

# ADDENDUM Phoenix Electronic Train Order System TA20 - Code of Practice for Victorian Main Line Operations

## Applicability

VIC
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## Publication Requirement

External Only
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2.0	02 October 2015		Rebranding

**Note:** A blue side-bar (as shown to the right) indicates where this version has been changed from the previous.

**Note:** Unless specifically addressed by this section of rules and procedures, current rules and procedures applied in Victoria as per the TA20 Code of Practice for Victorian Main Line Operations must continue to apply.

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This section is the Addendum for Phoenix Electronic Train Order System Working for TA20 – Code of Practice for Victorian Main Line Operations.

This section outlines the rules and procedures for;

- Phoenix Electronic Train Order System (Phoenix Train Order)
- Special Proceed Authority (SPA)
- Indicators and Signs
- Local Possession Authority
- Track Occupancy Authority
- Form B – Train Order Form
- Form W – Local Possession Authority Form
- Form X – Track Occupancy Authority Form

### **Work on Track Rules**

Absolute Occupation of a Running Line, Track Warrant Working Rules and Track Permission for Road/Rail vehicles must not to be used in the Phoenix Electronic Train Order Territories.



**Grey text within a Rule or Procedure indicates that it does not apply.**

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# **1 Phoenix Electronic Train Order System**

## **1.1 Purpose**

This section sets out how Authorities are formatted and used in Phoenix Electronic Train Order Working territory, how Train Order Working Block Locations are designated, the types of Authorities issued, the Limits of Authority applicable to each type, and how Authorities are confirmed in use, across the Network.

## **1.2 General**

The Phoenix Electronic Train Order Working system is used only on bi-directional single lines.

All safeworking decisions are managed by the Network Controller.

A computer system is used to:

- cross check and formulate proposed Authorities
- electronically display events  
and
- prevent the issue of conflicting authorities.
- A Train Order is used to deliver Authorities and instructions to rail traffic crews.

Authorities must:

- be manually or electronically compiled
- be transmitted to rail traffic crews
- not be compiled by workers who are operating the controls of a moving vehicle  
and
- be transcribed in a predetermined format, using Form B.

If the computer-assisted Phoenix Electronic Train Order system is unavailable, Network Controllers must:

- manually prevent the issue of conflicting authorities  
and
- manually issue Authorities without the use of Security Code.

### **1.2.1 Tracking System**

A tracking system may enable the Network Controller to:

- confirm the location of rail traffic  
and
- be alerted of any Limit of Authority overrun.

### **1.2.2 Communication System**

Rail traffic must be provided with a system to enable reliable communications with the Network Controller and between rail traffic crews.

### **1.2.3 Rail Traffic Identification**

Rail traffic is identified by train number and lead motive power unit number.

### **1.2.4 Network Controller**

The Network Controller must:

- efficiently manage Network activities
- formulate, authorise and issue Authorities
- record occupancies to eliminate conflicts  
and
- devise plans to recover from breakdowns, delays, or incidents.

### **1.2.5 Train Control Graph**

A paper Train Control Graph is used by the Network Controller, on which are plotted all:

- planned and authorised rail traffic occupancies
- planned and authorised work on track occupancies  
and
- other conditions or events that may affect safety.

The Network Controller must refer to the Train Control Graph, to

- plan Network traffic requirements  
and
- prevent conflicting authorities.

### **1.3 Security Codes**

The Train Order system generates a security code for rail traffic and work on track authorities.

The entry of the correct security code into a workstation:

- confirms the identity of the Authority  
and
- removes a blocking facility which releases the affected block.

Network Controllers must:

- transmit security codes to qualified workers together with the relevant Authority  
and
- not record security codes.

If an Authority is partly fulfilled, fulfilled or cancelled, Network Controllers must not enter security codes into the system before:

- the location of rail traffic has been confirmed  
and
- the security code has been provided.

### **1.4 Authorities**

The Network Controller issues Authorities for occupation of running lines

#### **1.4.1 Authority in Effect**

An Authority becomes in effect when the Network Controller advises the receiver of the "Read Back OK Time".

An Authority remains in effect until fulfilled or cancelled.

### 1.4.2 Authorities for Rail Traffic

Rail traffic is issued the following Authorities for occupation of running lines:

- Proceed Authority
- Conditional Proceed Authority
- Special Proceed Authority
- Proceed Restricted Authority
- Location Authority  
or
- Restraint Authority.

A Proceed Authority, Conditional Proceed Authority, or Special Proceed Authority may include permission for rail traffic to shunt within designated locations.

This is called Shunt Access.

A Location Authority must include permission for rail traffic to shunt within a designated location.

Rail traffic must not shunt except within locations where Shunt Access has been granted, or at which a Location Authority is in effect.



**Shunt Access is not required if shunting is conducted within sidings, entirely in clear of all running lines.**

### 1.4.3 Authorities for Track Workers

The following Authorities may be issued to Track Workers for occupation of running lines:

- Local Possession Authority  
and
- Track Occupancy Authority.



**On Phoenix Electronic Train Order Working territory, a Local Possession Authority is issued on Form W.**

#### 1.4.4 Proceed Authority

Rail traffic may be authorised to move on the Network by a Proceed Authority.

Rail traffic must proceed from one location to another location in the direction specified.

Rail traffic crews must record and report progress as required by the Network Controller.



**On Phoenix Electronic Train Order Working territory, a Proceed Authority is issued on Form B.**

#### 1.4.5 Conditional Proceed Authority

Rail traffic may be authorised to move on the network by a Conditional Proceed Authority.



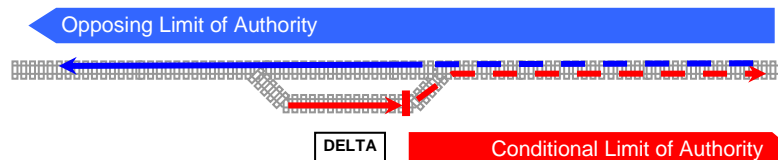
**If a Conditional Proceed Authority is issued, the receiving rail traffic crew must not be relieved of duty until conditional instructions have been completed.**

A Conditional Proceed Authority must:

- only be issued to stationary rail traffic in a loop or siding, which is waiting to cross other rail traffic at a location
- include crossing instructions for only one opposing rail traffic movement
- authorise rail traffic to proceed to a location in advance only after crossing opposing rail traffic
- state the identification details of the rail traffic to be crossed before proceeding and
- not be acted upon until the opposing rail traffic has arrived and has been confirmed to be complete.

**NOTE****Conditional instructions in a Conditional Proceed Authority are included in Section 2 of Form B.**

Figure 1-1



Limits of Authority – Conditional Proceed Authority

(Conditional Proceed Authority)

2	<input checked="" type="checkbox"/> Cross	Train ID	Loco	Loco ID	Before proceeding
3A	Proceed From	DELTA Loop		To	(End of Limit of Authority)
<input checked="" type="checkbox"/>	Fulfilment or Security Code	1	1	2	2
		Key Main or Loop			

(Proceed Authority for opposing movement)

3A	Proceed From	(Start of Limit of Authority)		To	(End of Limit of Authority)
<input checked="" type="checkbox"/>	Fulfilment or Security Code	5	1	A	A
		Key Main or Loop			
8	<input checked="" type="checkbox"/>	Train	ID	Loco	ID
		is on DELTA Loop			

### 1.4.6 Proceed Restricted Authority

Rail traffic may be authorised to move on the Network by a Proceed Restricted Authority

A Proceed Restricted Authority must only be issued:

- to rail traffic which is standing at an arrival-end Yard Limit sign and
- for travel from the arrival-end Yard Limit sign into an occupied Block Location, at which a Location Authority is in effect.



**Instructions about a Proceed Restricted Authority are included in Section 4 of Form B.**

A Proceed Restricted Authority must:

- state the identification details of the rail traffic already occupying the Block Location
- state that the Block Location is already occupied
- state that the crew must reach an understanding about the conditions of entry and
- state that the rail traffic must travel at Restricted Speed.

Rail traffic crews must not pass the arrival-end Yard Limit sign until an understanding of the conditions of entry to the Block Location is reached with the rail traffic crew already occupying the Block Location.

#### (Proceed Restricted Authority)

3A	Proceed From	DELTA YLS	To	DELTA Loop
<input checked="" type="checkbox"/>	Fulfilment or Security Code	1 1 2 2	Key	Main or Loop
4	Special Instructions	A location Authority is in affect at DELTA Liaise with 1xxx Loco 1233 Proceed at RESTRICTED SPEED		



### 1.4.7 Special Proceed Authority

Rail traffic may be authorised to move on the Network by a Special Proceed Authority.

A Special Proceed Authority may direct rail traffic to travel in either direction:

- between two specific points  
or
- provide assistance to disabled rail traffic.



**On Train Order Working Territory, a Special Proceed Authority is issued using Form B.**

**Instructions about a Special Proceed Authority are included in Sections 3 and 4 of Form B.**

#### (Special Proceed Authority)

3A	Proceed From	DELTA MAIN	To	FOXTROT Loop
<input checked="" type="checkbox"/>	Fulfilment or Security Code	1 1 2 2	Key	Main or Loop
4	Special Instructions	(Train ID) (Loco ID) is disabled and protected at 135.500km Couple to and assist (Train ID) to FOXTROT Loop		

### 1.4.8 Restraint Authority

A Restraint Authority must direct rail traffic to remain at a specific location.



**Instructions about a Restraint Authority are included in Section 4 of Form B.**

The rail traffic must not move from the specified location until:

- assistance arrives  
or
- the Restraint Authority is cancelled.

The Restraint Authority must:

- cancel any Authority currently in effect
- direct that the rail traffic remain at its current location
- if protection is required, indicate the direction in which protection must be placed
- if assistance is required, indicate the direction from which assistance will approach and
- is fulfilled upon the arrival of assisting rail traffic.

The restrained rail traffic must:

- remain at its current location and
- if required be protected in the direction indicated.

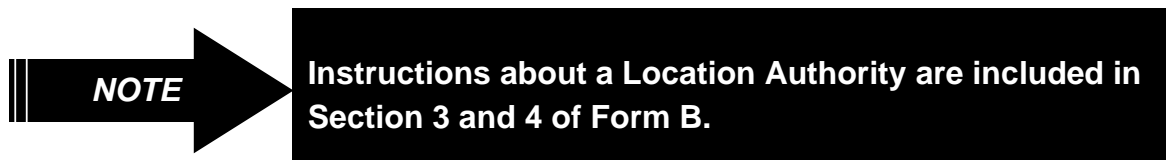
#### (Restraint Authority)

4 Special Instructions	Train Order (ID) is CANCELLED at (Location)
	Remain at (Location) and protect towards (Location).
	(Rail Traffic ID) will approach and assist

#### 1.4.9 Location Authority

Rail traffic may be issued with a Location Authority to shunt within Block Location limits on the Network.

A Location Authority must be issued to the crew of rail traffic required to shunt within the Block Location.



Other rail traffic must not be authorised to proceed through the Block Location within which a Location Authority is in effect.



**Rail traffic must not be authorised to approach a Block Location at which a Location Authority is in effect, unless Shunt Limit signs are provided.**

Other rail traffic may be authorised to proceed to the arrival-end Yard Limit sign of a Block Location within which a Location Authority is in effect.

Other rail traffic may be authorised by a Proceed Restricted Authority to enter a Block Location within which a Location Authority is in effect.

The following conditions apply:

- before issuing a Proceed Restricted Authority, the Network Controller must tell the rail traffic crew in possession of the Location Authority of the approaching rail traffic
- the rail traffic crew in possession of the Location Authority must be able to manage more than one rail traffic movement within the Block Location
- the approaching rail traffic crew must communicate with the rail traffic crew in possession of the Location Authority before passing the arrival-end Yard Limit sign  
and
- the approaching rail traffic crew and the rail traffic crew in possession of the Location Authority must reach a clear understanding about the conditions of entry of the approaching rail traffic, to the Block Location.

Rail traffic in possession of the Location Authority may:

- shunt between the arrival-end and departure-end limits of the Block Location  
and
- unless specifically excluded, shunt on all tracks.

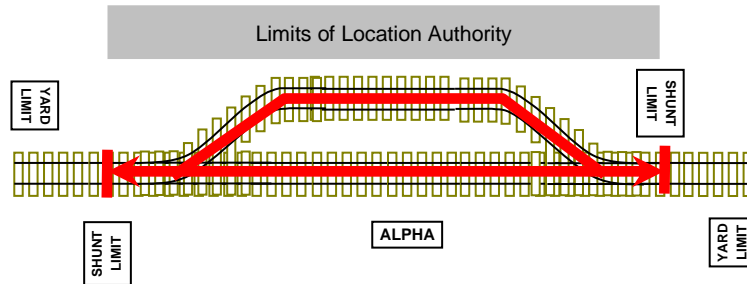
Whilst in possession of a Location Authority, rail traffic crews must keep motive power headlights switched on at all times.

The Location Authority must include:

- the Limits of Authority  
and
- any special instructions.

**(Example Location Authority)**

3A	Proceed From	ALPHA	To	ALPHA
<input checked="" type="checkbox"/>	Fulfilment or Security Code	E 7 7 A	Key	Main or Loop

**Figure 1-2**

*Example of Limits of Authority for a Location Authority*

**NOTE**

At Block Locations not provided with Shunt Limit signs, Location Limits extend to the Yard Limit signs.

**1.5 Block Location Limits**

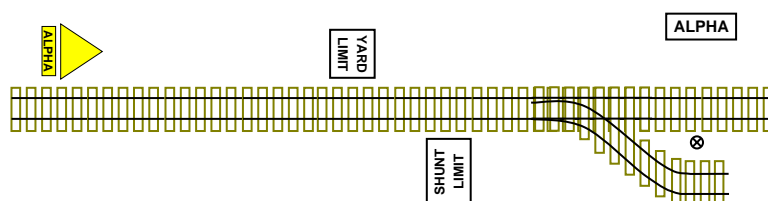
Block Location limits are designated by Yard Limit signs.

