



AUSTRALIAN RAIL TRACK CORPORATION LTD

## Route Access Condition Notice

# 13-00042

<b>Distributed To:</b>	<b>ARTC Website</b>
<b>Distribution Date:</b>	<b>04/04/14</b>
<b>Requested By:</b>	<b>ARTC</b>
<b>Subject:</b>	<b>General Information Review: Standards Department.</b>
<b>Effective Period:</b>	<b>Until Published</b>
<b>Amendment Type:</b>	<b>Permanent (to be added to RAS)</b>

*Note: Permanent Route Access Condition Notices (RACN) are periodically updated in the ARTC Route Access Standard (RAS), at which time the relevant RACN is withdrawn.*

**RAS Reference:**

**Section:** General Information      **Version No.:** 1.2      **Page/s:** All

**ARTC Network Location:**

**Line Section:** \_\_\_\_\_

**Kms:** \_\_\_\_\_

The following updates are after an Internal review by the Standards Department.

Revised Information:

**Table 2.5.2 Locomotive Configuration – Bridge Interface Minimum Axle Spacing for Specified Axle Load**

Infrastructure Limits equivalent to Metric Cooper M rating Design Load (refer Fig 2.5.1)	Locomotive Maximum Individual Axle Load (tonnes)	Locomotive Maximum Overall Mass (tonnes)	Locomotive Configuration - Distance Between Axles (mm)							Overall Length of Locomotive
			A	B	C	D	E	F	G	
RAS 270 (M270)	29.5	177	1800	1800	1800	8200	1800	1800	1800	19000
RAS 210 (M210)	23	138	1800	1800	1800	8000	1800	1800	1800	18800
RAS 180 (M180)	20.3	123	2300	1700	1700	7240	1700	1700	2300	18640

Comment [RP1]: PJ review  
 Comment [RP2]: RACN 1300042

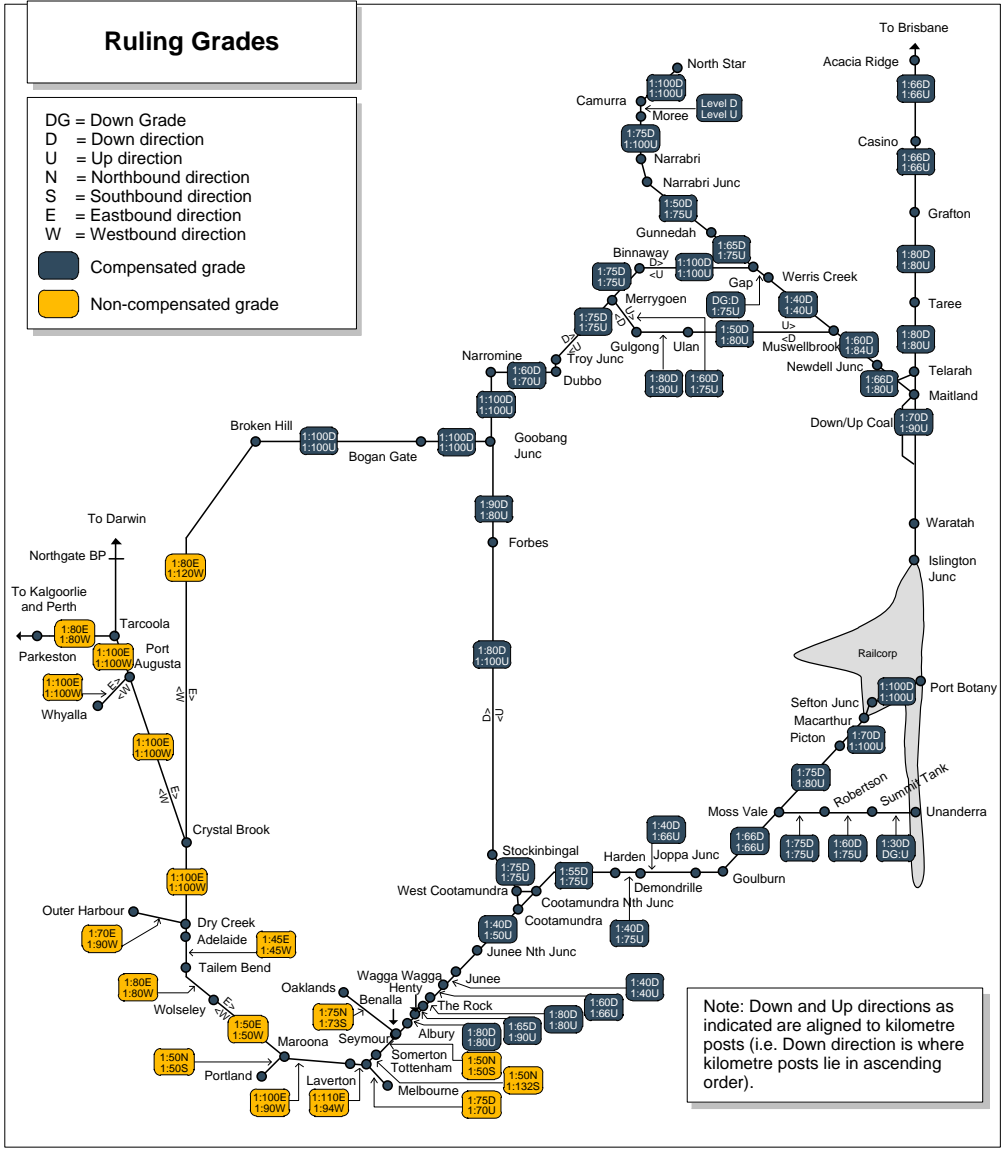
Note:

