

SAFE Notice

0028-17

2017

Introduction of Supplementary Codes for Shunt Orders at Siding Locations

Implementation

Commencing from 0500hrs on Wednesday 6th September 2017, John Holland Rail (JHR) will expand the use of Supplementary Codes to apply to all shunt orders issued for Train Order siding locations.

Supplementary Code for shunt orders at siding locations

Supplementary Codes are currently utilised in Train Order junction locations, to allow the movement of a second train through the junction location, whilst a train is shunting. As a result of the successful application of this system capability, John Holland will expand this capability to all Train Order siding locations as of Wednesday 6th September 2017.

This will provide improved operational flexibility and safety in managing trains travelling through or departing a siding location where a shunt order is current.

The Network Rule CNSY 502 Train Order system has been amended to expand the use of supplementary code for shunt orders at siding locations.

JHR CRN Web site

A copy of the revised Network Rules, Procedures and Forms are published adjacent the existing material on the JHR CRN website.

All relevant publications are available on the JHR CRN website www.jhrcrn.com.au.

Attachments

- CNSY 502 Train Order system

Mayfield, 7 August 2017

Manager Network Operations
Mayfield Network Management Centre

Train Order system

Purpose

To prescribe the rules for using the *Train Order system of Safeworking* in the *Country Regional Network (CRN)*.

System principle

The Train Order system:

- prevents *rail traffic* entries into occupied *blocks*, and
- is a *bidirectional* system used only on single lines outside *Rail Vehicle Detection territory*.

In *Train Order territory*, Train Orders are the only normal authorities for:

- a through-movement only, or
- shunting at a location (Shunt Order), or
- a through-movement with shunt access at a location.

If the Train Order system of Safeworking fails, a method of *special working* may be introduced.

Computerised Train Order working

Network Control Officers compile Train Orders and *Track Occupancy Authorities (TOAs)* in computerised workstations.

The system transmits Train Orders to Drivers using In Cab Equipment.

The system maintains *blocking facilities* against *issue* of Train Orders for conflicting movements and *occupancies*.

For each reporting location, the system generates a *security code* (security number).

Entry of the relevant security code into a workstation:

- removes a blocking facility, and
- releases the affected block.

For each Shunt Order at a siding location the system generates a *supplementary code*.

Manual Train Order working

If the computerised system fails, manual Train Order working without security codes is introduced. Network Control Officers must:

- compile Train Orders and TOAs manually, and
- not issue authorities for conflicting movements and occupancies.

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System description

Network Control Officers must:

- provide Train Orders or TOAs and security codes to *Drivers, track vehicle operators, Protection Officers, or Qualified Workers* directing shunting, and
- make sure that Train Orders and movements are recorded, in *permanent form, on a Train Control diagram, and*
- only issue an authority for track under their control.

Drivers must confirm Train Orders using the In Cab Equipment.

If the electronic transmission of Train Orders fails, *Qualified Workers* receiving Train Orders must:

- compile them on a Train Order form (CNRF 009), and
- confirm Train Orders and security codes by reading them back to the Network Control Officer.

Details of the Train Order for a journey must be progressively reported, *fulfilled* and confirmed at the locations specified in the Train Order.

TOAs must be issued:

- in accordance with Rule CNWT 304 Track Occupancy Authority, and
- on a TOA form (CNRF 002).

Security codes

Network Control Officers must:

- provide security codes to *Qualified Workers* together with the relevant Train Order, and
- not write down security codes.

If a Train Order or a TOA is partly fulfilled, fulfilled or *cancelled*, Network Control Officers must not enter security codes into the system before:

- the location of rail traffic has been confirmed, and
- reporting *Qualified Workers* have dictated back relevant security codes.

Proceed Authority

Authority to enter a block is given by a valid Train Order.

Train Orders must specify:

- departure and fulfilment locations
- if necessary, reporting, *crossing* and shunting locations
- any special instructions for the movement and conditions affecting the network in accordance with Rule *CNGB 206 Reporting and responding to a Condition Affecting the Network (CAN)*.

Rail traffic must pass indicators at STOP only in accordance with Rule *CNSG 610 Passing indicators at STOP*.

Train Order system

Issuing a Proceed Authority

Limit of authority

The *limit of authority* for a Train Order must be:

- an entry-end YARD LIMIT sign, or
- the departure-end clearance point of a crossing location, or
- the departure-end SHUNT LIMIT sign of a siding location, or
- the END TRAIN ORDER WORKING sign at a signalled location, or
- the END TRAIN ORDER WORKING sign at a Non-Train Order location, or
- the END NETWORK CONTROL sign at a Network Control boundary location.

The limit of authority for a Shunt Order must be:

- a SHUNT LIMIT sign for a location, or
- in locations where SHUNT LIMIT signs are not provided, the YARD LIMIT signs.

Train Orders must not *authorise* rail traffic to proceed:

- through signalled locations, or
- beyond Network Control boundary locations, or
- beyond intended crossing locations.

If the electronic transmission of Train Orders fails, Train Orders must not authorise rail traffic to proceed beyond locations for planned changes of crew.

Moving trains

Drivers may confirm Train Orders using the In Cab Equipment on moving trains.