A Shunt Limit sign may be located inside the Yard Limit Sign.

Location signs are placed to warn rail traffic crews of their approach to a Block Location.

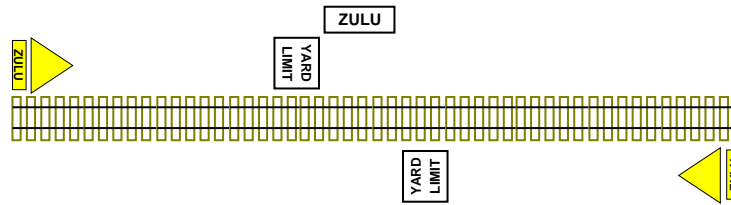
**NOTE**

Shunt Limit signs are not always provided.

**Figure 1-3**

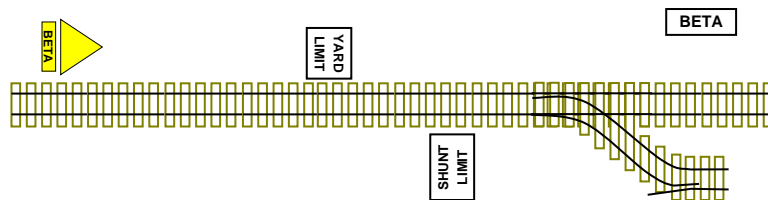
*Example of Block Location signs (Crossing Loop provided)*

Figure 1.4



Example of Block Location signs (No Crossing Loop or Siding provided)

Figure 1.5



Example of Block Location signs (Siding provided)



**Sidings are not provided with Clearance Posts.**

## 1.6 Designated Limits of Authority

The Start and End limits of an Authority must be specified.

Limits of Authority must be designated by the specific points between which occupancy is authorised, by:

- specific tracks at a location  
or
- specific signs at a location.

### 1.6.1 Limit of Authority

An Authority must not authorise rail traffic to proceed:

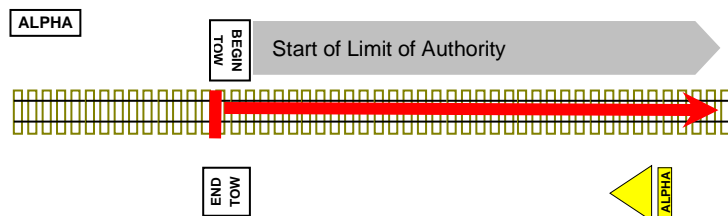
- through signalled locations
- through locations at which a Location Authority is in effect  
or
- beyond a Network Controller's territory boundary.

### 1.6.2 Limit of Authority Start Points

Limit of Authority Start points must be designated as follows:

- a) If a **BEGIN TRAIN ORDER WORKING** sign is designated as the Proceed Authority start location, the Limit of Authority starts from the **BEGIN TRAIN ORDER WORKING** sign.

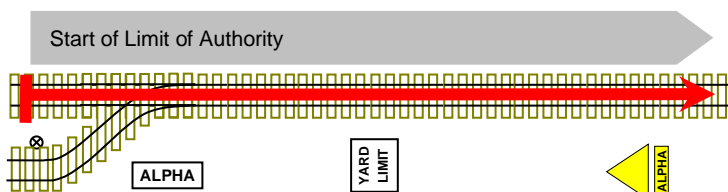
Figure 1.6



Example of Start of Limit of Authority – Begin TOW Sign

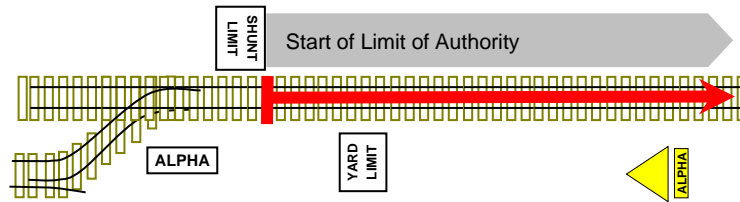
- b) If a specific track at a Block Location is designated as the Proceed Authority start location, the Limit of Authority starts from the departure end Clearance Post, or Limit of Shunt sign, where no departure end Clearance Post is provided.

Figure 1.7



Example of Start of Limit of Authority from Clearance Post

Figure 1.8

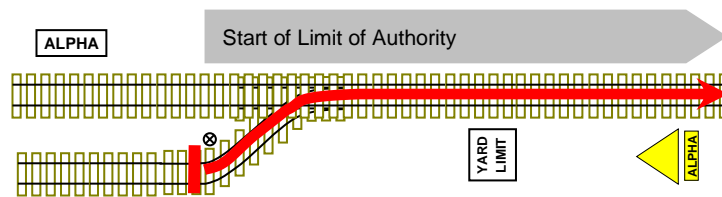


Example of Start of Limit of Authority from Shunt Limit sign

3A Proceed From ALPHA Loop To (End of Limit of Authority)

☒ Fulfilment or Security Code 2 C 2 C Key Main or Loop

Figure 1.9



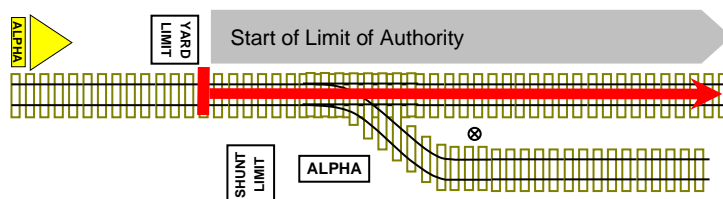
Example of Start of Limit of Authority from Crossing Loop

- c) If a Yard Limit sign is designated as the Proceed Authority start location, the Limit of Authority starts from the arrival-end Yard Limit sign.

3A Proceed From ALPHA Yard Limit Sign To (End of Limit of Authority)

☒ Fulfilment or Security Code 1 8 1 2 Key Main or Loop

Figure 1.10



Example of Start of Limit of Authority from Yard Limit sign

### 1.6.3 Limit of Authority End Points

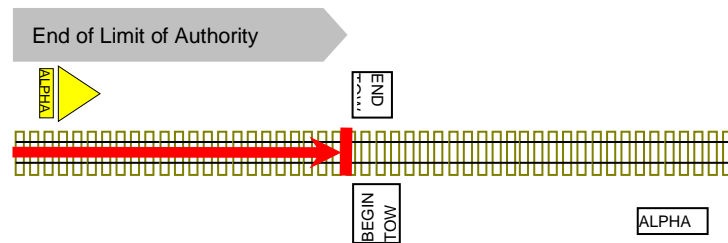
Limit of Authority end points must be designated as follows:

- a) If an **END TRAIN ORDER WORKING** sign is designated as the Proceed Authority end location, the Limit of Authority extends to the **END TRAIN ORDER WORKING** sign.

3A Proceed From (Start of Limit of Authority) To ALPHA End

Fulfilment or Security Code 8 D 8 A Key Main or Loop

Figure 1.11



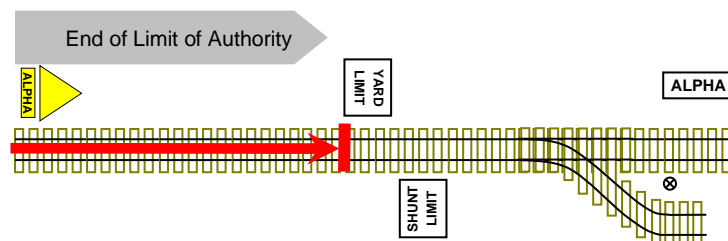
Example of End of Limit of Authority to End TOW sign

- b) If a Yard Limit sign is designated as the Proceed Authority end location, the Limit of Authority extends to the arrival-end Yard Limit sign at that Block Location.

3A Proceed From (Start of Limit of Authority) To ALPHA Yard Limit Sign

Fulfilment or Security Code B 7 6 7 Key Main or Loop

Figure 1.12



Example of End of Limit of Authority to Yard Limit sign

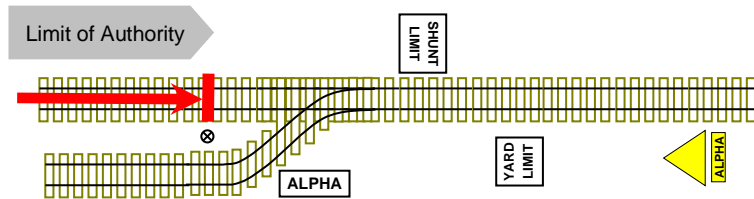


- c) If a specific line is designated as the Proceed Authority end location, the Limit of Authority extends to the departure end Clearance Post or Shunt Limit sign if no Clearance Post is provided.

3A Proceed From (Start of Limit of Authority) To ALPHA Main

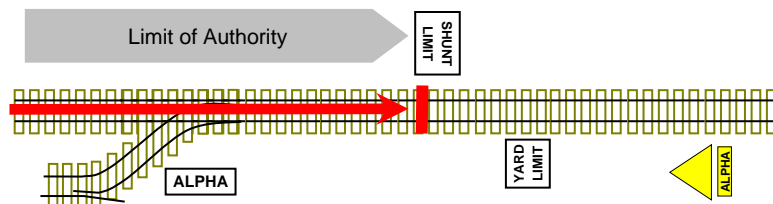
☒ Fulfilment or Security Code A 1 9 9 Key Main or Loop

Figure 1.13



Example of End of Limit of Authority to Clearance Post

Figure 1.14

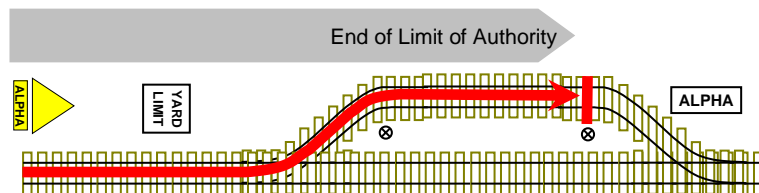


Example of End of Limit of Authority to Shunt Limit sign

3A Proceed From (Start of Limit of Authority) To ALPHA Loop

☒ Fulfilment or Security Code D D 1 1 Key Main or Loop

Figure 1.15

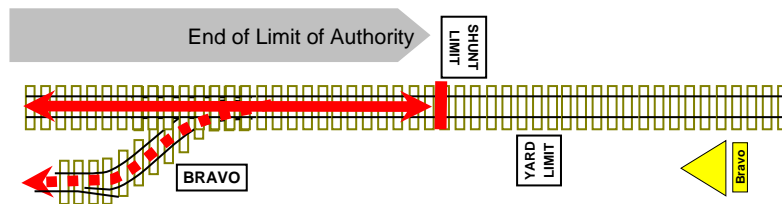


Example of End of Limit of Authority to Crossing Loop

- d) If an Authority directs rail traffic to proceed to a Block Location and grants Shunt Access:
- the Limit of Authority extends to the departure end Shunt Limit sign (or Yard Limit sign where no Shunt Limit signs are provided) and
  - rail traffic may occupy lines in addition to the Main Line at that Block Location.

3A	Proceed From	(Start of Limit of Authority)	To	BRAVO Main
<input checked="" type="checkbox"/>	Fulfilment or Security Code	3 0 3 B	Key	Main or Loop
7	Report at Authority End Location	Arrival Code	4 A 3 3	Shunt Access YES

Figure 1.16



Example of End of Limit of Authority with Shunt Access

## 1.7 Managing Authorities

Authorities must be managed in a standard manner concerning their:

- loss
- cancellation
- fulfilment and
- reporting requirements.

### 1.7.1 Lost Authority

The loss of a current Authority must be reported to the Network Controller as soon as possible.

If an Authority is lost before rail traffic departs from a Block Location, the rail traffic must not depart.

If an Authority is lost after rail traffic departs from a Block Location, the rail traffic must not pass the arrival-end Yard Limit sign at the next Block Location.

The Network Controller must:

- obtain a Superintendent's security code to cancel or fulfil the lost Authority and
- if travel is to continue, issue a new Authority.

### 1.7.2 Cancelling an Authority

If an Authority must be cancelled within a Section, a replacement Authority must cancel the Authority currently in effect and contain altered instructions.

An Authority may be cancelled whilst rail traffic is in motion, provided that:

- the rail traffic is not located past the proposed new Limit of Authority and
- the rail traffic will not pass the new Limit of Authority.

If a replacement authority is to be issued, then the new limit of authority start point will be the departure end Yard Limit Sign of the location to the rear that the train has reported departure from.



**Instructions about the cancelled Train Order are included in Section 4 of the replacement Train Order.**

If there is any doubt that the rail traffic cannot be prevented from exceeding the proposed Limit of Authority, the rail traffic must be stopped, and its exact location determined before an Authority is cancelled.



**Rail traffic that has an Authority for a section in advance of the current Authority and is closely approaching the limit of the current Authority must be brought to a stand before the next Authority is cancelled.**

When an Authority which is currently in effect is to be cancelled, the cancel location, must be included in the cancelling Authority.

4	Special Instructions	Authority (ID) is CANCELLED at (Location)
		Authority (this Authority ID) is now in effect



An Authority must not be Fulfilled when rail traffic is still within a section, is standing at, or is approaching an arrival-end Yard Limit sign.

### 1.7.3 Fulfilment of Authority

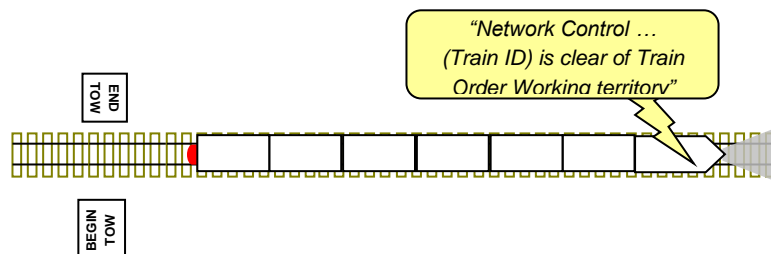
Rail traffic crews must fulfil an Authority only if the rail traffic is complete and clear of the section for which it was applicable.

