

Track Possession Manual

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1 Introduction

1.1 Purpose

This manual describes the procedures used by John Holland Rail (JHR) to manage track access requests on the NSW Country Regional Network (CRN).

This manual does not include requirements for management of environmental, legal and other obligations in the planning and delivery of construction works at worksites.

1.2 Overview

A **track possession** is the temporary suspension of rail services to allow work within the rail corridor to take place in a safe and efficient manner.

A track possession may include movement of work trains or other rail vehicles into and out of work sites, subject to the relevant CRN Network Rules.

Track possessions are planned in the manner described in this manual and enacted via the types of work on track 'authorities' described in the CRN Network Rules.

John Holland Rail delivers the following types of work within planned track possessions, following consultation and communication with relevant internal and external stakeholders.

- Routine Maintenance (RM),
- Major Periodic Maintenance (MPM),
- Annual Works Plan (AWP) related capital works,
- Non-Annual Works Plan (AWP) capital works, externally funded works and works carried out by third parties.

Track possessions are published in a possessions program which aims to:

- Minimise cancellation of or disruption to passenger and freight services,
- Maximise possession time to ensure safe and productive time on track is provided to carry out required works,
- Provide suitable notice of possessions to rail operators and other stakeholders to ensure the commercial cost of disruptions is minimised,
- Improve maintenance planning to ensure the efficiency and productivity of track works,
- Issue possession timetables and notifications via Country Train Notices (CTNs),
- To minimise disruption to passenger and freight services, seek where possible to coordinate CRN
 possessions with possessions on adjacent sections of the ARTC or Sydney Trains networks,
- Seek to coordinate possessions with maintenance activities at loading points,
- Provide a process where rail operators are consulted during the development of the possession program.
- Ensure the representative of the network owner, Transport Asset Holding Entity (TAHE), is;
 - Aware of the possessions program,
 - Informed of the process used to develop it,
 - Has the opportunity to participate in the development of the possessions program, and
 - Made aware of changes to the program that may affect the operations of the network or may precipitate delays to rail services, prior to any changes being implemented.

1.3 Scope

This document:

- Details the types of track possessions available,
- Provides guidance on the process necessary to gain approval for a track possession,
- Describes the obligations of the network manager to consult with rail operators and the network owner on the development of the possessions program and its implementation.

Note: The processes described in this manual for the development and implementation of track possessions are subject to any and all of the requirements detailed in the following:

- CRN Network Rules and Procedures,
- CRN SAFE Notices.
- CRN Network Local Appendices.

1.4 Procedure owner

The CRN Network Planning Manager is the document owner and is the initial point of contact for all queries relating to this document.

1.5 Responsibilities

Individuals planning or managing projects, maintenance supervisors, infrastructure managers and related parties are responsible for proposing track possession requests to the Network Planning Manager (Network Operations), commensurate with the type of work required to be performed and the processes described herein.

The Network Planning Manager is responsible for developing the track possession program and generation of associated CTNs.

1.6 Reference documents

The following documents and procedures support this document:

- Safety Management System (SMS),
- JHR CRN Network Rules & Procedures,
- Interface Agreements,
- Operational Impact Assessment (Possession Bid),
- Rail operator access agreements and the Operations protocol,
- JHR CRN Possession Programme,
- Country Train Notices,
- Standard Working Timetable.

1.7 **Definitions**

The following terms and acronyms are used within this document:

Term or acronym	Description
Adjacent Live Line	Track on which trains are running next to closed track
ATP	As Traffic Permits
CRN	Country Regional Network
CTN	Country Train Notice
Danger Zone	The area within 3 metres horizontally from the nearest rail, and any distance above or below these 3 metres, and any other area within the rail corridor unless a safe place exists or has been created
JHR	John Holland Rail
MPM	Major Periodical Maintenance
SMS	Safety Management System
SWTT	Standard Working Timetable
TAHE	Transport Asset Holding Entity; the representative of the network
TfNSW	Transport for New South Wales; the network owner represented by TAHE
TSR	Temporary Speed Restriction

JHR CRN Possession Program Overview

The JHR CRN track possession program is developed by the Network Planning Manager in conjunction with a range of internal and external stakeholders identified within this manual.

Track possession programs are developed to accommodate the following works;

- AWP projects (including MPM works),
- Routine maintenance works, and
- Third-party funded projects,
- Work executed by third parties within the rail corridor.