If the electronic transmission of Train Orders fails, Train Orders:

- may be transmitted to the Train Crews of moving trains by radio, or other form of on-board communications, and
- must not be compiled or confirmed by Train Crew members who are operating the controls of moving trains.

Transfer of Orders

Drivers must confirm all Train Order details at changes of crew.

If the electronic transmission of Train Orders fails, Train Orders must not be passed between Train Crews at changes of crew.

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Crossing and passing trains

Crossing and *passing* movements may be authorised at crossing and *siding* locations.

The Network Control Officer must:

- determine the order of movement for a crossing, and
- tell Drivers which *routes* to use.

One train in the movement must be able to stand:

- wholly between clearance points at the location, or
- clear of the *main line*.

The Driver of the first train to arrive within *yard limits* must:

- come to a stand, and
- report arrival to the Network Control Officer.

The Network Control Officer must not authorise the second train to enter yard limits before the first train is stationary:

- wholly between clearance points at a crossing location, or
- at a departure-end clearance point, or
- clear of the main line in a siding.

If there is a Shunt Order current at a siding location, the Network Control Officer may authorise a Train Order to other rail traffic:

- standing at the YARD LIMIT sign, or
- within shunt limits

To obtain a train order for a location where a shunt order is current, the Driver must have:

- consulted with the holder of the Shunt Order to confirm the intended route is clear, and
- if the route is confirmed clear, obtained the *supplementary code* from the holder of the Shunt Order, and
- provided the *supplementary code* to the Network Control Officer.

A holder of a Shunt Order must not provide the *supplementary code* to the Network Control Officer.

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Variation of Train Orders

The Network Control Officer must arrange to cancel a Train Order, and issue a new one, if the Train Order:

- needs to be varied, or
- cannot be fulfilled.

Before a Train Order may be cancelled, the affected rail traffic must be stationary at:

- a crossing or siding location, or
- a block location or signalled location, or
- a Network Control boundary location, or
- a mishap location.



Note

Rail traffic that has a Train Order for a section in advance of the current authority ('next order') and is closely approaching the limit of the current authority must be brought to a stand before the next order is cancelled.

Loss of paper or electronic Train Order information

Qualified Workers must report the loss of a current Train Order to the Network Control Officer as soon as possible.

If a Train Order is lost before rail traffic departs from a location, the rail traffic must not depart.

If a Train Order is lost after rail traffic departs from a location, the rail traffic must not pass the entry-end YARD LIMIT sign at the next location.

The Network Control Officer must:

- obtain a superintendents security code to cancel or fulfil the lost Train Order, and
- if travel is to continue, issue a new Train Order.

Reporting

Departure

Drivers and track vehicle operators must report departure:

- 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
- a BEGIN NETWORK CONTROL sign, or
- the YARD LIMIT sign at the departure end of a location specified in the Train Order.

The Train Order location immediately preceding the limit of a Train Order must be specified as a reporting location.

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Reporting cont. If the electronic transmission fails, Network Control Officers must confirm with Drivers and track vehicle operators:

- train numbers, and
- lead locomotive numbers or track vehicle numbers, and
- departure times, and
- the limit of authority for the current Train Order.

Arrival

If a Train Order has shunt access, Drivers and track vehicle operators must report arrival at the shunting locations to the Network Control Officer when the rail traffic:

- is between SHUNT LIMIT signs, or
- where SHUNT LIMIT signs are not provided, between YARD LIMIT signs

Fulfilment at crossing locations

At crossing locations, Drivers and track vehicle operators must fulfil the Train Order only if the rail traffic is:

- stationary between clearance points, or
- clear of the main line or loop.

If rail traffic is over-length, Drivers and track vehicle operators must fulfil the Train Order only if the rail traffic is stationary at the departure-end clearance point.

Fulfilment at siding locations

At siding locations, Drivers and track vehicle operators must fulfil the Train Order only if the rail traffic is:

- stationary between SHUNT LIMIT signs, or
- clear of the main line.

If rail traffic is over-length, Drivers and track vehicle operators must fulfil the Train Order only if the rail traffic is stationary at the departure-end SHUNT LIMIT sign.

Fulfilment at signalled locations

At signalled locations, Drivers and track vehicle operators must fulfil the Train Order only if the rail traffic has completely passed the END TRAIN ORDER WORKING sign.

Fulfilment at Network Control boundary locations

At Network Control boundary locations, Drivers and track vehicle operators must fulfil the Train Order only if the rail traffic has completely passed the END Network control sign.

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Reporting cont.

Confirming the location of rail traffic

The system confirms the location of rail traffic.

If the electronic transmission fails, the Network Control Officer must confirm the location of rail traffic from:

- the train radio workstation, or
- Drivers and track vehicle operators.

Communications Failure

If primary communications in a train or track vehicle fail, Drivers and track vehicle operators must:

- report departure from a reporting location at the first available location, and
- if possible, report at the location immediately preceding the limit of the Train Order.

The Network Control Officer may delegate Qualified Workers certified in Train Order working to relay information between Network Control and Drivers or track vehicle operators without communications.

Opposing rail traffic with failed primary communications must not be authorised to approach a location simultaneously.

CRN Network Procedures

CNPR 719 Operating groundframes

CNPR 721 Spoken and written communication

Effective Date

6 September 2017