At Block Locations rail traffic must be:

- between Clearance Posts
- between Shunt Limit signs where no clearance Posts are provided or
- clear of Running Lines.

At Block Locations where Train Order Working terminates, rail traffic must be completely past the **END TRAIN ORDER WORKING** sign.

Figure 1.17

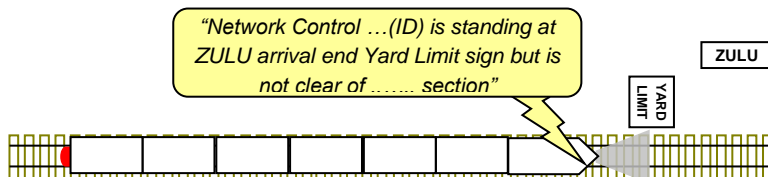


Example of Rail Traffic reporting clear of TOW territory



An Authority must not be Fulfilled if rail traffic is standing within a section.

Figure 1.18



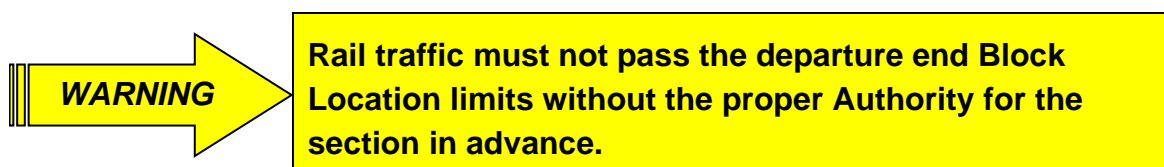
Example of Rail Traffic reporting arrival at an arrival-end Yard Limit sign but unable to fulfill Authority

### 1.7.4 Reporting

When receiving reports from rail traffic crews, Network Controllers must confirm the:

- rail traffic identification
- arrival and departure times
- security codes where required and
- Limit of Authority for the current Authority.

The Block Location immediately preceding the Limit of Authority must be specified as a reporting location.



#### 1.7.4.1 Reporting Departure

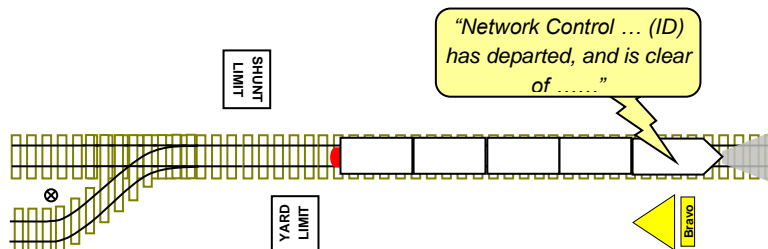
Rail traffic crews must report departure to the Network Controller:

- from departure locations and
- from reporting locations.

Departure must be reported only after the rearmost vehicle has cleared:

- a **BEGIN TRAIN ORDER WORKING** sign or
- the departure end Yard Limit sign.

Figure 1.19



Example of Rail Traffic reporting departure from Block Location

#### 1.7.4.2 Reporting Arrival

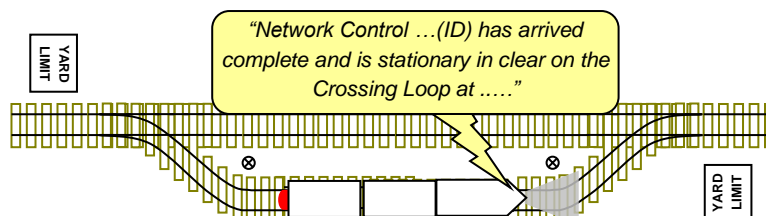
Arrival of rail traffic at a Block Location is recorded when the rail traffic has stopped, complete:

- before the departure-end clearance post  
or
- before the departure-end Shunt Limit sign where no clearance post is provided
- and is clear of the section to the rear.

If an Authority has shunt access, rail traffic crews must report arrival at the Block Location to the Network Controller when the rail traffic:

- is between Shunt Limit signs  
or
- where Shunt Limit signs are not provided, between Yard Limit signs.

Figure 1.20



Example of Rail Traffic reporting arrival at a Block Location

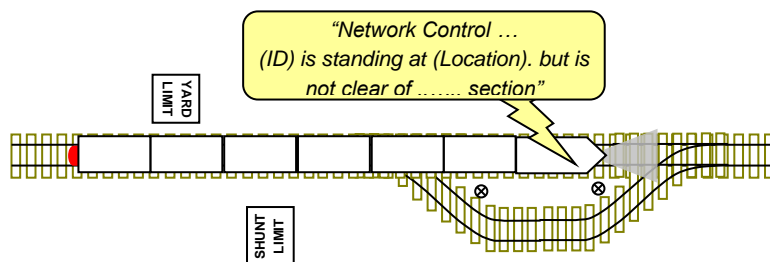
#### 1.7.5 Over-length Rail Traffic

Rail traffic may be too long to be able to stand within the limits of a Block Location.

Over length rail traffic must not enter a Block Location at which a cross is to take place, until opposing rail traffic has arrived complete, and is standing in clear.

Over length rail traffic is not considered to have arrived until it is clear of the section to the rear.

Figure 1.21



Example of Rail Traffic reporting arrival at a Block Location without clearing the section to the rear.

### 1.7.6 Confirming the location of rail traffic

The Network Controller must confirm the location of rail traffic from:

- the train control workstation  
or
- rail traffic crews.

### 1.7.7 Communication Failure

If primary communication in a rail traffic vehicle fails, rail traffic crews must:

- report departure at the first available location  
and
- if possible, report at the Block Location immediately preceding the limit of the Authority.

Opposing rail traffic without communications must not be authorised to approach a Block Location simultaneously.

## **1.8 Crossing or Passing of Rail Traffic**

On Train Order Working territory the Network Controller issues instructions about:

- cross and pass movements to be made
- the line to be occupied  
and
- identification details of opposing or passing rail traffic.

These instructions are included in the Train Order containing the Proceed Authority.

Crossing or passing of rail traffic can be carried out at any Block Location where the infrastructure allows this to take place.

Rail traffic crews set points as required.

### **1.8.1 First Rail Traffic to Arrive**

The crew of the rail traffic arriving first must:

- comply with instructions provided within the Authority
- enter the Block Location
- stand in clear on the designated line
- check that the route is set for the arrival of opposing or passing rail traffic
- report arrival to the Network Controller and fulfil their Authority
- if possible, tell the crew of the rail traffic to be crossed or passed that the route is set for their arrival
- observe that the opposing or passing rail traffic arrives complete and is not displaying an unsafe condition
- if possible, tell the crew of the opposing or passing rail traffic about their observation
- obtain an Authority to proceed  
and
- set or confirm the setting of points for departure.



### **1.8.2 Second Rail Traffic to Arrive**

The crew of the rail traffic arriving second must:

- communicate with the rail traffic crew already at the Block Location
- enter the Block Location in accordance with their Authority
- stand in clear on, or travel through the Block Location on the designated line
- observe that the opposing rail traffic, or rail traffic being passed is complete and not displaying an unsafe condition
- if possible, tell the crew of the opposing rail traffic, or rail traffic being passed about their observation
- if necessary, obtain an Authority to proceed and
- set or confirm the setting of points for departure.

### **1.8.3 Departing Rail Traffic**

Following a cross or pass, the crew of departing rail traffic must tell the opposing rail traffic crew:

- that they have cleared the Block Location limits  
or
- that they have stopped within the Block Location limits.

## **1.9 Sidings**

An Authority may direct rail traffic to proceed to a siding, shunt clear of Running Lines, and:

- terminate  
or
- cross, pass, or be passed by other rail traffic.

An Authority may also direct rail traffic to originate at, and proceed from, a siding.

### 1.9.1 Terminating at a Siding

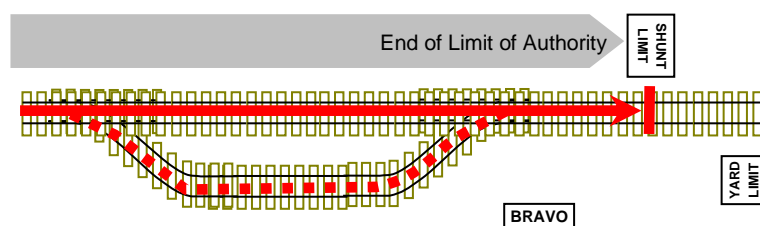
If an Authority directs rail traffic to proceed to a siding and:

- grants Shunt Access
- directs that the rail traffic terminate, clear of running lines or
- advises of opposing rail traffic to be crossed:
- the Limit of Authority extends to the departure end Shunt Limit sign and
- rail traffic must shunt in clear of Running Lines and terminate or
- shunt in clear of Running Lines and cross other rail traffic.

The figure shows two screenshots of the Phoenix Electronic Train Order System interface. Both screenshots show a train order entry screen with the following fields:

- 3A Proceed From:** (Start of Limit of Authority)
- To:** BRAVO Main
- Fulfillment or Security Code:** C C S B
- Key:** Main or Loop
- 4 Special Instructions:**
  - Top screenshot: Terminate at BRAVO
  - Bottom screenshot: Train 2VB4 Loco XY21 will pass  
Cross Train 2296 Loco ED09
- 7 Report at Authority End Location:** Arrival Code 4 A 3 3, Shunt Access Yes

Figure 1.22



Example of End of Limit of Authority where Shunt Access is granted for rail traffic to shunt, cross or terminate.

### 1.9.2 Originating from a Siding

If an Authority directs rail traffic to:

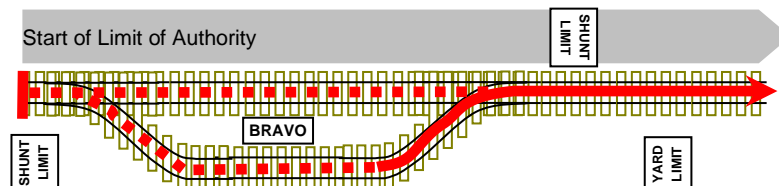
- proceed from a siding  
and
- grants Shunt Access.

The rail traffic must;

- originate at the siding
- shunt onto Running Lines  
and
- proceed to the End Limit of Authority location.

3A	Proceed From	BRAVO Main	To	(End of Limit of Authority)
<input checked="" type="checkbox"/>	Fulfilment or Security Code	5 1 A 3	Key	Main or Loop
5	Report clear of Authority Start Location	Departure Code	A 1 1 E	Shunt Access YES

Figure 1.23



Example of Start of Limit of Authority where Shunt Access is granted for rail traffic to originate, or following a cross.

## 1.10 Crew Change Over

### 1.10.1 Relieving rail traffic crew

Prior to departure of rail traffic from a crew change location, the relieving rail traffic crew must:

- check the status of the Authority in effect and make sure that it is:
- understood
- correctly recorded
- clearly displayed  
and
- not containing any unfulfilled conditional instructions  
and
- tell the Network Controller about:
- the change of crew
- any change to communications arrangements
- their understanding of the Limits of the Authority currently in effect  
and
- any special instructions.



**If a Conditional Proceed Authority is issued, the receiving rail traffic crew must not be relieved of duty until conditional instructions have been completed.**

### 1.10.2 Rail traffic crew being relieved

The rail traffic crew being relieved must not leave until the relieving rail traffic crew has an understanding of:

- the status of the Authority in effect
- the status of indicators and points
- the speed limits applicable for the rail traffic
- the status of track and temporary speed restrictions in place  
and
- other factors that could affect the safety of rail traffic.

### 1.11 Joint Occupancy Tables and Conditions

The Phoenix Electronic Train Order safeworking system provides for occupancy of a track section by rail traffic or for work on track.

The joint occupancy conditions are the pre-requisites for the joint occupancy of a track section.

The Network Controller uses the technologies and procedures specific to the Phoenix Electronic Train Order safeworking system to manage the conditions for joint occupancy of a track section.

#### Phoenix Electronic Train Order Working Joint Occupancy Table

The Authorities and Permits used in the Phoenix Electronic Train Order Working system are as follows:

PA:	Proceed Authority	LPA:	Local Possession Authority
CPA:	Conditional Proceed Authority	TOA:	Track Occupancy Authority
PRA:	Proceed Restricted Authority	TFP:	Track Force Protection – Country Regions
SPA:	Special Proceed Authority		
LA:	Location Authority		
RA:	Restraint Authority		

Current Occupancy	PA	No	7	No	No	No	No	No	3	4
	CPA	No	No	No	No	No	No	No	3	4
	PRA	No	No	No	No	No	No	No	No	No
	SPA	No	No	No	6	No	No	No	3	4
	LA	No	No	2	No	No	No	No	No	4
	RA	No	No	No	1	No	6	9	9	4
	LPA	No	No	No	No	No	No	No	No	No
	TOA	No	No	No	No	No	No	No	8	5
	TFP	4	4	4	4	4	4	No	8	6
		PA	CPA	PRA	SPA	LA	RA	LPA	TOA	TFP

**Requested Occupancy**

## Joint Occupancy Conditions

1. The request is permitted provided speed restrictions are placed on the approaching rail movement and the rail traffic crew is informed of the location of the restrained rail traffic.
2. The crews of rail traffic movements must liaise and movements must proceed at Restricted Speed.
3. The request is permitted provided it is issued after rail traffic has passed the proposed limits or starting point for travel and is not returning.
4. The request is permitted provided the Protection Officer who is required to manage the passage of rail traffic through a worksite is fully informed of all rail traffic likely to affect the works during the currency of the Authority.
5. The request is permitted provided the Protection Officer is fully informed of all rail traffic and work on track likely to affect the worksite.
6. The request is permitted provided the specified limits do not overlap.
7. The request is permitted provided crossing instructions are included in the Authority issued to the waiting rail traffic.
8. The request is permitted provided the specified limits are the same limits or for overlapping limits and the Protection Officers have consulted.
9. The request is permitted provided the specified limits are the same limits or for overlapping limits and the rail traffic crew and Possession Protection Officer or Protection Officer have consulted.

