

# SCHEDULE C - Network Management Principles

The Train Priority Matrix (Table D1), the Decision Matrix (Table D2) and the set of Rules proposed below are contained in the NSW Lease. In recognition of the particular objectives of Coal Trains but within the constraints of the NSW Lease, ARTC has supplemented these rules with an additional set of guidelines to be applied when Coal Trains run out of course.

The following definitions apply in this Schedule.

“**Coal Train**” means a Train, the sole purpose of which is carrying coal, whether loaded, empty, operating in or transiting through the Network.

“**Commuter Peak Services**” means RailCorp's commuter rail passenger services arriving at Newcastle Station between 0600 and 0900 hours and departing Newcastle Station between 1600 and 1800 hours and continuing until they reach their destination point.

“**Discharge Point**” means a facility connected to the Hunter Valley Network at which coal is discharged from Trains.

“**Express Freight Services**” means those freight services capable of maintaining sectional running times that are, or are determined by the appropriate network controller, to operate at faster sectional times than local Frequent-Stopping Services.

“**Frequent-Stopping Services**” means those rail passenger services that stop at most or all stations along their Train Path.

“**Healthy Train**” means a Train that, having regard to the daily train plan applicable on the day:

- (a) presents to the Network on time, is configured to operate to its schedule and operates in a way that it remains able to maintain its schedule; or
- (b) is running late only due to causes within the Network, but only where the root cause is outside the Operator's control; or
- (c) is running on time, regardless of previous delays.

“**Hunter Valley Coal Chain**” means the system of moving coal from coal producers through a terminal in the Gunnedah, Sydney or Gloucester basin areas of New South Wales that utilise the Network and:

- (a) in relation to coal exported through an export terminal at Newcastle, includes those persons:
  - (i) who participate in marketing, mining, loading, transporting, unloading, stockpiling and shiploading activities;
  - (ii) who provide rail or port infrastructure or port services to facilitate those activities; or
  - (iii) who provide vessel or cargo management services, and
- (b) in relation to other coal movements in the Gunnedah, Sydney or Gloucester basin areas of New South Wales, includes those persons:
  - (i) who participate in marketing, mining, loading, transporting, unloading and stockpiling activities; or
  - (ii) who provide rail infrastructure to facilitate these activities.

“**Integrated Plan**” means the plan prepared by the HVCCC in accordance with the System Rules and provided to all logistics service providers in the Hunter Valley Coal Chain on a 36 hour basis (or such other time frame as otherwise agreed by the members of the HVCCC) setting out the plan for the running of Coal Trains, assembly of cargoes and loading of vessels.

“**Limited-Stop Services**” means those rail passenger services that stop at a few selected stations along their Train Path.

“**Long-distance Passenger Services**” means those rail passenger services operating to or from points outside the Sydney metropolitan rail area, excluding RailCorp's CityRail services.

“**Network Control**” means the control and regulation of all rail operations (including Train Movements, movements of rolling stock and track maintenance vehicles) to ensure the safe, efficient and proper operation of the Network.

“**Non-Revenue Positioning Movements**” means movements of Trains required for reasons other than revenue services.

“**Special Event**” means a major community, cultural, sporting or similar event within the metropolitan rail area, which is identified as such by a relevant NSW agency, and which may require:

- (a) a special timetable for the operation of RailCorp rail passenger services before, during and after the event; and
- (b) significant operational priority for RailCorp rail passenger services; and
- (c) consequential adjustments to other rail operators' services.

“**System Rules**” mean rules, standards, specifications and processes agreed with the HVCCC for the efficient operation of the Hunter Valley Coal Chain.

“**Train**” means a single unit of rolling stock or 2 or more units of rolling stock including a locomotive or other self propelled unit coupled together to operate on the Track as a single unit.

“**Train Movement**” means a particular trip by a Train on a Train Path.

“**Train Path**” means the series of network segments over a particular time interval through which a Train can travel and may include stopping points and intervals and fuelling stations and other set down or changeover points.

### **Objectives of Coal Trains and Non-Coal Trains**

In general,

- (a) the primary objective of a Coal Train is to arrive at the Discharge Point in sequence in accordance with the Integrated Plan; and
- (b) the primary objective of a Non-Coal Train is to arrive at its destination or exit the Hunter Valley Network (as the case may be) in accordance with its schedule.

Notwithstanding the above objectives, the requirements of Customers on the Hunter Valley Network are complex and may necessitate the pursuit of different objectives from time to time. Accordingly, ARTC will manage Trains on the Hunter Valley Network having regard to the Integrated Plan and in accordance with the Network Management Principles set out in this Schedule.