Prior to publication in final form via a CTN, multiple draft possession programs may be developed and used to identify the effect of proposed track possessions on passenger and freight services, and related parties. The following are considered during the development of a track possession program:

- Minimising the effect of proposed works on rail services,
- Requirements of project scopes within the AWP,
- Third Party work requirements,
- Special event timing and location,
- Alignment with track possessions on either or both the ARTC or Sydney networks,
- Resource availability for conducting proposed works,
- Routine maintenance works program, including;

- Ultrasonic rail testing,
- Ballast delivery and associated work train requirements,
- Rail grinding program.

2.1 Possession type and lead times

Different types of possessions, and their related lead times, have been developed to achieve the aims and objectives described in this manual.

Possession types include;

- Aligned possessions. These are possessions aligned with those of adjoining networks to ensure disruption to rail services is minimised.
- Non-aligned possessions. These are possessions that cannot be aligned with a possession on an adjoining network and are classified as;
 - a. **Primary possession** delays or cancellation of passenger services or mandatory freight paths will be required, or
 - b. **Secondary possession** delays or cancellations will only affect ad hoc train paths.
- Short notice works possession. This is a possession required to rectify an infrastructure problem that
 may, if not rectified, lead to deterioration of infrastructure and potentially threaten network service
 continuity.
- 4. Emergency works possession. This is a possession imposed to rectify an urgent infrastructure problem that is threatening, or will threaten, network service continuity, or to address or remove a condition within the rail corridor that has the potential to escalate into a serious safety threat.

2.2 Aligned possessions

Where possible, possessions on CRN lines/sections used by passenger services and/or mandatory path freight services, will be aligned with possessions planned by and on adjoining networks. Aligning possessions with adjoining networks will minimise the effect of a CRN possession on rail operators and their customers. Table 1 details the lead times applied for track possessions on lines used by passenger and/or mandatory path freight services, where the possession will align with a possession on an adjoining network. The Network Planning Manager will provide advice to all relevant internal stakeholders of planned adjoining network possessions, to ensure that aligned possessions can be developed whenever possible, in preference

to non-aligned possessions, that may require the cancellation of passenger or mandatory path freight services.

Table 1 - Aligned Possession Notice Period

Service cancellation requirement	Minimum weeks advice to Network Planning Manager (Network Operations)	Minimum weeks advice to rail operators	
Passenger	28	26	
Mandatory path freight	18	16	

2.3 Non-aligned possessions

These are track possessions that cannot be aligned with a possession on an adjoining network and are classified as;

- a. **Primary possession** delays or cancellation of passenger services or mandatory freight paths will be required, or
- b. **Secondary possession** delays or cancellations will only affect ad hoc train paths.

2.3.1 primary non-aligned possessions

Where a track possession cannot be aligned with a possession on an adjoining network, and where the proposed possession will require the cancellation of passenger and/or mandatory path freight services on lines or sections noted in Table 3. The notice period for possession planning and implementation is detailed in Table 2.

Table 2 - Primary Non-aligned Possession Notice Period

Service cancellation requirement	Minimum weeks advice to Network Planning Manager (Network Operations)	Minimum weeks advice to rail operators	
Passenger	28	26	
Mandatory path freight	18	16	

Table 3 – Passenger and Mandatory Path Freight Service Lines / Sections

Line or Section	Passenger	Mandatory Path Freight
Bowenfels - Orange	Yes	Yes
Orange – Dubbo	Yes	Yes
Orange – Parkes interface	Yes	Yes
Joppa Junction - Canberra	Yes	Yes
Junee - Griffith	Yes	Yes
Werris Creek - Armidale	Yes	
Wallerawang – Airly Junction		Yes
Narromine – Cobar		Yes
Narrabri Junction - Wee Waa		Yes

2.3.2 secondary non-aligned possessions

These are track possessions that are;

- a. Not aligned possessions, or
- b. For lines or sections noted in Table 4, or
- c. Proposed for lines or sections noted in Table 3 that do not require cancellation of, or delays to, passenger or mandatory pathed freight services, or
- d. Proposed for works noted in Table 5, or
- e. That allow train services to continue operating under 'block working', or similar arrangements provided for under the CRN Network Rules.

Table 4 – Ad-hoc and Non-passenger Service Lines / Sections

Line / section
Camurra – Weemelah
Wee Waa - Walgett
Burren Junction – Merrywinebone
Bogan Gate interface – Tottenham
Stockinbingal interface – Griffith
Temora – Lake Cargelligo
Ungarie – Naradhan
Griffith - Hillston
Troy Junction interface – Coonamble
The Rock interface – Boree Creek
Nevertire – Warren South

Notice periods for secondary track possessions are detailed in Table 5.