1. Any locomotive's Load Effects on any bridge span must not exceed above RAS 270 / RAS 210 Loading/ M180.
2. Where a Locomotive is designed with another axle configuration or load, the axle spacing / load must be adjusted accordingly to comply to the above RAS 270 / 210 Loading/ M180.
3. For any locomotive configurations outside the above, refer to ARTC.

## 2.7 Ruling Grades

Figure 2.7.1 – Ruling Grades across the ARTC Network

**Comment [RP3]:** Grade Updated for Macarthur to Port Botany RACN 1300042 PJ



## 2.10.1 New South Wales

Note: This section shall be read in conjunction with ANGE 210.

Speed restrictions may be imposed when prescribed threshold temperatures are reached.

**Table 2.10.1.1 – New South Wales Speed Restrictions During Hot Weather**

Train Type	Ruling Train Speed <sup>1</sup> (km/h)	Speed Restrictions During Hot Weather (km/h)
Passenger trains (all types) and light locomotives.	100 or more	90
	95	85
	90	80
	85	75
	80	70
	75	65
70 or less	Allowable track speed but not exceeding 60 km/h	
Freight trains containing all loaded vehicles	90 or more	80
	85	75
	80	70
or		
Freight trains containing one or more empty platform, all of which must have allowable, empty speed exceeding 80 km/h <sup>2</sup> .	75	65
	70 or less	Allowable track speed but not exceeding 60 km/h
Freight trains containing one or more empty platform, which are restricted to an allowable, empty vehicle speed of 80 km/h or lower <sup>2</sup> .	80	Allowable track speed but not exceeding 50 km/h

Note:

<sup>1</sup>The ruling train speed shall be the allowable track speed or the allowable vehicle speed, as specified in the Section Pages, whichever is less.

<sup>2</sup>For the purpose of this rule, a loaded platform is one with a loaded mass of upto 30 tonnes. or more.

**Comment [RP4]:** PN comment 4 14/03/14 The word platform better describes the situation. A platform can either be part of a multi pack which are permanently coupled (can be separated if need be) or part of a multi pack with articulated joints and shared bogies. (cannot be separated)