In the event of a conflict between two Coal Trains running out-of-course, ARTC will manage Trains in accordance with objective (a) above and, where necessary, will liaise closely with the HVCCC and

members of the live run operations group to determine the optimum recovery strategy to benefit the Hunter Valley Coal Chain as a whole and, except where required otherwise for reasons of safety or contractual obligation, will seek to implement that course of action.

**Train Decision Factors**

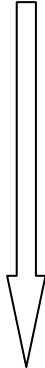
Train Decision Factors apply to resolve the competing interests of Customer’s Trains using the Hunter Valley Network.

General principles guiding train management are:

- (a) all parties are to ensure operational safety is maintained through compliance with safeworking rules, regulations and procedures;
- (b) ARTC is responsible for ensuring the integrity of the track and other infrastructure so that the train plan can be met;
- (c) Operators are responsible for ensuring operating integrity of their Trains, including train crewing, locomotives, wagons and loading so that the train plan can be met; and
- (d) where one or more Trains are late or unhealthy, they will be managed as specified in the matrices below subject to a rail operator’s preferences for its own services.

The two tables are used in conjunction with each other. Table D1 will enable a person undertaking Network Control ("Network Controller") to define the relative priority of two conflicting Trains. Table D2 will specify the type of decision available to the Network Controller in delivering Network Control directions to resolve the potential conflict.

**Table D1 – Train Priority Matrix**

<b>Decreasing order of priority</b>	<b>Type of train service in ARTC Network</b>
From Highest	Long-distance Passenger Services
	Commuter Peak Services and rail passenger services likely to affect Commuter Peak Services or Special Event services
	Limited -Stop Services that are not Commuter Peak Services or Special Event Services
	Freight services likely to affect Commuter Peak Services or Special Event services
	Frequent-Stopping Services that are not Commuter Peak Services
	Freight Services
To Lowest	Non-Revenue Positioning Movements

**Table D2 – Decision Matrix**

<b>Trains of Equal Health</b>	<b>Both Healthy</b> <b>One on Time &amp; One Late</b>	<b>Both Late</b>
<b>Equal Priority Trains</b>	<b>Rule 1 + 2</b>	<b>Rule 3</b>
<b>Unequal Priority Trains</b>		<b>Rule 6 + 3</b>
<b>Higher Priority Train is On Time + Lower Priority is Late</b>	<b>Rule 5 + 2</b>	
<b>Higher Priority Train is Late + Lower Priority Train is On Time</b>	<b>Rule 4 + 2</b>	
<b>Trains of Unequal Health</b>	<b>Rule 7 + 2</b>	

**Rule 1:**

- (a) A Healthy Train should be managed such that it will exit on time.
- (b) If a Healthy Train is running late, it should be given equal preference to other Healthy Trains and advanced wherever possible to regain lost time. Any delay to other Healthy Trains as a result of such advancement must be kept to a minimum as defined in Rule 2.

**Rule 2:**

The following delay limits apply to the full journey of a Healthy Train being held back:

- (a) the delay to the individual rail passenger service held back does not exceed 5 minutes;
- (b) there is a plan in place to recover lost time so that the downstream effect on the service held back and on individual subsequent rail passenger services also does not exceed 5 minutes;
- (c) the delay to a freight service held back does not exceed 15 minutes; or
- (d) there is a plan in place to recover lost time so that the downstream effect on the healthy freight service held back and on individual subsequent healthy freight services also does not exceed 15 minutes. Any plan for the recovery of time by freight services must be capable of being achieved prior to their entry into the Sydney metropolitan rail area.

**Rule 3:** Give preference to the Train whose Train performance indicates it will lose least or no more time and even make up time and hold the gain; and consider downstream effect to minimise overall delay.

**Rule 4:** A lower priority Train gets preference. A higher priority Train can be given preference subject to the delay to the lower priority Train being kept to a minimum as defined in Rule 2.

**Rule 5:** A higher priority Train should be given preference over a lower priority Train. A lower priority Train may be given preference over higher priority Train provided the delay to that Train is kept to a minimum as defined in Rule 2.

**Rule 6:** A high priority Train has preference, subject to Rule 3.

**Rule 7:** A Healthy Train should be given preference over an unhealthy Train. An unhealthy Train may be given preference over a Healthy Train provided the delay to that Train is kept to a minimum as defined in Rule 2.