## **2 Special Proceed Authority**

### **2.1 Purpose**

To prescribe the rules for using a Special Proceed Authority (SPA) in the Australian Rail Track Corporation (ARTC) Network within the Phoenix Electronic Train Order Territory.

### **2.2 Method principle**

A SPA may be used to authorise rail traffic movements that are not otherwise permitted under the system of Safeworking normally in operation.

A SPA must:

- specify the limits for the movements that it authorises, and
- specify the line to be used, but not specify routes within yard limits of attended locations and remotely controlled locations.

A SPA may:

- include more than one section within its limits
- allow removal of a train in portions from a section.

Network Controllers must:

- not authorise conflicting occupancies or routes, and
- make sure that planned movements are safe.

### **2.3 Method description**

Rail traffic must travel at speeds consistent with the conditions that caused the SPA to be issued.

### 2.3.1 Assurances

The Network Controller must make sure or be assured that:

- the SPA area, excluding attended interlockings, will be occupied only by authorised rail traffic for the period of the SPA,
- effective communication is established,
- prior Proceed Authorities have been cancelled or fulfilled,
- unless authorised by the Network Controller, intermediate signal boxes and local control panels in affected sections are not switched in or out while the SPA is in force,
- current work on track authorities in affected sections are cancelled or fulfilled, or worksites are protected against movements under the SPA,
- obstructions are protected, and
- if necessary, facing points have been or will be clipped and locked by a Qualified Worker.

The Network Controller must get the Signaller's assurance that unauthorised rail traffic is prevented from entering the SPA area.

Signallers must make sure that:

- protecting signals are at **STOP** with blocking facilities applied, and either
- releasing switches for intermediate sidings are in the NORMAL position with blocking facilities applied, or
- if blocking facilities cannot be applied, trains or track vehicles will be restrained by giving relevant Drivers and track vehicle operators a Restraint Authority.



**In Phoenix Electronic Train Order territory rail traffic will be restrained using form B. Form B will be used to issue a Restraint Authority to rail traffic.**



**Where Signaller's are not used or available on the Network, the Network Controller will be responsible for the Signaller's duties.**



## 2.4 Proceed Authority

Only the Network Controller may authorise travel under a SPA.



**In Phoenix Electronic Train Order territory Form B must be used to issue a Special Proceed Authority.**

If available, signals within the limits of the SPA must be cleared. Drivers and track vehicle operators must pass signals at **STOP** only:

- if so authorised in the SPA.

### 2.4.1 Issuing a Special Proceed Authority

The Network Controller must arrange for a SPA to be issued to:

- Drivers and track vehicle operators carrying out the authorised movements, and
- Signallers, at attended locations and for remotely controlled locations, involved in the authorised movements.

Before issuing a SPA, the Network Controller must arrange for workers known to be on the affected portion of line to be told about the authorised movements.

Network Controllers must record, in permanent form:

- the issue of a SPA, and
- details of affected workers told about the authorised movements.

## 2.5 Travelling through and beyond an attended location or a remotely controlled location

If a SPA authorises a movement through and beyond an attended location, or a remotely controlled location, the Driver or track vehicle operator:

- must not pass the arrival-end yard limit, in the direction of travel, of the location, until authorised by the Signaller, and
- follow the directions of the Signaller for the location.

## **2.6 Cancelling or fulfilling a Special Proceed Authority**

A SPA must be cancelled only if:

- the Network Controller is assured that the authorised movement has not started or has not been completed,  
and
- affected Qualified Workers have been told that the SPA will be cancelled.

A SPA must be fulfilled only if:

- the Network Controller is assured that the authorised movement has been completed,  
and
- affected Qualified Workers have been told that the SPA will be fulfilled.

### **2.6.1 Removing blocking facilities and point clips**

A SPA must be cancelled or fulfilled only if the Network Controller has been assured that, unless they are required for a subsequent movement:

- blocking facilities will be removed,  
and
- point clips and locks have been, or will be, removed as directed.

### 3 indicators and signs

#### 3.1 Purpose

To describe the types of indicators and signs used in the *Australian Rail Track Corporation (ARTC)* Network within the Phoenix Electronic Train Order Territory.



The Figures in this Rule show examples of the indicators and signs used in the ARTC Network. White or lunar white lights are shown in blue ●.

#### 3.2 Main line indicators

##### 3.2.1 Main line indicators

*Main line* indicators:

- advise rail traffic crews about the condition of the points and level crossings, and
- are identified by a black letter on a white reflective diamond attached to the indicator post.



**Main line indicators do not indicate that the line ahead is clear.**

If indicators are able to display a **STOP** indication, they may be passed at **STOP** only in accordance with 3.3.1 Passing main line indicators at **STOP**.

Indication	Means
<i>Pulsating</i> white light	Points are set for the main line, and warning equipment at a level crossing is in working order.
Steady red light	<b>STOP.</b>

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Figure 3-1

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Example of main line indicators

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### 3.2.2 Passing Main line indicators at STOP

Rail traffic must not pass main line indicators at **STOP** unless:

- points have been checked and set for the route,  
and
- if necessary, the points have been clipped and locked.

Rail traffic must not pass main line indicators at **STOP** that are protecting a level crossing unless:

- the level crossing warning equipment is working correctly,  
or
- if the level crossing warning equipment is not working correctly,
  - stop short of the level crossing,
  - proceed cautiously forward using the rail traffic whistle frequently until the level crossing warning equipment is operated by the rail traffic,  
and
  - proceed over the level crossing only if it is safe to do so.

## 3.3 Point indicators

### 3.3.1 Mechanical point indicators

Mechanical point indicators provide an indication of the setting of the points.

Mechanical Point indicators do not indicate that the points are locked.

Mechanical point indicators are displayed by reflectorized targets as follows:

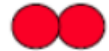
#### Green Arrow

Indicates the main line points are set for the main line. The arrow points up and away from the line.



#### Red Dumb Bell

Indicates the main line points are set for the siding or dead end.



### 3.3.2 Passing Mechanical point indicators at STOP

*Rail traffic must not pass mechanical points indicators at **STOP** unless:*

- points have been checked and set for the route, and
- if necessary, the points have been clipped and locked.

### 3.4 Yard Limit signs

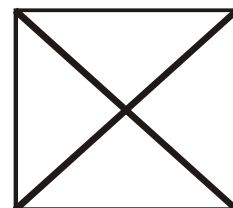
**YARD LIMIT** signs:

- define the limits of *yards*,
- define the end of a *section*, and
- in *Train Order territory*, define the *yard limits* of a *Train Order location*.

Figure 3-3



Front





Back

Example of YARD LIMIT signs in Train Order territory

#### 3.4.1 Responding to YARD LIMIT signs

Drivers or track vehicle operators must respond to **YARD LIMIT** signs as described in the table below.

Territory	Meaning and required action	Sign
Train Order	<b>STOP</b> , unless authorised to <b>PROCEED</b> on a Train Order	
	Defines the departure-end yard limit of a location. If required by the Train Order, report departure beyond the location	

### 3.5 Location signs

**LOCATION** signs are reflective yellow signs that may be placed on the approach side of a location where rail traffic may be required to stop.

The location may be a:

- signal
- **STOP** sign
- main line indicator
- **YARD LIMIT** sign
- or
- mechanical point indicator.

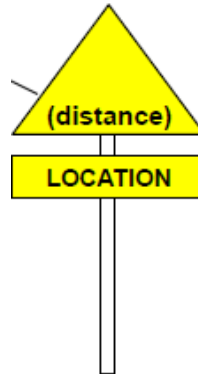
**LOCATION** signs are used to indicate approach to a location.

**LOCATION** signs are placed:

- not more than 3000m before the location,  
and
- at a safe braking distance from the location.

**LOCATION** signs display a distance in metres on the bottom of the triangle to indicate to rail traffic crew the distance to where rail traffic may be required to stop.

Figure 3-4



Example of **LOCATION** sign

### 3.5.1 Responding to **LOCATION** signs

Drivers or track vehicle operators must respond to **LOCATION** signs as described in the table below.

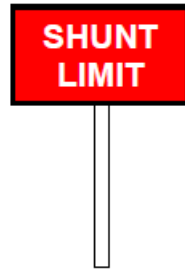
Territory	Meaning and required action	Sign
Train Order	<p><b>WARNING</b></p> <p>Approaching a Train Order location. <b>PROCEED</b> according to the Train Order, being prepared to respond to the next main line indicator or mechanical point indicator.</p>	

### 3.6 SHUNT LIMIT signs

SHUNT LIMIT signs:

- indicate the limit to which a shunting movement may be made on a running line,  
and
- have white text on a red reflective or illuminated background.

Figure 3-5



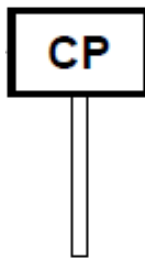
Example of **SHUNT LIMIT** sign

### 3.7 Clearance posts

*Clearance posts* are usually located between two *converging* lines to show the clearance limit.

Clearance Posts also define points to which an authority may be issued.

Figure 3-6

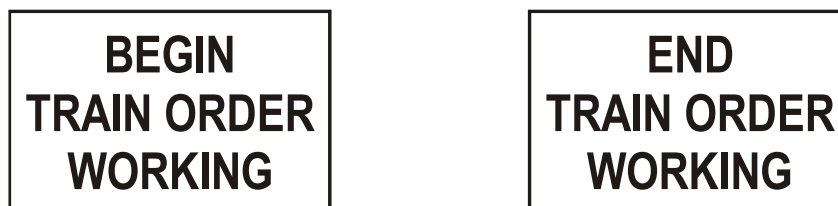


Example of Clearance post sign

### 3.8 Train Order Working signs

*Train Order* working signs show the beginning and end of the territory where the Train Order System of safeworking applies.

Figure 3-7



Example of Begin and End Train Order Working signs



## **4 MASTER KEYS**

### **4.1 Purpose**

To prescribe the rules for authorising, issuing and using Master Keys on Phoenix Electronic Train Order Territory.

### **4.2 General**

Master Keys are provided for use at all Block Locations in Phoenix Electronic Train Order Territory. The Master Key may be of the Ordinary type (large) or the Miniature ST21 'Fortress' type. Over some Corridors, a miniature 'Fortress' type Master Key will be permanently attached to ordinary type Master Key

Master Keys for each Train Order Corridor are marked with the name of the Corridor.

Where Master Keys are used within a Corridor, all rail traffic movements operating over Train Order Territory must be issued with a Master Key.

Where a relief locomotive is required to assist disabled rail traffic and no Master Key is available, it will be permitted to allow the relief locomotive to enter the Corridor without a Master Key.

Each Train Order issued for a rail traffic movement for the Corridor must be endorsed with the number of the Master Key issued.

### **4.3 Master Key Security**

#### **4.3.1 Block Locations**

Master Keys must be securely kept at nominated Block Locations. The rail traffic crew must request from the Network Controller the authority to gain access to the Master Key at the nominated location.

Where rail traffic is to terminate at a Block Location the rail traffic crew must return the Master Key to the nominated Location.

### **4.4 Transferring Master Keys**

If required the Network Controller may authorise a competent person to transfer a Master Key from one Location to another Location. The Network Controller must endorse the details on the Train Control Graph.

When the Master Key has arrived at the intended Location, the Network Controller must be advised by the competent person that the Master Key has been secured at the Location. The Network Controller must endorse the details on the Train Control Graph.

If the Master Key is to be received by a Driver at a Location, the Master Key number must be included in the text of the Train Order.

#### **4.5 Issue of Master Key to Infrastructure Representative**

A Master Key may be issued to an Infrastructure Representative for use at a Block Location where Track Machines are located. In this instance, a Train Notice must be issued, authorising the issue of the Master Key.

A Master Key may only be issued to an Infrastructure Representative who is competent in Level 2 Track Force Protection Coordinator or competent in the Phoenix Electronic Train Order System of Safeworking.

#### **4.6 Lost or Damaged Master Key**

If a Master Key is lost or damaged, it must be dealt with in accordance with Operating Procedure No.20 (Section 27) of TA20, the ARTC Code of Practice for the Victorian Main Line Network.

#### **4.7 Taking a Master Key**

##### **Rail Traffic Crew**

1. Get the Network Controller's authority to take the Master Key.
2. Obtain a Master Key from the nominated location.
3. Obtain the appropriate Train Order to proceed.

##### **Network Controller**

1. Give the authority to the Rail Traffic Crew or competent worker to obtain the Master Key.
2. Record the number of the Master Key on the Train Control Graph and include on the Train Order during issue.

#### **4.7.1 Shunting a Block Location**

##### **Rail Traffic Crew**

1. Rail Traffic Crews must report arrival at the Block Location to the Network Controller.
2. At the completion of shunting operations at the Block Location the rail traffic crew must make sure that the points are set and locked for the main line and they are in possession of the Master Key.
3. The Rail Traffic Crew must obtain the permission of the Network Controller before departing.
4. If the Rail Traffic Crew is unable to contact the Network Controller, the rail traffic may depart the location. The Rail Traffic Crew must report departure at the first available location.

##### **Network Controller**

1. Before giving permission for the rail traffic to depart the Block Location, the Network Controller must make sure that the Master Key is in the possession of the Rail Traffic Crew.
2. The Network Controller must record on the Train Control Graph that the rail traffic crew are in possession of the Master Key.

##### **Note:**

The number of the Master Key must be shown on the Train Order. All movements of the Master Keys must be recorded on the Train Control Graph and the Network Controller's Master Key log book.