**Comment [RP5]:** RACN 1300041

**Comment [RP6]:** RACN 1300042

**Comment [RP7]:** Pacific National comment 4: as above

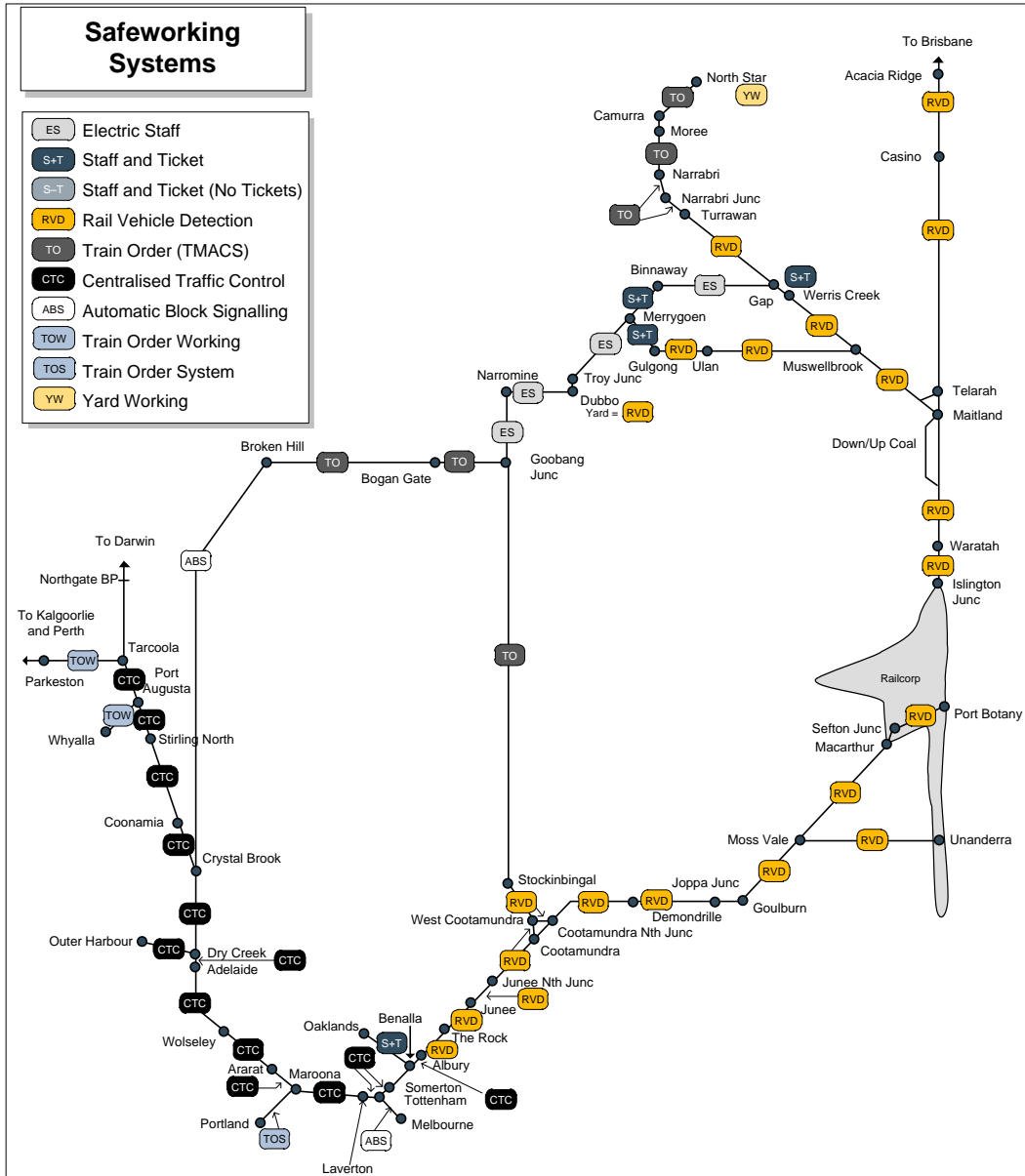
## 2.11 ARTC Safeworking Systems

The Network Controller is in charge of day-to-day operational control of safeworking systems. Network Controllers operate from Network Control Centres located at Mile End, Broadmeadow and Junee.

Figure 2.11.1 – ARTC Safeworking Systems

**Comment [RP8]:** S&T added Benalla to Oaklands Vite Vite removed because of CTC PJ/RP

**Comment [RP9]:** RACN 1300042 1300019



## 4.9 Train Speed Restrictions on Steep Descending Grades

Table 4.9.1 Speed Restrictions When Operating on a Steep Descending Grade

Circumstance	Train Speed (km/h)
Freight trains descending 1 in 30 grades or steeper	Up to 30
Light locomotives descending 1 in 30 grades or steeper	Up to 30

Refer to: [D52 Mossvale – Unanderra](#), for maximum speeds on graded sections.

