Comments on Aurecon report: road cost benchmarking (Table 36)

Table 36: Cost Benchmarking Comparing Transport Costs for 1 TEU between Hobart and Melbourne to Costs for 1 TEU between Adelaide and Melbourne

	Export – Hobart to Melbourne		Domestic (TFES assisted) – Hobart to Melbourne		Land only – 19m Semi – 733km		Land only – 26m B-Double – 733 km	
	Unit	Cost	Unit	Cost	Unit	Cost	Unit	Cost
Road Leg	278km at \$1.09/km	\$303	278km at \$1.09/km		733km at \$1.09/km		733km at \$0.77/km	\$564
Lift On		\$50		,		-		-
Bass Strait	Devonport – Melbourne	\$900	Devonport – Melbourne (TFES assisted)	\$450		-		-
Lift Off		\$50		-		-		-
Further Road Leg		\$100		\$100		-		-
TOTAL		\$1403		\$853		\$799		\$564

Source: Aurecon 2013

BITRE has identified the following issues with the Aurecon 'TFES benchmarking' (Table 36 page 90):

- 1) The Export container does not require a 'further road leg' of \$100 (local Melbourne delivery).
- 2) Aurecon incorrectly states on page 89 that the TFES definition of 'notional wharf to wharf' freight rate includes 'lift on lift off' costs.
 - As defined in the TFES, the notional wharf to wharf cost is 'blue water' only by definition this excludes intermodal costs including lift on and off costs.
 - ⇒ This mistake carries through Aurecon calculations in Table 36. The actual wharf to wharf freight rate for column 2 in Table 36 should be \$900, not \$1000 as stated on page 89.
- 3) Aurecon's has mis-calculated 'domestic TFES assisted' sea costs (Devonport to Melbourne)
 - ⇒ Based on the Aurecon's assumptions, an assumption that the container is 'standard density' freight, and the correct application of the current TFES methodology, a Shipper with a wharf-to-wharf freight cost of \$900 for this standard container would receive a TFES payment of \$648, including an intermodal allowance of \$100. The 'TFES assisted' cost to the shipper is therefore \$252, not \$450 as calculated by Aurecon in Table 36.
- 4) Aurecon's mainland Road Freight benchmark cost per km (and net tonne km) appears to reflect low spot rates, and is not a representative market benchmark
 - ⇒ The basis of the 'industry sourced' freight rate for Aurecon's benchmark is not stated.
 - ⇒ Aurecon does not include an allowance for 'operating empty' in its road freight benchmark.
 - ⇒ Norske Skog state that their analysis is consistent with Aurecon's freight rate.
 - ⇒ However, Norske Skog is a very large shipper with specialised freight requirements which clearly differs from other shippers and its freight costs cannot be used as a market freight cost benchmark.

⇒ Aurecon's 'benchmark' road freight rate is significantly lower than BITREs. Consequently, Aurecon's estimate of sea freight disadvantage is higher than BITRE's.

Unfortunately, the above issues undermine the reliability of Aurecon's conclusions with respect to cost benchmarking on page 91.

BITRE has estimated a similar analysis for 30 per cent and 20 per cent operating empty assumptions (Attachment 1). For this specific shipment comparing Hobart to Melbourne and Adelaide to Melbourne:

- Assuming 30 per cent operating empty: the domestic TFES assisted cost for a dry standard container is \$910 (total distance 698 kilometres), compared to \$1135 by road for the same container (733 kilometres Port Adelaide to Port of Melbourne).
- Assuming 20 per cent operating empty: the domestic (TFES assisted) cost for a dry standard container is \$857 (total distance 698 kilometres), compared to \$993 by road for the same container (733 kilometres Port Adelaide to Port of Melbourne).

Attachment 1 BITRE re-estimation of Aurecon analysis (Table 36)

Table 1 BITRE re-estimation of Aurecon cost benchmarking: 30 per cent operating empty

	Export – Hobart to Melbourne		Domestic (TFES assisted) – Hobart to Melbourne			Land only – 26m B-Double – 733 km	
	Unit	Cost	Unit	Cost		Unit	Cost
Road Leg	278km at \$1.5479/km	\$430	278km at \$1.5479/km	\$430		733km at \$1.5479	\$1135
Lift On		\$50		-	-		-
Bass Strait (\$900 wharf-to-wharf)	wharf-to- wharf	\$900	Devonport - Melbourne (TFES assisted - Class 2 shipper)	\$252	-		-
Lift Off		\$50		-	-		-
Melbourne local delivery		na		\$228	-		-
TOTAL		\$1430		\$910			\$1135

Notes BITRE assumes \$900 wharf to wharf freight cost; BITRE suggested road freight benchmark rate with 30 per cent operating empty; current TFES parameters; Norske Skog cost of \$228 /TEU for the 15 km local delivery cost (page 5 of draft report submission.

Table 2 BITRE re-estimation of Aurecon cost benchmarking: 20 per cent operating empty

	Export – Hobart to Melbourne		Domestic (TFES assisted) – Hobart to Melbourne			Land only – 26m B-Double – 733 km	
	Unit	Cost	Unit	Cost		Unit	Cost
Road Leg	278km at \$1.3547/km	\$377	278km at \$1.3547/km	\$377		733km at \$1.3547	\$993
Lift On		\$50		-	-		-
Bass Strait (\$900 wharf- to-wharf)	wharf-to- wharf	\$900	Devonport - Melbourne (TFES assisted - Class 2 shipper)	\$252	-		-
Lift Off		\$50		-	-		-
Melbourne local delivery		na		\$228	-		-
TOTAL		\$1377		\$857			\$993

Notes BITRE has assumed a \$900 wharf to wharf freight cost; BITRE road freight benchmark rate with 20 per cent operating empty; current TFES parameters; Norske Skog cost of \$228 /TEU for the 15 km local delivery cost (page 5 of draft report submission.

BITRE benchmark is one full TEU with a net freight of 11.5 tonnes with gross mass 13 tonnes. Three TEUs can be carried on a a B-double with a gross vehicle mass limit of 39 tonnes.

gross /TEU	13			
TARE /TEU	1.5			
net tonnes/TEU	11.5			
30% operating empty	13.46	c/ntk	1.5479	\$/km
20% operating empty	11.78	c/ntk	1.3547	\$/km

Table 3 TFES assistance calculation for a \$900 wharf to wharf bill for a standard 6" container

Shipper Wharf-to-Wharf freight bill for one standard dry 6" container	\$ 900
Freight rate per TEU	\$ 900
Notional WW Freight Rate (\$/Container)	\$ 900
Equivalent Notional WW Freight rate (\$/TEU)	\$ 900
Notional WW Freight Cost Disadvantage (\$/TEU)	\$ 619
Shipper Class	2
Notional Entitlement (NWW + Intermodal Cost)	\$ 719
Assistance Payable (\$/TEU)	\$ 648
Final Payment Rate + No High Density Adjustment (\$/TEU)	\$ 648
Total TFES Assistance payable (\$)	\$ 648
Shipper out-of-pocket cost (\$)	\$ 252