These notice periods incorporate the time required to produce and distribute CTNs, and to provide rail operators and other customers sufficient notice of proposed service disruption.

Table 5 – Low Effect Non-aligned Possession Notice Period.

Proposed Works Possession	Minimum weeks advice to Network Planning Manager (Network Operations)	Minimum weeks advice to rail operators
Maintenance rolling stock possession, including movement of track machines, SPENO ultrasonic testing, but does not apply to track recording car movements.	8	6
Daily works possession. For completion of RM, MPM or other works between defined times within a single 24-hour period, between defined times or over defined blocks of time. The track will be made available for operation of services at completion of a Daily possession, or between Daily possessions.	8	6
Window works possession. Where RM, MPM or other works require track closure for a period more than [24-hours], or where multiple blocks of track closure time over multiple days are required between train services to complete works.	8	6

2.4 Short notice works possessions

This is a possession required to carry out works to rectify an infrastructure problem that may, if not rectified, lead to deterioration of infrastructure and potentially threaten service continuity.

The imposition of a short notice possession is managed by the Network Planning Manager on a case by case basis.

Table 6 - Short Notice Works Possession Notice Period

Proposed Works Possession	Minimum weeks advice to Network Planning Manager (Network Operations)	Minimum weeks advice to rail operators
Short notice works	As soon as possible	One (1) day to 6 weeks

2.5 Emergency works possessions

This is a track possession imposed to rectify an urgent infrastructure problem that is threatening, or will threaten, service continuity, or to address or remove a condition within the rail corridor that has the potential to escalate into a serious safety threat.

Table 7 - Emergency Works Possession Notice Period

Proposed Works Possession	Minimum weeks advice to Network Planning Manager (Network Operations)	Minimum weeks advice to rail operators
Emergency works	Not applicable	Not applicable

2.5.1 Requests for Emergency Possessions

A request for an <u>emergency works possession</u> must be made directly to CRN Network Control and the relevant Network Control Officer (NCO).

Network Control Board	BAU Call	Priority Call	Emergency	Back-up Number	Public Free Call
North	02 4028 9501	02 4028 9521	02 4028 9541	02 4028 9671	1800 643 373
South	02 4028 9502	02 4028 9522	02 4028 9542	02 4028 9672	1800 021 914
West	02 4028 9504	02 4028 9524	02 4028 9544	02 4028 9674	1800 427 198

3 Obtaining a Track Possession

This section provides the sequence of actions and decision points, from draft possession plans through to production and the issue of a CTN and associated documents.

3.1 Possession program development process

The Network Planning Manager in consultation with all relevant internal stakeholders and TAHE will develop a draft possession program, covering the period 1 July to 30 June, to align with the proposed delivery of routine maintenance and annual works plan programs.

The draft possession program will consider the following:

- Identification of opportunities for aligned possessions.
- Identification of passenger and mandatory path freight service disruptions from non-aligned possessions.
- Potential requirement for rescheduling of passenger or mandatory path freight services.
- Proposed works under the AWP.
- Scheduled routine maintenance requirements, such as ultrasonic testing, track recording car operations, etc.
- Service provision requirements under rail operator access agreements.
- Known special events and related passenger train service demand.
- Project planning advice from internal stakeholders including;

- Resource availability.
- Long lead time materials
- Procurement tenders
- Any other known service delivery requirements.

The Flowchart in Figure 1 highlights the track possession program development process.

Figure 1 - Application Flowchart

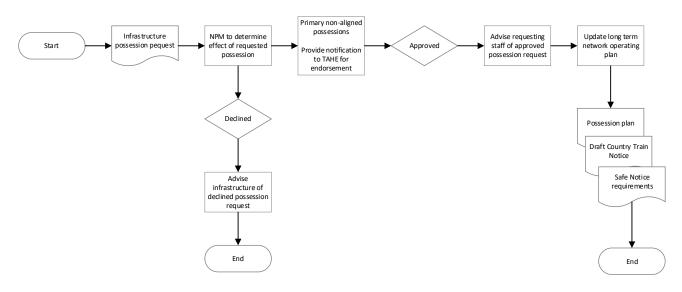
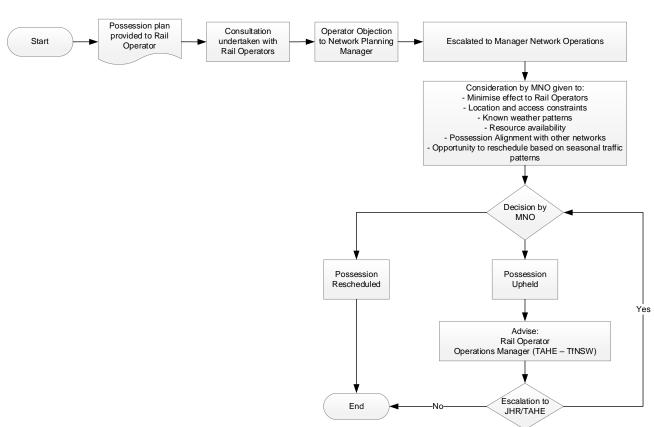