#### 4.7.2 Terminating at a Siding

##### Rail Traffic Crew

1. Unlock the points using the Master Key.
2. Set the route for the siding.
3. Authorise the rail traffic movement to proceed into the siding.
4. When the intended rail traffic movement is clear of the main line, restore the points to the Normal position and remove the Master Key.
5. Return the Master Key to the Driver.
6. The Driver must tell the Network Controller;
  - the rail traffic is clear of the main line
  - the points have been returned to the Normal position and
  - the Master Key is in the Drivers possession.
7. Return the Master Key to the nominated location.
8. Tell the Network Controller:
  - the Master Key number, and
  - that it has been returned to the nominated location.



**After locking away within the siding, a new Train Order must be obtained before the rail traffic is permitted to occupy the main line.**

##### Network Controller

1. Record the time and number of the Master Key returned on the Train Control Graph and fulfil the Train Order.

### 4.7.3 Originating from a Siding

#### **Rail Traffic Crew**

1. Get the Network Controller's authority to take the Master Key from the secure location.
2. Tell the Network Controller the Master Key number and that it has been removed.
3. Compile a Train Order.
4. Unlock the points using the Master Key.
5. Set the route for the siding.
6. Authorise the rail traffic movement to proceed onto the main line.
7. When the intended rail traffic movement is clear of the siding onto main line, restore the points to the Normal position and remove the Master Key.
8. Return the Master Key to the Driver.
9. The rail traffic crew must obtain the permission of the Network Controller before departing.

#### **Network Controller**

1. Before giving permission for the rail traffic to depart, the Network Controller must make sure that the siding points have been returned to the Normal position and the Master Key is in the possession of the Rail Traffic Crew.
2. The Network Controller must record on the train control graph the departure time and Master Key number.



**The number of the Master Key must be shown on the Train Order. All movements of the Master Keys must be recorded on the Train Control Graph and the Network Controller's Master Key log book.**

## 5 Local Possession Authority

### 5.1 Purpose

To prescribe the rules for authorising, issuing and using a Local Possession Authority (LPA).

### 5.2 General

An LPA closes a defined portion of track for a specified period.

An LPA is issued exclusively to the Possession Protection Officer for the specified period of the possession

Work within the portion of track included in the LPA limits must only be done with the agreement of the Possession Protection Officer.

No other work on track authority can be issued for the defined portion of track for the period of the LPA.

A number of separate work groups and their work trains and equipment may occupy the portion of track defined by an LPA.

Portions of line included in the LPA must be *advertised* in a Train Alteration Advice at least 7 days in advance.

### 5.3 Authorisation

Only Network Controllers may authorise an LPA for track under their control.

If the proposed limits of an LPA affect more than one Network Controller, the Network Controllers must confer and nominate a Coordinating Network Controller. The Coordinating Network Controller must authorise the LPA.

The Network Controller must make sure that Signallers responsible for the affected area, and the Possession Protection Officer, are aware of protection arrangements.

The Network Controller must record, in permanent form, the details of an LPA before authorising the possession.

A form is not required on Rail Vehicle Detection, Electric Staff and Staff and Ticket Systems.

Form W is required to be used on the Phoenix Electronic Train Order Working System.

## 5.4 Issue of Authority

Only Network Controllers may issue an LPA.

Network Controllers and Signallers must record, in permanent form, the issue of an LPA.

If a written Authority is issued, it must be issued on Form W.



**On Phoenix Electronic Train Order Working territory, a Local Possession Authority is issued on Form W.**

## 5.5 Rail Traffic

Only work trains or track vehicles associated with the LPA are allowed to enter a possession.

Other trains may cross the possession to enter or exit a balloon loop or siding with the agreement of the Possession Protection Officer.

## 5.6 Possession Protection Officer

At all times there must be a nominated Possession Protection Officer for the LPA.

The Possession Protection Officer must:

- get the Authority,
- be responsible for the protection of workers from rail traffic,
- make sure that the limits of the Authority are protected against unauthorised entry or exit by rail traffic,
- make sure that each worksite under the LPA has a Protection Officer,
- make sure Protection Officers keep the tracks between worksites and protecting locations clear of obstructions,  
and
- coordinate the protection of all worksites within the limits of the LPA.

### **5.6.1 Keeping records**

The Possession Protection Officer must keep written records about:

- the Authority,
- possession protection arrangements,  
and
- communications with the Network Controller about changes in the possession protection arrangements.

### **5.6.2 Other duties**

A Possession Protection Officer's primary duty is to keep the worksite and workers safe. A Possession Protection Officer must be satisfied that other work will not interfere with protection duties.

## **5.7 Protection Officer**

A Protection Officer must be on duty at each worksite when work is being done.

Protection Officers:

- are responsible for the protection of workers from rail traffic,  
and
- must make sure that tracks between worksites and protecting locations are not obstructed.

Protection Officers must tell members of work parties about the kinds and limits of protection in place:

- before work begins,  
and
- if the protection arrangements change.

### **5.7.1 Other duties**

A Protection Officer's primary duty is to keep the worksite and workers safe. A Protection Officer must be satisfied that other work will not interfere with protection duties.



## 5.8 Protecting worksites

The Possession Protection Officer and Protection Officers must make a safety assessment as described in *ANWT 300 Planning work in the Rail Corridor*.

Unauthorised rail traffic must be prevented from entering the possession by:

- setting protecting signals at STOP and applying available blocking facilities,
- applying a block to a section in Train Order territory  
or
- taking and safeguarding the staff for the section;
- and also
- clipping and locking points,  
or
- placing Audible Track Warning Signals (ATWS) *detonators* and red flags/red lights  
or
- placing STOP signs/red lights on the head of the left hand rail in the direction of approach to the Local Possession area.

ATWS *Detonators* and red flags/red lights or STOP signs/red lights must be placed at both ends of the possession or 2500m from the worksite if this is more practicable.

Work in the Danger Zone must not begin before the required safety measures are in place.

The Possession Protection Officer must make sure that all points of entry into the portions of track within the LPA limits are protected against unauthorised rail traffic movement.

The distance between the signal protecting the limits of the Authority and a fixed worksite must not be less than 500m unless:

- points can be secured to prevent access to the portion of track within the LPA limits,  
or
- a *Track Work Authority* Track Force Protection – Country Regions adjoining the entry end limit has been authorised for the period of the work.

### 5.8.1 Staffs and half pilot staffs

In *token* areas, or in areas where *half pilot staffs* are provided, the Possession Protection Officer must arrange to take and safeguard, for the period of the Authority:

- the ordinary staff or electric staff for the section,  
or
- the half pilot staffs at the limits of the Authority.

The Signaller and/or Train Controller must record, in permanent form, that the staffs have been secured.

### 5.8.2 Terminal lines

If the Network Controller tells the Possession Protection Officer that there is no rail traffic between worksites and the end of a *terminal line*, protection from that direction is not necessary.

### 5.8.3 Adjacent lines

If rail traffic can travel on adjacent lines, the Possession Protection Officer must arrange for safety measures to be taken to reduce the risk from rail traffic on the adjacent lines.

The Possession Protection Officer may arrange for the speed of rail traffic on adjacent lines to be restricted.

### 5.8.4 Slip sites

If a signal at **STOP** protects a slip site, *Drivers* and *track vehicle operators* must follow the directions on the *instruction sign* on the signal.

### 5.8.5 Multiple worksites

If the LPA includes more than one worksite, each worksite must have a Protection Officer. Protection Officers are responsible to the Possession Protection Officer.

Fixed worksites must be protected by:

- red flags/red lights and three ATWS *detonators*  
or
- worksite limit signs

placed at least 500m from the worksite on both sides.

If fixed worksites are less than 500m apart, they must be treated as one worksite.

If fixed worksites are more than 500m but less than 1000m apart:

- three ATWS **detonators** must be placed midway between the worksites, and
- a red flag/red light must be placed next to the middle ATWS **detonator** or
- a **STOP** sign/red light must be placed on the head of the rail.

If the LPA includes more than one worksite, the Possession Protection Officer and Protection Officers must apply Rule 20 Multiple Work Groups, Section 15 Infrastructure Works.

### 5.8.6 Piloting

The Possession Protection Officer or a delegate must act as the Pilot.

#### 5.8.6.1 Entering Authority limits

Work trains and track vehicles must be piloted into the LPA from the controlled signals protecting the limits.

If there are no controlled signals, work trains and track vehicles must be piloted into the LPA from the entry to the section.

#### 5.8.6.2 Within Authority limits

Work train movements must be piloted within the limits of an LPA.

The Possession Protection Officer may require track vehicles to be piloted within the limits of an LPA.

#### 5.8.6.3 Departure of work trains and track vehicles

Work trains and track vehicles may depart from the limits of an LPA only on the authority of the Network Controller.

## 5.9 Liaison

### 5.9.1 Network Control

The Possession Protection Officer must be the only point of contact between Network Control and work parties for matters of worksite protection.

The Possession Protection Officer must:

- tell the Network Controller about protection applied to lines adjacent to the possession,
- tell the Network Controller about work progress
- if necessary, seek an extension of time,  
and
- arrange for the movement of associated work trains and track vehicles.

### **5.9.2 Change of Possession Protection Officer**

An outgoing Possession Protection Officer must tell an incoming Possession Protection Officer about the worksite protection arrangements.

The incoming Possession Protection Officer must:

- tell the Network Controller about the changed contact arrangements,
- record in permanent form, the handover of the Authority,  
and
- sign the Authority form to acknowledge handover of the Authority.

### **5.10 Fulfilling the Authority and returning the track to service**

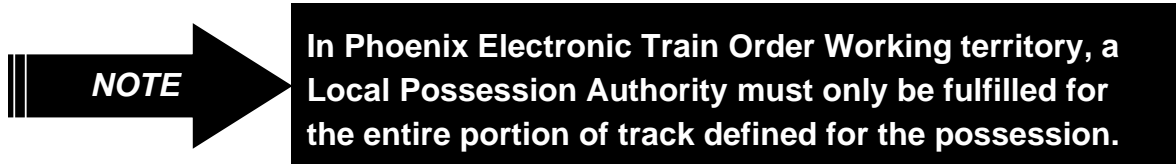
An LPA may be:

- fulfilled for the entire portion of track defined for the possession.  
or
- fulfilled progressively for one or more portions of track included in the agreed possession.

The LPA may be fulfilled only when the Possession Protection Officer:

- arranges for work to continue under another work on track authority,  
or
- tells the Network Controller that:
  - worksites have been cleared,
  - protection has been removed
  - staffs, or half pilot staffs, have been returned,  
and
  - the portion of track included in the Authority has been certified as available for use.

The Possession Protection Officer must tell the Network Controller about operating restrictions that have been placed or removed.



## **6 Using Local Possession Authority**

### **6.1 Introduction**

A Local Possession Authority (LPA) is used to close a defined portion of track for a specified period.

### **6.2 Obtaining a Local Possession Authority**

The Possession Protection Officer obtains an LPA from the Network Controller responsible for the portion of track.

#### **Possession Protection Officer**

1. Immediately before an LPA is due to begin, speak to the Network Controller and Signallers responsible for the portion of track.
2. Make sure that you, the Network Controller and the Signallers have a copy of the documentation and amendments advertising the LPA.

#### **Network Controller**

3. Confirm that the LPA request will affect only one Network Controller area.
4. If the proposed limits of the LPA affect more than one Network Controller, Network Controllers agree on the Train Control area most affected.  
The Coordinating Network Controller authorises the possession and issues the LPA.
5. Confirm the details of the possession and protection arrangements with affected Signallers.
6. Tell the Coordinating Network Controller when the details have been confirmed.

#### **Signallers**

7. Make sure that blocking facilities have been applied to prevent entry into the portions of track within the LPA.

#### **Network Controller/Coordinating Network Controller**

8. Make sure that any:
  - rail traffic not associated with the LPA that might need to be moved during the LPA is clear of the limits, and
  - rail traffic associated with the LPA within the limits has been identified and is being managed as agreed by the Possession Protection Officer and the Network Controller.

**Network Controller**

9. Agree with the Possession Protection Officer that the LPA is now authorised, and record the current time.

On Phoenix Electronic Train Order territory compile Form W.

10. Tell affected Signallers that an LPA has been issued.

**Possession Protection Officer**

11. On Phoenix Electronic Train Order territory compile Form W.

12. Repeat the details you recorded back to the Network Controller.

13. Arrange to tell affected Network Controllers and Signallers about the location of worksites in the possession.

**6.3 Protecting the Limits of the Authority****Possession Protection Officer**

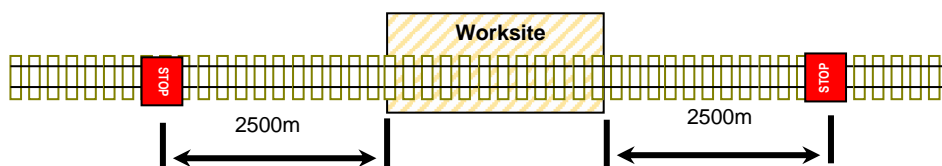
1. In token areas, safeguard the staff or half pilot staffs.

2. Protect the possession with:

- three ATWS detonators and red flags/red lights placed at the specified limits of the possession,
- or
- STOP signs/red lights placed at the specified limits of the possession

or at 2500m from the outermost worksites if this is more practicable.

If points have been clipped and locked to give protection, ATWS ~~detonators~~ and flags or STOP signs/red lights are not required.

**Figure 5-1**

Example of protection arrangements for a Local Possession Authority using **STOP** signs/red lights

3. If necessary, protect the worksites from rail traffic on other lines.

## 6.4 Protecting Multiple Worksites in the Limits of the Authority

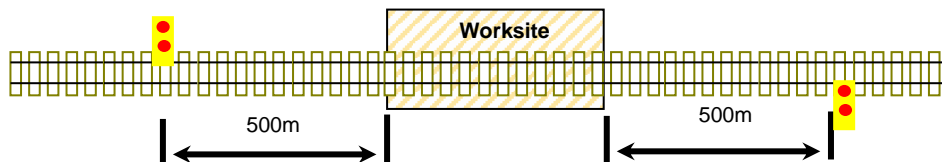
### Possession Protection Officer

1. Make sure the Protection Officers place the right protection.
2. Tell the Protection Officers if the worksite protection needs change and make sure they change the protection.