[H2 Musswellbrook Ascending](#)– [Werris Creek](#), bank locomotive working  
[Willow Tree – Ardglen](#).

**Comment [RP10]:** RACN 1300042 PJ

**Comment [RP11]:** Special working conditions for operation on steep grades reference added for section pages. (PN comment No17 22/06/11)

## 4.10 On Train Communication

The Operator is responsible for the provision of locomotive based communication equipment required for network operations and safeworking. The Operator shall ensure that locomotive communications equipment is maintained and is compatible with the equipment used by ARTC Network Control.

Accredited Operators may request radio frequencies directly from ARTC.

Table 4.10.1 – On Train Communication Requirements for ARTC Network Areas

ARTC Network Area	On-Train Communication Requirement
NSW	*NTCS / ICE radio to provide the primary means of voice communications between the train driver and Network Controller. Working backup communications, which may include mobile or satellite phone, to be used in the event of a failure of the primary voice radio system. UHF radio for local communications with other train drivers, track workers and wayside equipment.
VIC/SA/WA	*NTCS / ICE radio to provide the primary means of voice communications between the train driver and Network Controller. UHF radio can be used to provide the primary means of voice communications between the train driver and Network Controller. Working backup communications, which may include mobile or satellite phone, to be used in the event of a failure of the primary voice radio system. UHF radio for local communications with other train drivers, track workers and wayside equipment.
GHERINGHAP - MAROONA (VIC)	*NTCS / ICE radio to provide the primary means of voice communications between the train driver and Network Controller. UHF radio for receiving data transmitted authorities from the Network Controller. DICE radio for the remote operation of points by the train driver from the locomotive.
TENT HILL – PARKESTON (SA/WA)	*NTCS / ICE radio to provide the primary means of voice communications between the train driver and Network Controller. ICAPS radio for the remote operation of points by the train driver from the locomotive.