Figure 2 - Rail operator consultation process



3.2 Choosing the appropriate possession

The Network Planning Manager will work with internal stakeholders to determine what type of possessions best suits the proposed works, considering the following factors;

- The effect of a proposed track possession on continuity of service delivery and rail services,
- The location of the proposed works and track possession,
- The scope of the works,
- The requested period in which the works are to be performed,
- The duration of the track possession requested,
- In consultation with the party proposing a track possession, determine if the work can be carried out
 outside the danger zone and thus if a track possession may not be required,
- Advice from the relevant project manager or supervisor regarding resource availability,
- Inclusion of work trains or track machines to carry out the proposed works,
- The need for sidings to be cleared of vehicles,
- Any interruptions required to line-side operations by a third-party in order to allow works to be carried out safely, e.g. on sidings.
- Factors related to Safe Working at network interfaces.

3.3 Possession planning and implementation requirements

A project manager or works supervisor must ensure the following matters are considered and addressed prior to proposing to the NPM a request for a track possession.

3.3.1 infrastructure alterations

If any changes to infrastructure will result from proposed works, these must be clearly defined and approved prior to applying for a track possession and must be included in any possession application. This will allow for the preparation of relevant Safeworking documentation, such as Safe Notices or amendments to Country Network Local Appendices.

3.3.2 Location of Works

The location of a proposed work site or sites, and the works to be carried out at each site or sites, must be clearly defined and communicated within an application for a track possession.

3.3.3 proposed track protection arrangements

The proposed track possession area must be protected in accordance with the Network Rules & Procedures. Any proposed track protection variations must be approved by relevant internal stakeholders, prior to approval of a track possession.

3.3.4 Effect on rail services

The effect on rail services will be the primary consideration when assessing applications for all non-aligned track possessions.

Applicants seeking non-aligned track possessions must check the current track possession program to determine if the proposed location and/or date of a track possession will affect service continuity.

3.3.5 Preferred Work Dates

It is important to determine if the proposed works can be carried out within an <u>aligned track possession</u> to minimise disruption to train services.

If a <u>non-aligned primary possession</u> or <u>short notice works</u> track possession is required, it is necessary to clearly define preferred work dates, or a range of dates, to allow track possession alternatives to be considered, to reduce or eliminate any interruption to service delivery.

Note; the nomination of a date for a proposed track possession <u>does not guarantee</u> that a track possession will be approved for that date.

3.3.6 Duration of track possession

To determine the duration of a track possession, the Network Planning Manager will work with the applicant to determine the period required to complete the proposed works and to return the relevant section to operational status, including allocating sufficient time to:

- Mobilise the workforce and to have all plant on site,
- Assemble or stockpile materials on-site, either prior to or during the track possession,
- Prepare the site,
- Complete all the works and certify the track for resumption of operations,
- Clean up and restore the site to the required standard,
- Allow for a contingency period for the effect of adverse conditions, e.g. rain.

Failure to allow enough time for a possession increases the risk of over-time works, which may affect the return of the line / section to operational status and thus may delay passenger of freight services.

Allowing too much time to complete works reduces network service available and will cause delays to passenger and/or freight services.

The appropriateness of track possession durations will be monitored as a key performance indicator and used as a planning tool to minimise network service disruption.

3.3.7 Live Line Constraints

These apply to;

- Dual track sections of the network and include speed restriction on track adjacent to work sites where such restrictions may cause delays to services on adjacent lines, and
- Any temporary speed restriction (TSR) applicable prior to, during and after work is completed.

Parties requesting track possessions in areas where live line constraints potentially apply, <u>must provide any proposed live line constraints to the NPM in the track possession application</u>.

Any live line constraint will be considered in the track possession approval process, and if approved, be included in relevant track possession program, CTN or Safe Notice.

3.3.8 Work train / track machine involvement

It is critical to ensure the <u>inclusion of work trains or track vehicles</u> as a component of proposed works requiring a track possession is <u>communicated clearly to the NPM at the time a possession request is made</u>.