### Protection Officers

3. Make sure that:
  - ATWS detonators are placed on each side of each worksite  
or
  - worksite limit signs are placed on each side of each worksite, as shown in the following examples.
4. Where ATWS are used make sure that red flags/red lights are placed in the middle of the four-foot, beside the ATWS detonators closest to each fixed worksite.
5. If fixed worksites are more than 1000m apart, place the ATWS detonators or worksite limit signs 500m from each worksite.

Figure 5-2

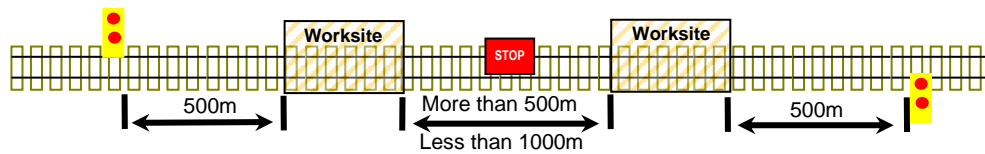


Example of protection arrangements for an individual worksite using Worksite Limit signs

6. Where ATWS are used, if fixed worksites are more than 500m but less than 1000m apart, place three ATWS detonators midway between the worksites.
7. Place a red flag/red light next to the middle ATWS detonator.
8. Where ATWS are not used, place a STOP sign/ red light midway between the worksites.



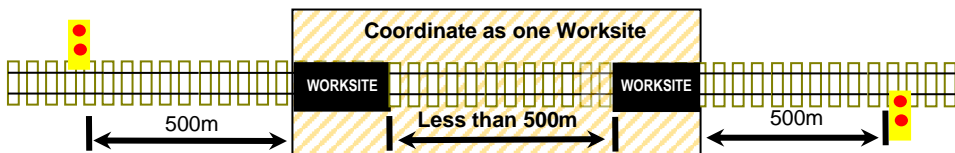
Figure 5-3



Example of Protection Arrangements for multiple worksites more than 500m but less than 1000m apart using Worksite Limit signs and a STOP sign

9. Treat fixed worksites less than 500m apart as one worksite.

Figure 5-4



Example of Protection Arrangements for multiple worksites less than 500m apart using Worksite Limit signs

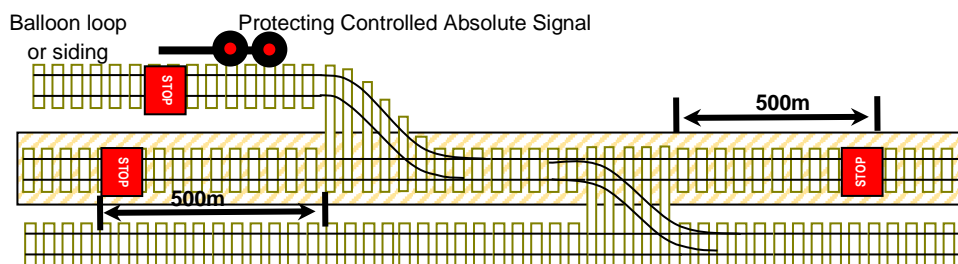
## 6.5 Protecting from Rail Traffic Crossing the LPA

### Possession Protection Officer

Make sure that three ATWS detonators and red flags/red lights or STOP signs/red lights are placed:

- on the closed line 500m clear of the crossover or turnout, and
- on the converging line that allows entry to the possession area, at the signal protecting entry into the closed line.

Figure 5-5



Example of Protection Arrangements if rail traffic may be authorised to cross the Local Possession Authority area using Railway Track Signals and red flags

## 6.6 Returning the Track to Service

### Possession Protection Officer and Protection Officers

1. Make sure that track vehicles and equipment have cleared the line.
2. Make sure that all workgroups have cleared the worksites.
3. Make sure that protection, including flags, ATWS **detonators**, STOP signs/red lights, worksite limit signs and point clips, has been removed.

### Possession Protection Officer

4. Make sure that any emergency crossovers that have been used are returned to, and secured in, the normal position.
5. When advised that the line is certified fit for service, tell the Network Controller.
6. Tell the Network Controller and Signallers about any restrictions on track use.
7. Fulfil the LPA for:
  - the entire portion of track defined for the possession.  
or
  - progressively for one or more portions of track included in the agreed possession.



**In Phoenix Electronic Train Order Working territory, a Local Possession Authority must only be fulfilled for the entire portion of track defined for the possession.**

## 6.7 Keeping Local Possession Authority Details

Network Controllers, Signallers and the Possession Protection Officer must keep details about the LPA and information about protection arrangements.

## 7 Track Occupancy Authority

### 7.1 Purpose

To prescribe the rules for *authorising, issuing* and using a *Track Occupancy Authority* (TOA).

### 7.2 General

A TOA authorises occupation of *track*, within specified limits, for an agreed period.

A TOA is issued to the *Protection Officer* for the agreed period of the *occupancy*.

A TOA gives *exclusive occupancy* except for:

- *joint occupancy* by mutual agreement with the holder of another TOA for the same limits or overlapping limits,
- joint occupancy following a *train* movement,
- joint occupancy by mutual agreement with the holder of Track Force Protection – Country Regions a *Track Work Authority* (TWA),  
or
- joint occupancy with a disabled train.

For track within specified limits, a maximum of two TOAs *may* be in force at any one time.

A TOA may involve one or more *track vehicles* and machines working within the specified limits.

A TOA may be issued for track vehicles to *travel* singly or in *convoy*.

### 7.3 TOA Limits

The limits of a TOA *must* be stated as being between:

- one *yard limit* and another yard limit,
- defined *clearance points* wholly within one *yard's* limits,
- one yard limit to a defined clearance point within another yard,  
or
- a defined clearance point within one yard's limits to a defined clearance point within another yard's limits.

A TOA may include more than one *section*, provided it does not extend:

- into the yard limits controlled by another *Signaller*,
- beyond an unattended junction location,  
or
- beyond an *unattended location* where a train is *shunting* in the section ahead.

## 7.4 Authorisation

Only *Network Controllers* may authorise a TOA for track under their control.

If the proposed limits of a TOA affect more than one Network Controller:

- the Network Controllers must agree about the Train Control area most affected,  
and
- the Network Controller responsible for the area most affected must authorise the TOA.

Before authorising a TOA, the Network Controller must make sure that:

- the track is unoccupied, and will remain unoccupied, except as specified in the TOA,
- the Protection Officer knows about any existing obstructions,
- the Protection Officer understands and agrees to the limits of the TOA,  
and
- *blocking facilities* have been applied to prevent the entry of *rail traffic* into the portion of track within the TOA limits.

Before authorising the occupancy, the Network Controller must record, in *permanent form*, the details of the TOA.

Form X is required to be used on the Phoenix Electronic Train Order Working System.

### 7.4.1 Staffs and Half Pilot Staffs

If practicable during *token* working, or in areas where *half pilot staffs* are provided, the Protection Officer must arrange to take and safeguard for the period of the Authority:

- the ordinary staff or electric staff for the section,  
or
- the half pilot staffs at the limits of the Authority.

The Signaller and/or Network Controller must record, in permanent form, that the staffs have been secured for *work on track* or taken for a track vehicle to travel on the Network.

#### 7.4.2 Attended locations

If the limits of the proposed TOA are wholly within the yard limits of an attended location, the Protection Officer must ask the Signaller to issue the TOA.

A TOA form is not needed.

#### 7.4.3 Authorising a second TOA

The Network Controller may authorise a second TOA for the same limits, or for overlapping limits, only:

- after the Protection Officers have consulted with each other, and
- with the agreement of the Protection Officer holding the first Authority.

Before authorising the second TOA, the Network Controller must record its details in permanent form.

#### 7.4.4 Occupancy following a train movement

Before issuing the Authority, the Network Controller must make sure that the preceding train has passed:

- the proposed worksite, or
- the starting point from which the track vehicle included in the Authority will travel.

#### 7.4.5 Joint occupancy with Track Force Protection – Country Regions

The Network Controller may authorise a TOA for a portion of line where a TWA Track Force Protection – Country Regions is current.

Before the *Network Controller* or Signaller issues the TOA:

- the Protection Officers must consult with each other and agree about arrangements, and
- the Protection Officer holding the Track Force Protection – Country Regions TWA must agree to the issue of the second Authority.

The Network Controller must record, in permanent form, the details of the TOA.

In *unidirectional* portions of line where the TOA is for a track vehicle journey that will travel through the worksite in the *wrong running-direction*, the Track Force Protection – Country Regions TWA Protection Officer must place:

- the standard protection against rail traffic approaching in the *right running-direction*,  
and
- three Audible Track Warning Signals (ATWS) *detonators* or STOP sign/red light at least 500m and not more than 1000m from the worksite in the wrong running-direction.

#### 7.4.6 Occupancy with disabled rail traffic

To allow restoration work, the Network Controller may authorise a TOA for a portion of line occupied by disabled rail traffic, in accordance with Rule Phoenix Electronic Train Order System 1.4.8 Restraint Authority *ANGE 206 Reporting and responding to a Condition Affecting the Network*.

#### 7.5 Issue of Authority

Signallers may issue a TOA only on the authority of the Network Controller.

The Network Controller and Signallers must record, in permanent form, the issue of a TOA.

If a written Authority is issued, it must be issued on a Track Occupancy Authority form X (ANRF 002).

#### 7.6 Rail Traffic

Only rail traffic associated with the TOA may enter the portion of track within the TOA limits.

#### 7.7 Protection Officer

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

The Protection Officer must:

- get the Authority,
- be responsible for the *protection* of workers from rail traffic,  
and
- make sure that the limits of the Authority are protected against *unauthorised* entry or exit by rail traffic.

The Protection Officer must tell workers about the kinds and limits of protection in place:

- before work begins,  
and
- if the protection arrangements change.

#### 7.7.1 Keeping records

The Protection Officer must keep written records about:

- the Authority,
- protection arrangements for *fixed worksites*,  
and
- communications with the Network Controller and Signaller about changes in the protection arrangements.

#### 7.7.2 Other duties

A Protection Officer's primary duty is to keep the worksite and workers safe.

A Protection Officer must be satisfied that other work will not interfere with protection duties.

### 7.8 Protecting the limits of the Authority

The Network Controller and Signaller must apply blocking facilities to prevent the entry of rail traffic into the portion of track within the TOA limits.

The *Danger Zone* must not be occupied before the TOA is issued, and protection is applied.

### 7.9 Protecting fixed worksites

Fixed worksites must have the extra protection of three ATWS *detonators* and a red flag/red light or STOP signs/red lights, at least 500m on each side of the worksite, or at the limits of the Authority.

If there is only one fixed worksite within the limits of the TOA, ATWS *detonator* protection or STOP signs/red lights are not required:

- in Train Order territory.,  
or
- if a staff or half pilot staff can be secured for the duration of the TOA.

If there is more than one worksite within the limits of the TOA, or a second Authority is issued within the limits, fixed worksites must have:

- three ATWS detonators and a red flag/red light:
  - at least 500m on each side of the worksite,  
or
  - at the limits of each Authority  
or
- a STOP sign/red light:
  - at least 500m on each side of the worksite,  
or
  - at the limits of each Authority.

Unless a set of *points* can be secured to prevent *access* to the portion of track within the TOA limits, the distance between the signal protecting the limits of the Authority and the fixed worksite must not be less than 500m.

If rail traffic can approach from more than one direction, the Protection Officer must make sure that there is protection at all points of entry into the portion of track within the TOA limits.



**If a track vehicle journey is stopped to carry out work, the work must be protected as a fixed worksite.**

#### 7.9.1 Slip sites

If a signal at **STOP** protects a slip site, *Drivers* and *track vehicle operators* must follow the directions on the *instruction sign* on the signal.

#### 7.9.2 Terminal lines

If the Network Controller or Signaller tells the Protection Officer that there is no rail traffic between worksites and the end of a *terminal line*, protection from that direction is not necessary.

#### 7.9.3 Adjacent lines

If rail traffic can travel on *adjacent* lines, the Protection Officer must arrange for safety measures to be taken to reduce the risk from rail traffic on the adjacent lines.



The Protection Officer may arrange for the speed of rail traffic on adjacent lines to be restricted.

#### **7.9.4 Piloting**

The Protection Officer or *delegate* must act as the *Pilot*.

#### **7.9.5 Entering Authority limits**

Rail traffic must be piloted into the TOA:

- from the *controlled signals* protecting the limits,  
or
- if there are no controlled signals, from the entry to the section.

#### **7.9.6 Within Authority limits**

Work train movements must be piloted within the limits of a TOA.

The Protection Officer may require track vehicles to be piloted within the limits of a TOA.

#### **7.9.7 Departure of rail traffic**

Rail traffic may depart from the limits of a TOA only on the authority of the Network Controller or Signaller.

### **7.10 Liaison**

#### **7.10.1 Network Control**

The Protection Officer must be the only point of contact between *Network Control* and work parties for matters of worksite protection.

The Protection Officer must:

- tell the Network Controller about protection applied to lines adjacent to the occupancy,
- tell the Network Controller about work progress,
- if necessary, seek an extension of time,  
and
- arrange for the movement of associated rail traffic.

#### **7.10.2 Change of Protection Officer**

An outgoing Protection Officer must tell an incoming Protection Officer about the worksite protection arrangements.

The incoming PO must:

- tell the Network Controller or Signaller about the changed contact arrangements,  
and
- sign the Authority form to acknowledge handover of the Authority.

#### **7.11 Fulfilling the Authority and returning the track to service**

A TOA is *fulfilled* only when the Protection Officer tells the Network Controller or Signaller that:

- worksites have been cleared,
- protection has been removed,
- ~~staffs, or half pilot staffs, have been returned,~~  
and
- the portion of track included in the Authority has been certified as available for use.