**Comment [RP12]:** Re-instated by PJ

**Comment [RP13]:** RACN 1300042 & 1300004

**Table 5.2 – Allowable Maximum Rolling Stock Outlines**

**Comment [RP14]:** Table updated. (PN comment No 18 22/06/11)

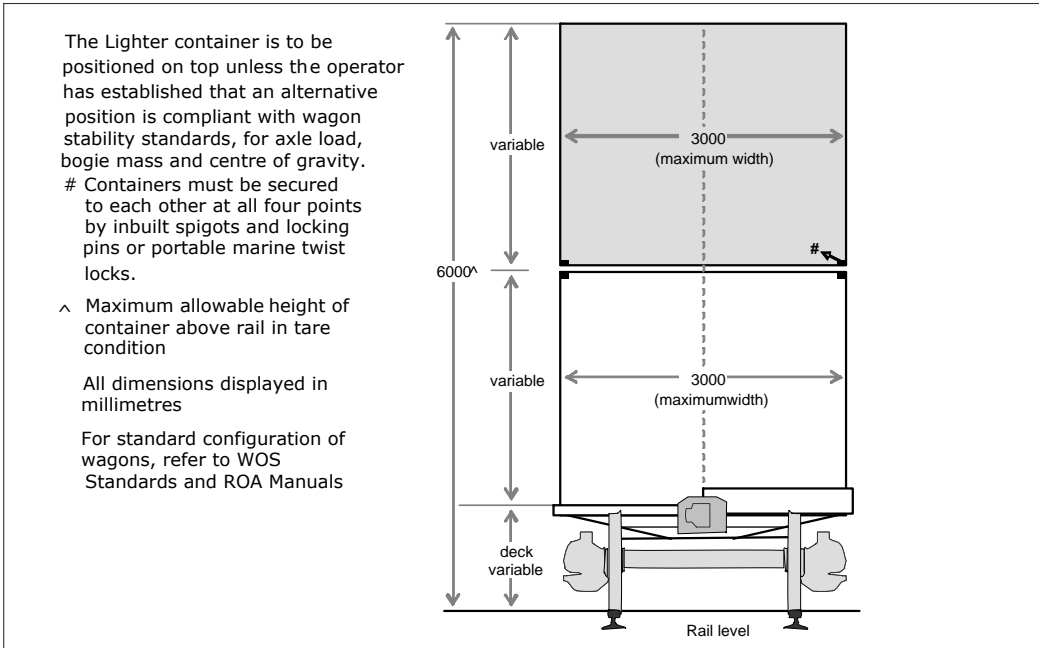
**Comment [RP15]:** RACN 1300041

Route	Rolling Stock Outline														
	ROA A	ROA B	ROA C	ROA D	ROA E <sup>1</sup>	ROA F <sup>1</sup>	ROA F <sup>2</sup>	ARTC CY 4150	ARTC CZ	NSW NNE	NSW NC	NSW NS	NSW IS	NSW NH	NSW DS
D5-7	AFT ISLINGTON – CRYSTAL BROOK – PARKESTON (end of ARTC track)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D4	DRY CREEK – OUTER HARBOUR	✓	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	✓
D21	WHYALLA LINE	✓	✓	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓
D15	CRYSTAL BROOK – BROKEN HILL	✓	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	✓
D14	BROKEN HILL – GOOBANG JUNC	✓	✓	✓	✓	x	x	✓	✓	✓	✓	✓	✓	✓	✓
D1-3	AFT ISLINGTON – TOTTENHAM JUNCTION – DYNON	✓	✓	✓	✓	x	x	x	✓	✓	✓	✓	✓	✓	x
D53	MELBOURNE (TOTTENHAM) – WODONGA – RIVER MURRAY BRIDGE – ALBURY	✓	✓	✓	✓	x	x	x	✓	x	✓	✓	✓	✓	x
D51	ALBURY – MACARTHUR	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
D33	MAITLAND – ACACIA RIDGE (NSW NTH COAST)	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
D11	COOTAMUNDRA – GOOBANG JUNC	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
D52	MOSS VALE – UNANDERRA	x	x	x	x	x	x	x	x	x	✓	x	✓	x	x
D46	LEIGHTONFIELD – MACARTHUR	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
D45	PORT BOTANY – LEIGHTONFIELD	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
H1	ISLINGTON JUNCTION – MUSWELLBROOK	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
H2	MUSWELLBROOK – WERRIS CREEK	✓	✓	✓	✓	x	x	x	x	x	✓	✓	✓	✓	x
H3	WERRIS CREEK – NARRABRI	✓	✓	x	x	x	x	x	x	x	✓	x	x	x	x
H4	MUSWELLBROOK – ULAN	✓	✓	✓	✓	x	x	x	x	x	✓	✓	x	x	x
I1	PORTLAND – MAROONA	✓	✓	x	x	x	x	x	x	x	✓	x	x	x	x
I2	BENALLA – OAKLANDS	✓	✓	x	x	x	x	x	x	x	✓	x	x	x	x
I3	ALBION – JACANA (Not connected to DIRN)	✓	✓	x	x	x	x	x	x	x	✓	x	x	x	x
I5	DUBBO – GOOBANG JUNC	✓	✓	✓	✓	x	x	x	x	x	✓	✓	x	x	x
I4	GAP – BINNAWAY - MERRYGOEN	✓	✓	✓	✓	x	x	x	x	x	✓	x	x	x	x
I4	MERRYGOEN – DUBBO	✓	✓	✓	✓	x	x	x	x	x	✓	✓	x	x	x
I7	ULAN – GULGONG – MERRYGOEN	✓	✓	✓	✓	x	x	x	x	x	✓	✓	x	x	x