This will allow lead times for pathing across other networks can be met and to ensure that, where required, sidings can be cleared.

Failure to notify the NPM of the inclusion of work trains or track vehicle movements within the boundaries of a possession at the time of application may lead to the possession application being declined, or to an approved track possession being cancelled.

4 Applying to Work Within an Aligned Possession

Table 8 outlines the requirements, timeline, responsibilities and application process for work within <u>aligned possessions.</u>

Table 8 - Aligned Possession Timetable

>12 Months	12-6 Months	8 Weeks	4 - 6 Weeks	2 - 4 Days
Coordinate Possession Dates with Stakeholders	Major Projects identified	Bids Close	Outstanding Actions Completed	PO Briefing
Sydney Trains	Confirm Possession Length	Possession Times Finalised	Approval "Go/No go" Possession Bids	
ARTC	Ensure No Conflicts	Pre-possession Meeting	Final CTN Published	
		Draft CTN		

Where possible, maximum use of aligned possession periods is encouraged, and as such late requests to include works within <u>aligned possessions</u> will be considered on a case by case basis.

Late requests should be supported by a clear statement of the benefits and costs associated with;

- a. including the proposed works within a planned possession and
- b. not undertaking the works at the proposed time or within the planned possession.

5 Publication of Track Possession Documentation

5.1 Publication of the possession program

The CRN Possession Program will be updated and distributed to internal stakeholders, TAHE, rail operators, adjacent networks and other relevant parties. The possession program will be updated as required, where changes occur to works delivery or timing.

This possessions program will be published on or about the 20th of each month and distributed via email and uploaded to the John Holland CRN website www.jhrcrn.com.au.

Publication of Country Train Notices must be at least 7 days, and up to 42 days, prior to the commencement of a planned track possession.

5.2 Rail operator consultation

The Network Planning Manager or delegate consults with relevant rail operators and other stakeholders about the track possession planning process, and obtains feedback on the effect implemented possessions had on their operations and how planned possessions may affect their operations.

This feedback is incorporated into the track possessions planning process via the Network Planning Manager, to ensure rail operator views are considered when planning works.

5.3 Adjoining network consultation

The NPM liaises with representatives of adjoining networks on a regular basis, including formal monthly discussions. This enables the NPM to include track possession programs planned by these networks into the draft CRN possession program.

5.4 Consultation with the network owner

The Network Planning Manager will ensure the network owner (TAHE) is kept appraised of the development of the possessions program, and any changes to aligned and non-aligned possessions.

6 Track Possession Alterations

6.1 Changes to aligned possessions

Requests for changes to aligned track possessions <u>must</u> be submitted to the NPM <u>no less than 28 days prior</u> to the commencement of the scheduled possession.

Requests are to be accompanied by a detailed description of why the approved aligned possession (or part thereof) is to be cancelled. The Network Planning Manager shall be responsible for decisions relating to an approval to change all or part of an <u>aligned possession</u>.

As the primary focus of possession planning is to reduce the effect of track closures on rail operations by aligning CRN possessions with those of adjacent networks, cancelling an aligned possession will only occur when no alternative strategy is available.

6.2 Changes to non-aligned possessions

A proposal to change an approved track possession must be submitted to the Network Planning Manager <u>no</u> <u>later than 28 days prior</u> to the commencement of the scheduled possession.

Requests are to be accompanied by a detailed description of why the approved aligned possession (or part thereof) is to be cancelled. The Network Planning Manager shall be responsible for decisions relating to an approval to change all of part of a <u>non-aligned possession</u>.

6.3 Cancelling a programmed track possession

A request to cancel a programmed track possession must be submitted to the Network Planning Manager no later than three (3) working days prior to the commencement of the scheduled possession.

Possession cancellation requests are to be accompanied with a description of why the possession is to be cancelled.

7 Additional Information

7.1 Work trains

Work train path requests for <u>paths on the CRN</u> must be sent to the Network Planning Manager at least 14 days prior to the commencement of a scheduled possession. Any amendment to a work train path on the CRN must be submitted to the CRN network programmer.

Any work train paths through the Sydney Trains or ARTC networks must submitted to those networks at <u>least 28 days prior to the commencement of a scheduled possession</u>.

Work train path requests, once approved, will be published in the form of CTNs.

The NPM will create a work train possession plan for each work train operating within a possession.

7.2 Ultrasonic testing

Ultrasonic rail testing (via an on-track recording car) is carried out in the CRN on specific train paths. Track possessions are not required for these movements.

The ultrasonic testing runs will be included as a component of the possession program and will be advertised via a CTN.



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