The Protection Officer must tell the Network Controller or Signaller about operating restrictions that have been placed or removed.

## **8 Using a Track Occupancy Authority**

### **8.1 Introduction**

A Track Occupancy Authority (TOA) is used to occupy a defined portion of track within specified limits for an agreed period.

TOA's may involve one or more track vehicles and machines working within the specified limits. TOAs may also be granted for track vehicles to travel singly or in convoy.

### **8.2 Obtaining a Track Occupancy Authority**

The Protection Officer obtains a TOA from the Network Controller or Signaller responsible for the portion of track.

#### **Protection Officer**

1. Tell the Network Controller or Signaller:

- your name, and the location of the work,
- the type of work to be done,  
and
- the limits of the TOA:
  - if there are multiple tracks, give the names of the yards and the tracks,  
or
  - if within yard limits, identify the clearance points,  
and
  - give signal, points or crossover numbers
  - the protection arrangements for the Authority,  
and
  - the intended start and finish times.

#### **Network Controller or Signaller**

2. Make sure that:

- there is no rail traffic within the proposed limits of the TOA,
- rail traffic within the limits has passed beyond the proposed worksite or the starting point of the track vehicle journey,  
or
- if the TOA is associated with disabled rail traffic, the rail traffic will not be moved before authority is obtained from the Protection Officer.

3. Apply blocking facilities to prevent entry into the limits of the TOA.

**Signaller**

4. Ask the Network Controller for permission to issue a TOA.

**Network Controller**

5. Confirm that the TOA request will affect only one Train Control area.
6. If the proposed limits of a TOA affect more than one Train Control area, the affected Network Controllers must agree about the Train Control area most affected. That Network Controller authorises the occupancy.

**Signaller**

7. When authorised, issue the TOA.
8. Tell the Network Controller that the TOA has been issued.

**Train Controller and Signaller**

9. Record, in permanent form, all information about the authorisation and issue of the TOA.

**Protection Officer**

10. If the TOA is to be authorised to start after a train movement:
  - watch the train pass the point from which the track is to be occupied, and
  - give the Network Controller or Signaller the identification number of the lead unit of the train.
11. If told by the Network Control Officer, take and safeguard the staff for the section, or half pilot staff, and record this in permanent form.
12. If the limits of the proposed TOA are wholly within the yard limits of an attended location:
  - start the work on the Signaller's spoken authority, and
  - record, in permanent form, the receipt of the authority and the start and finish times.
13. If you are not working wholly within the yard limits of an attended location, Compile a TOA form (form X).
14. Repeat the details you recorded back to the Network Controller or Signaller.

15. Confirm with the Network Controller or Signaller that blocking facilities have been applied to prevent entry of rail traffic into the portion of track within the TOA limits.

16. When authorised, put protection in place.

### 8.3 Jointly with a Track Force Protection – Country Regions

A TOA may be granted in an area where Track Force Protection – Country Regions a TWA is current.

#### Network Controller or Signaller

1. Tell the Protection Officer seeking the TOA to consult with the Protection Officer holding the Track Force Protection – Country Regions TWA.
2. Confirm that the Protection Officers have consulted with each other, and that the Track Force Protection – Country Regions TWA Protection Officer agrees with the arrangements.

#### TOA Protection Officer

3. If the TOA is for a fixed worksite, confirm the protection that will be placed for the TOA.
4. If the TOA is for a track vehicle journey, confirm:
  - the direction of travel,  
and
  - that the protection arrangements are agreed.

#### Network Controller and Signaller

5. Apply blocking facilities if necessary.

#### Signaller

6. When authorised, issue the TOA.
7. Tell the Network Controller that the TOA has been issued.

#### Network Controller, Signaller and TOA Protection Officers

8. Record, in permanent form, the TOA details.

### 8.4 Getting a second TOA when a TOA is Current

A second TOA may be granted for a portion of line where a TOA is current.

#### Network Controller or Signaller

1. Tell the Protection Officer seeking the second TOA to consult with the Protection Officer holding the first TOA.

2. Confirm that the Protection Officers have consulted with each other, and that the first Protection Officer agrees with the arrangements.
3. Record the details of the second TOA.
4. Apply additional blocking facilities if necessary.

**Signaller**

5. When authorised, issue the TOA.
6. Tell the Network Controller that the TOA has been issued.

**Network Controller, Signaller and Protection Officer**

7. Record, in permanent form, details about the TOA.

**8.5 Protecting fixed worksites**

ATWS **Detonator** protection is not required:

- in Train Order territory,  
or
  - if the staff or half pilot staff for the section has been taken and safeguarded,
  - if there is no other work on track authority or worksite in the section, and
  - if the worksite is more than 500m from the protecting signal.

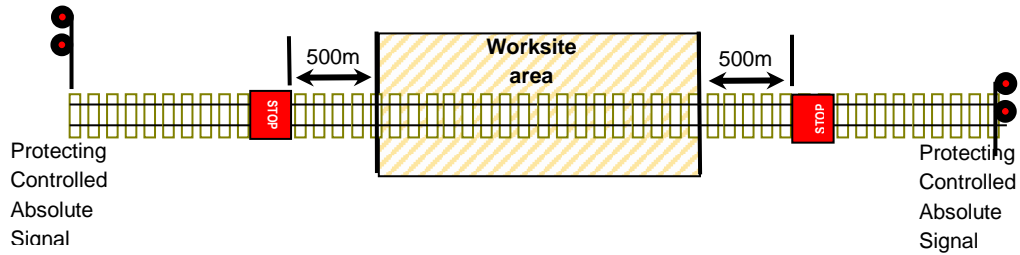
ATWS **Detonator** protection or STOP signs/red lights, placed 500m from the entry limits of the worksite, is required if:

- there is more than one worksite within the TOA,  
or
- a second TOA is granted within the section.

**Protection Officer**

1. Where ATWS are used, make sure that three ATWS **detonators** are placed, as necessary, on all lines entering the fixed worksite. Place these ATWS **detonators** at least 500m from the worksite or at the limits of the TOA.
2. Make sure that red flags/red lights are placed in the middle of the four foot, beside the ATWS **detonator** closest to the worksite.
3. Where ATWS are not used, place STOP signs/red lights, on all lines entering the fixed worksite. Place the STOP signs/red lights at least 500m from the worksite or at the limits of the TOA.

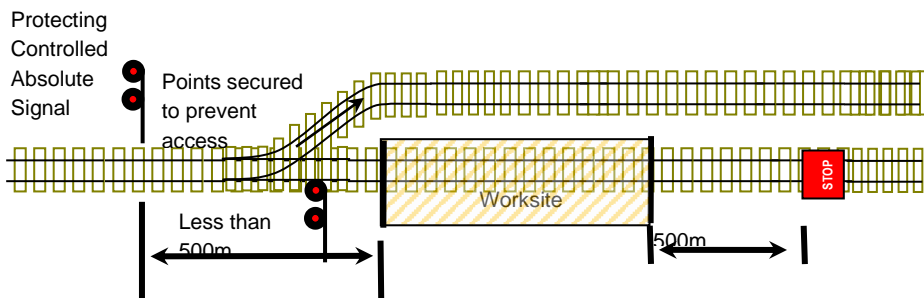
Figure 7-1



Example of protection arrangements for a single worksite using STOP signs/red lights.

4. If a *controlled signal*, less than 500m from the worksite, is used to prevent access to the portion of track within the TOA limits, and a set of points is available for a different *route*, clip and lock the points.

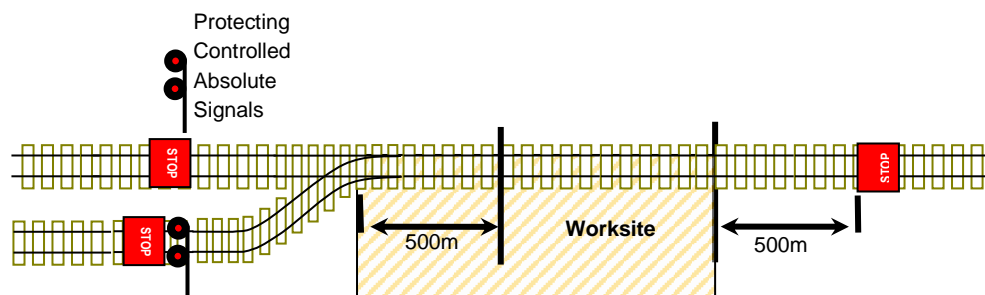
Figure 7-2



Example of protecting signal less than 500m from worksite, points secured for a different route.

5. If points cannot be clipped and locked, use a controlled signal at least 500m from the worksite.

Figure 7-3



Example of protecting a worksite with Controlled Absolute Signals more than 500m from worksite.

## 8.6 Obtaining an extension of time

### Protection Officer

1. If necessary, ask the Network Controller or Signaller for an extension of time.
2. Record the new expiry time and the authorising Network Controller's name on the TOA form or other permanent record.

### Network Controller or Signaller

3. Tell affected Network Controller and Signallers about the new Authority expiry time.

## 8.7 Returning the track to service

### Protection Officer

1. Make sure that track vehicles and equipment have cleared the line.
2. Make sure that all workgroups have cleared the worksites.
3. Make sure that protection, including flags, ATWS detonators, STOP signs/red lights and point clips, have been removed.
4. When advised that the line is certified fit for service, tell the Network Controller.
5. Tell the Network Controller and Signallers about any restrictions on track use.
6. If necessary, replace the staff or half pilot staff, as required by the Network Control Officer.
7. If a TOA form was issued for work in Train Order territory, tell the Network Controller the security code.
8. If a TOA form was issued for work other than in Train Order territory, tell the Network Control Officer the TOA number.
9. Fulfil the TOA form.

## 8.8 Keeping Track Occupancy Authority details

Network Controllers, Signallers and the Protection Officer must keep TOA forms or records, including information about protection arrangements.



## 9 Form B

### 9.1 Introduction

Form B is used to authorise occupancy of the line by rail traffic in Phoenix Electronic Train Order territory.

It is normally generated by the Network Controller's workstation, but is compiled manually by the Network Controller if the computerised system is not available.



**Security codes are not used if a Network Controller compiles an Authority manually.**

### 9.2 Special instructions

Complete the form with the exact details dictated to you by the Network Controller.



**Network Controllers must not record security codes generated by the workstation.**

### 9.3 Compiling an Authority

#### 9.3.1 Item 1 - Authority type

In the first box, write the Authority type (Proceed, Conditional Proceed, Proceed Restricted, Location, Restraint, or Special Proceed Authority).

In the second box, write the Authority number. If manually compiling forms, the Network Controller must use sequential numbers with an 'M' suffix.

Write the date, train number and lead locomotive number in the boxes provided.

#### 9.3.2 Item 2 – Cross

Write the rail traffic number and lead locomotive number in the boxes provided for a Conditional Proceed Authority.

**9.3.3 Item 3A – Proceed**

Write the Authority Starting Location and, if relevant, the final destination. Write the Fulfilment or Security Code dictated by the Network Controller.

**9.3.4 Item 3B – Proceed**

Cross the check box ☒ item 3B is not relevant to the Victorian Phoenix Train Order System.



**3A (Key) and Item 3B are not relevant to the Victorian Phoenix Train Order System.**

**9.3.5 Item 4- Special instructions**

Write any special instructions for the movement.

**9.3.6 Item 5 - Report clear Authority Start Location**

Write the departure code for the starting location.

If shunt access is not granted for the Authority Start Location, write NO in the box ☐ NO.

If shunt access is granted for the Authority Start Location, write YES in the box ☐ YES.

**9.3.7 Item 6 – Report at**

For intermediate reporting locations, write:

- in the left hand “Report at” box, the intermediate location name,
- in the centre box, the departure code,  
and
- in the right hand box, write ☐ NO if shunt access is not granted at that location,  
or write ☐ YES if shunt access is granted.

**9.3.8 Item 7 - Report at Authority End Location**

Write the arrival code for the final destination in the first box.

If shunt access is not granted for the Authority End Location, write NO in the box

If shunt access is granted for the Authority End Location, write YES in the box

**9.3.9 Item 8 - Train**

Cross the check box ☐ if other rail traffic is not being held at a Block Location.

Tick the check box ☒ if other rail traffic is being held at a Block Location, write:

- in the left hand box, the train number,
- in the second box, the lead locomotive number,  
and
- in the third box, write  if the other rail traffic is on the loop line, or  if the other rail traffic is on the main line, or  if the other rail traffic is on the siding and the location name.

**9.3.10 Item 9 - Repeated back OK**

Write the time and date that the Network Controller says that the Authority was read back OK.

**9.3.11 Item 10 – Issued by**

In the first box, write the name of the Network Controller and in the second box the location.

**9.3.12 Item 11 - Compiled by**

The person compiling and receiving the Authority must write their name in the box provided.

**9.3.13 Item 12 - Noted by**

If the Authority was received and compiled by someone other than the Driver, track vehicle operator or competent worker, the Driver track vehicle operator or competent worker must write their name, time and the date they noted the Authority, verifying the authority as being understood and correct.

## **9.4 Cancellling and fulfilling forms**

### **9.4.1 Fulfilling a form**

If all of the instructions in an authority have been completed, fulfil the authority by writing FULFILLED between parallel diagonal lines across the form.

### **9.4.2 Cancelling a form**

If some or none of the instructions in a form have been completed, cancel the form by writing CANCELLED between parallel diagonal lines across the form.

### **9.4.3 Signing and dating**

Between the parallel diagonal lines, write:

- the date and time the form is fulfilled or cancelled,  
and
- your name and signature.