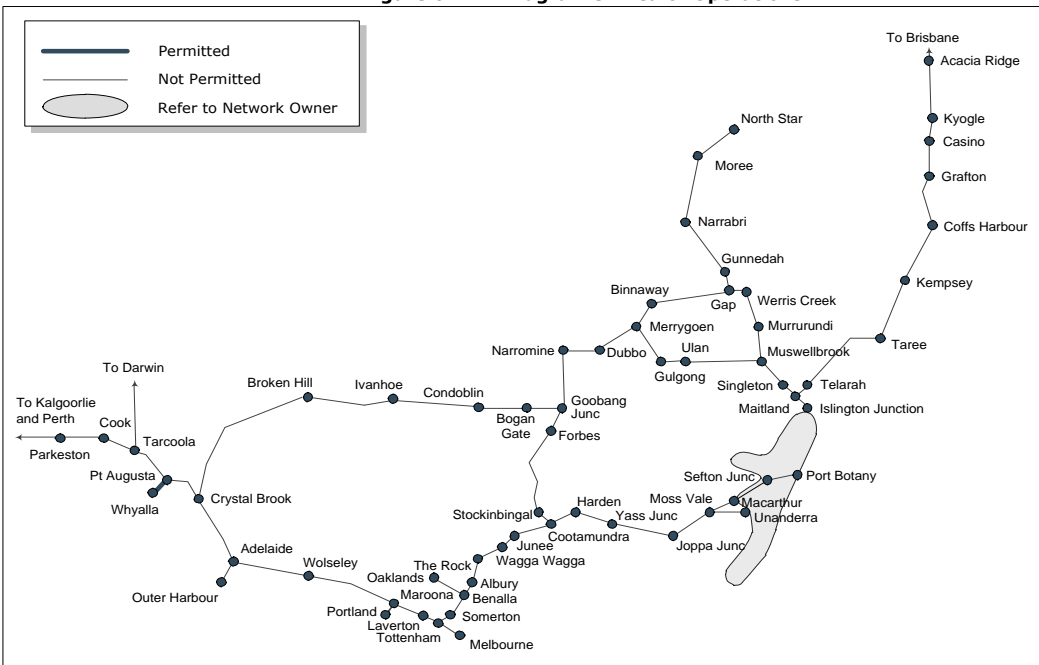
**Comment [RP16]:** PJ review RACN 1300042

**Figure 6.21 – Diagram 9 – Double Stacking of Containers from Port Augusta to Whyalla**

**Comment [RP17]:** The lighter container wording added to the diagram. PJ RP review. RACN 1300042



**Figure 6.22 – Diagram 9 Area of Operations**





## 6.1 Other Loading Requirements

Following are additional loading requirements that apply on the ARTC Network:

Operators shall construct trains of vehicles loaded without exceeding applicable:

- axle load limits taking into account weight distribution (refer to Table 2.2.1), or
- train height and width maximums (refer to Table 2.5.1)

Loading shall be secured to prevent movement during transit due to train and vehicle dynamic forces

Securing devices shall be correctly selected, protected against working loose, falling off or trailing from the wagon en route

Securing devices used shall be maintained in good condition and fit for use on the ARTC Network

Loading-specific segregation requirements shall be established and practiced (e.g. Dangerous Goods Code)

Loading shall not protrude more than 150 mm over the headstock of any vehicle

Locking mechanisms on doors, containers and open vehicles shall be maintained in good condition and fit for use in respect of opening, closing, security and locking

Containers shall be placed on wagons subject to:

- Operators ensuring that loading is to be evenly distributed within the container
- even distribution of loading between bogies
- the difference between adjacent bogies on a wagon or multipack does not exceed 20 tonne
- container(s) loaded in open wagons are located, secured centrally and evenly distributed over the bogies
- open wagon side doors are secured against opening
- open wagons without side doors are not operated with a vacant container position
- open wagons are free of loose items (e.g. dunnage before loading).

Double stacking shall be subject to:

- full height containers limited to container height not exceeding the overall height limits for area of operation (depicted in Figure 6.11 – Diagram 4 or Figure 6.15 – Diagram 6 or Figure 6.21 Diagram 9)
- half height containers limited to container height not exceeding the overall height limits for area of operation (depicted in Figure 6.07 – Diagram 2, Figure 6.09 – Diagram 3, Figure 6.13 – Diagram 5, Figure 6.17 – Diagram 7, Figure 6.19 – Diagram 8 and Figure 6.23 – Diagram 10)
- not exceeding maximum container loading limits
- container securement is to all four points by devices in good condition and fit for use on the ARTC Network
- the lighter container is positioned on top unless the operator has established that an alternative position is compliant with wagon stability standards (axle load both mass & centre of gravity).

**Comment [RP18]:** Revised reference from PJ RACN 1300042

**Comment [RP19]:** Note changed to reflect PN loading heavier containers on top. (PN comment No19 22/06/11)

**Comment [RP20]:** RACN 1300041

**Issued By:**

Richard Potts

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**Approved By:**

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**NAN Ref (if applicable):**