## 9.5 Example - Form B

ARTC		FORM B	
1	Authority Type	Type of Authority	Number ID Number
	Train	Train ID	Loco Loco ID
2	<input type="checkbox"/> Tick or Cross Cross	Train ID	Loco ID Number
3A	Proceed From	Current Authority Start Location	To Current Authority End Location
	<input type="checkbox"/> Tick or Cross Fulfilment or Security Code		Key Main or Loop
3B	Proceed From	Next Authority Start Location	To Next Authority End Location
	<input type="checkbox"/> Tick or Cross Fulfilment or Security Code		Key Main or Loop
4	Special Instructions		
5	Report clear of Authority Start Location	Departure Code	Shunt Access Yes / No
6	Also Report at:	Location	Departure Code
	Also Report at:	Location	Departure Code
	Also Report at:	Location	Departure Code
	Also Report at:	Location	Departure Code
	Also Report at:	Location	Departure Code
	Also Report at:	Location	Departure Code
7	Report at Authority End Location	Arrival Code	Shunt Access Yes / No
8	<input type="checkbox"/> Tick or Cross Train	Train ID	Loco Loco ID
	Train	Train ID	Loco Loco ID
	Train	Train ID	Loco Loco ID
	Train	Train ID	Loco Loco ID
9	Read Back OK Time / Date	Time / Date	This authority is in affect when the Read back OK time and date is given by the Network Controller.
10	Issued by	Network Controller	At Location
11	Compiled by	Receiver	
12	<input type="checkbox"/> Tick or Cross Noted by	Other Train Crew Members	At Time / Date

ANRF 014 Form B This document is uncontrolled when printed Issue 2 Rev 0 04 October 2015

## **10 Form W**

### **10.1 Introduction**

Form W is used to authorise occupancy of the track, within specified limits for a Local Possession Authority (LPA) in Phoenix Electronic Train Order territory.

It is normally generated by the Network Controller's workstation, but is compiled manually by the Network Controller if the computerised system is not available.

### **10.2 Special instructions**

Complete the form with the exact details dictated to you by the Network Controller.

### **10.3 Mandatory items**

The following items must be completed:

1. Number, date and Possession Protection Officer Name and location.
2. Track will be closed between  and . Time and date track to be returned to service.
6. Authorised / Issued and in the second box the location.  
Received by and details of this form have been read back correctly by Possession Protection Officer, time and date.
7. Fulfilment time extension, date and Authorised by.
8. The portion of track detailed clear and safe for the resumption of normal rail traffic  and  , time and date.
9. Possession Fulfilled Possession Protection Officer name, time and date.

### **10.4 Optional items**

#### **10.4.1 Item 3 Details of advertising notice**

Tick the check box ☒ and record the advertisement notice number and confirmed Yes / No.

Cross the check box ☒ if the LPA has not been advertised.

#### **10.4.2 Item 4 Security Code**

Tick the check box ☒ if the Network Controller compiles the authority using the electronic system and record the security code number.

Cross the check box ☒ if the Network Controller compiles the authority manually.



**Network Controllers must not record security codes generated by the workstation.**



**Security codes are not used if a Network Controller compiles an Authority manually.**

#### **10.4.3 Item 5 Additional instructions or information.**

Tick the check box ☒ if additional instructions or information is required.

Cross the check box ☐ if additional instructions or information is not required.

### **10.5 Cancelling and fulfilling forms**

#### **10.5.1 Fulfilling a form**

If all of the instructions in an authority have been completed, fulfil the authority by writing FULFILLED between parallel diagonal lines across the form.

#### **10.5.2 Cancelling a form**

If some or none of the instructions in a form have been completed, cancel the form by writing CANCELLED between parallel diagonal lines across the form.

#### **10.5.3 Signing and dating**

Between the parallel diagonal lines, write:

- the date and time the form is fulfilled or cancelled,  
and
- your name and signature.

## 10.6 Example - Form W

ARTC		FORM W																																														
<b>1</b>	Possession	ID Number	issued on <table style="display: inline-table; border-collapse: collapse;"><tr><td style="border: 1px solid black; width: 20px; text-align: center;">DD</td><td style="border: 1px solid black; width: 20px; text-align: center;">MM</td><td style="border: 1px solid black; width: 20px; text-align: center;">YY</td></tr></table> to <span style="border: 1px solid black; padding: 2px;">Possession Protection Officer at Location</span>	DD	MM	YY																																										
DD	MM	YY																																														
<b>2</b>	<p>A Local Possession Authority will be established.</p> <p>The track will be closed to normal rail traffic between:</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <span style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</span> <span>and</span> <span style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</span> </div> <p>and will be managed by the Possession Protection Officer until this Authority is FULFILLED</p> <p>Management of track will be returned to the Network Controller by: <table style="display: inline-table; border-collapse: collapse;"><tr><td style="border: 1px solid black; width: 40px; text-align: center;">Time</td><td style="border: 1px solid black; width: 20px; text-align: center;">DD</td><td style="border: 1px solid black; width: 20px; text-align: center;">MM</td><td style="border: 1px solid black; width: 20px; text-align: center;">YY</td></tr></table></p>			Time	DD	MM	YY																																									
Time	DD	MM	YY																																													
<b>3</b>	<input type="checkbox"/> Tick or Cross	The details of advertising Notice number <span style="border: 1px solid black; padding: 2px;">Advertisement ID</span> are confirmed <span style="border: 1px solid black; padding: 2px;">Yes - No</span>																																														
<b>4</b>	<input type="checkbox"/> Tick or Cross	The following Security Code applies <table style="display: inline-table; border-collapse: collapse;"><tr><td style="border: 1px solid black; width: 20px; height: 20px;"></td><td style="border: 1px solid black; width: 20px; height: 20px;"></td><td style="border: 1px solid black; width: 20px; height: 20px;"></td><td style="border: 1px solid black; width: 20px; height: 20px;"></td></tr></table> (Electronic Train Order Territory)																																														
<b>5</b>	<input type="checkbox"/> Tick or Cross	<div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p style="text-align: center; color: #ccc;">Additional Instructions or Information</p> </div>																																														
<b>6</b>	Authorised / Issued by  Received by	<div style="display: flex; justify-content: space-between;"> <div> <span style="border: 1px solid black; padding: 2px;">Network Controller Name</span> at <span style="border: 1px solid black; padding: 2px;">Location</span>  <span style="border: 1px solid black; padding: 2px;">Possession Protection Officer at Location</span> </div> <div> Read back OK at <span style="border: 1px solid black; padding: 2px;">Time/Date</span> </div> </div>																																														
<b>7</b>	Fulfilment time extended until:  Fulfilment time extended until:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 40px; text-align: center;">Time</td> <td style="border: 1px solid black; width: 20px; text-align: center;">DD</td> <td style="border: 1px solid black; width: 20px; text-align: center;">MM</td> <td style="border: 1px solid black; width: 20px; text-align: center;">YY</td> <td style="width: 10px; text-align: center;">Authorised by</td> <td style="border: 1px solid black; padding: 2px;">Network Controller</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">Time</td> <td style="border: 1px solid black; text-align: center;">DD</td> <td style="border: 1px solid black; text-align: center;">MM</td> <td style="border: 1px solid black; text-align: center;">YY</td> <td style="text-align: center;">Authorised by</td> <td style="border: 1px solid black; padding: 2px;">Network Controller</td> </tr> </table>		Time	DD	MM	YY	Authorised by	Network Controller	Time	DD	MM	YY	Authorised by	Network Controller																																	
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<b>8</b>	<p>The portion of track detailed below is clear and safe for the resumption of normal rail traffic.</p> <p>The Possession Protection Officer relinquishes management of the track to the Network Controller between:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">and</td> <td style="border: 1px solid black; padding: 2px;">Location / Track / Kilometre ID / Clearance Point</td> <td style="padding: 0 10px;">at</td> <td style="border: 1px solid black; padding: 2px;">Time/Date</td> </tr> </table>			Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date	Location / Track / Kilometre ID / Clearance Point	and	Location / Track / Kilometre ID / Clearance Point	at	Time/Date
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<b>9</b>	Possession Fulfilled by  Possession Fulfilled by	<div style="display: flex; justify-content: space-between;"> <div> <span style="border: 1px solid black; padding: 2px;">Possession Protection Officer</span> at <span style="border: 1px solid black; padding: 2px;">Time</span> </div> <div> <span style="border: 1px solid black; padding: 2px;">DD</span> <span style="border: 1px solid black; padding: 2px;">MM</span> <span style="border: 1px solid black; padding: 2px;">YY</span> </div> </div>																																														

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## 11 Form x

### 11.1 Introduction

Form X is used to authorise occupancy of the track, within specified limits for a Track Occupancy Authority (TOA) in Phoenix Electronic Train Order territory.

It is normally generated by the Network Controller's workstation, but is compiled manually by the Network Controller if the computerised system is not available.

### 11.2 Special instructions

Complete the form with the exact details dictated to you by the Network Controller.

### 11.3 Mandatory items

The following items must be completed:

1. Number, date and Possession Protection Officer Name and location.
7. Record details of other authorities in the section or location, details of agreed arrangements and additional information, i.e. type of work.
8. Issued and in the second box the location.  
Received by and details of this form have been read back correctly by Protection Officer, time and date.
9. Authority time extension, date and Authorised by.



**Item 10 Suspend / Re-instated is not relevant to the Victorian Phoenix Train Order System.**

11. Fulfilled Protection Officer name, time and date.

### 11.4 Optional items

#### 11.4.1 Item 2 Work

Tick the check box ☒ if the TOA is for a fixed worksite and record Track Occupancy Authority in the first box ☐, the worksite boundary and line. Time and date track to be returned to service.

Cross the check box ☒ if the TOA is not for a worksite.

#### 11.4.2 Item 3 Travel

Tick the check box ☒ if the TOA is for a track vehicle journey, and record;

- Track Occupancy Authority in the first box ☐,
- track machine numbers,  
and
- location from and to for the track vehicle journey.

Time and date track to report clear.

Cross the check box ☒ if the TOA is not for a track vehicle journey.

#### 11.4.3 Item 4 Train Number

If there is rail traffic within the limits of the TOA tick the check box ☒ and record the;

- train number ☐ given by the Network Controller,  
and
- identification number of the lead unit of the train when it has passed beyond the starting point of the track vehicle journey ☐, and give this to the Network Controller.

#### 11.4.4 Item 5 Security Code

Tick the check box ☒ if the Network Controller compiles the authority using the electronic system and record the security code number.

Cross the check box ☒ if the Network Controller compiles the authority manually.



**Network Controllers must not record security codes generated by the workstation.**



**Security codes are not used if a Network Controller compiles an Authority manually.**

#### 11.4.5 Item 6 Pass signal(s) / indicator. Check set and secure points

Tick the check box ☐ if the Network Controller requires signal(s) / indicators to be passed in the **STOP** position or to check set and secure points. Record the details of signal(s) to be passed in the **STOP** position or to check set and secure points.

Cross the check box ☒ if there are no signal(s) / indicators to be passed in the **STOP** position or to check set and secure points.



**Item 10 is not applicable on Phoenix Train Order Territory.**

### 11.5 Cancelling and fulfilling forms

#### 11.5.1 Fulfilling a form

If all of the instructions in an authority have been completed, fulfil the authority by writing FULFILLED between parallel diagonal lines across the form.

#### 11.5.2 Cancelling a form

If some or none of the instructions in a form have been completed, cancel the form by writing CANCELLED between parallel diagonal lines across the form.

#### 11.5.3 Signing and dating

Between the parallel diagonal lines, write:

- the date and time the form is fulfilled or cancelled, and
- your name and signature.

## 11.6 Example - Form X

ARTC										Form X							
1	Authority	Type / ID Number	on	DD	MM	YY	to Protection Officer at	Location									
				Protection Officer name and contact details													
				Protection Officer Name and Contact Details													
2	Tick or Cross	A	Track Occupancy Authority														
WORK		is authorised for occupation of the track by workers and equipment for WORK to be performed between:															
		Location / Track / Kilometre ID / Clearance Point				and		Location / Track / Kilometre ID / Clearance Point									
		on the _____ line															
		until FULFILLED.															
		The track must be clear of workers and equipment by:				Time	DD	MM	YY								
3	Tick or Cross	Track Occupancy Authority									is authorised.						
TRAVEL		For TRAVEL of									ID of Track Machine(s) or Road-Rail Vehicle(s)	between:					
		Location / Track / Kilometre ID / Clearance Point				and		Location / Track / Kilometre ID / Clearance Point									
		Report clear at Limit of Authority End Location by:									Time	DD	MM	YY			
4	Tick or Cross	Train Number _____										is ahead, follow and be prepared to stop or has passed beyond the worksite location.					
		As required, the Protection Officer must give the Network Control Officer the identification number of the lead unit of the train.															
		Identification number of the lead unit of the train										ID of lead unit					
5	Tick or Cross	The following Security Code applies										Electronic Train Order Territory					
6	Tick or Cross	Pass signal (s) / Indicator (s)										Signal ID / Indicator ID	at STOP				
		Check set and secure points										Points IDs	before proceeding				
7	Details of other Authorities in the Section or Location																
		Details of agreed arrangements															
		Additional Information															
		Other notes															
8	Issued by										Network Controller Name	at	Location				
		Received by										Protection Officer	Read back OK at	Time			
9	This Authority extended until:		Time	DD	MM	YY	Authorised by		Network Controller								
		This Authority extended until:		Time	DD	MM	YY	Authorised by		Network Controller							
10	This Authority suspended at		Time	DD	MM	YY	Re-instated at		Time	DD	MM	YY					
		This Authority suspended at		Time	DD	MM	YY	Re-instated at		Time	DD	MM	YY				
		This Authority suspended at		Time	DD	MM	YY	Re-instated at		Time	DD	MM	YY				
		This Authority suspended at		Time	DD	MM	YY	Re-instated at		Time	DD	MM	YY				
		This Authority suspended at		Time	DD	MM	YY	Re-instated at		Time	DD	MM	YY				
11	ALL TRACKS ARE CLEAR of workers, equipment and protection. ALL TRACKS ARE SAFE for traffic.																
		Fulfilled by										Protection Officer	at	Time	DD	MM	YY

Form X
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