

Annexure A: Underlying assumptions

Part A Coal Study: Unitary Vessel Dimensions, Parcel size & Assumptions

Assumptions 1. Number of Days in Port: 1 Day & 8 hours (32hours) 2. Parcel Size (tons): 112 586 3. LOA: 225m, Breadth: 32m, Draft: 13.54m, GT: 39 763t, NT: 25 329t 4. Assume that there are no penalties, additional surcharges or waiting fees applicable within the vessel call. 5. Assume the vessel utilises the port within normal working hours of that port. 6. Assume the vessel will use two tugs. 7. Assume the vessel will always need pilotage assistance in the port.



Part B: Iron Ore Study: Unitary Iron Ore Vessel Dimensions, Iron Ore Parcel size & Assumptions

	<u>Assumptions</u>
1.	Number of days in port: 1 day & 23 hours (47hrs)
2.	Iron Ore Parcel Size: 170,000tons
3.	Vessel Dimensions: Length 280m Breadth: 44m Draft: 12m DWT: 180,000t GT: 95,000t NT n/a Cubic dimension: 147.840 cu.m
4.	The vessel utilises the port within normal working hours of the port, and abides by all rules and regulations of the port.
5.	No additional surcharges, waiting fees, penalties or cancellation fees are applicable within the vessel call.
6.	There is no use of miscellaneous services, such as Fire & Emergency services, Fire Protection, etc.
7.	4. Port charges such as Security service fees, fresh water fees, electricity and removal of refuse, etc, where a minimum fee is not stipulated, will be excluded from the Port charges.
8.	5. Assume away all reductions (based on the number of calls) in the port charges offered to vessels.
9.	6. Assume a Vessel of this size will always require the assistance of two tugs for one hour.
10.	7. Pilotage is always required. Shifting tariffs are excluded.
11.	8. Assume one vessel call per port per month.
12.	9. Assume vessel call at non-concessionary terminals and berths.
13.	10. Where there is more than one service provider, an average of the tariffs was taken.
14.	11. Assume all information about the vessel & cargo is provided in advance in accordance with requirements of each port prior to the arrival/departure of the vessel & cargo to/from the port.
15.	12. Assume vessel needs to use the port's mooring or unmooring ropes, two mooring ropes are used.
16.	13. Vessel always makes use of the port's equipment.
17.	14. Assume the vessel enters the berth at 10h00 and leaves at 09h00 (47hours later)
18.	15. Assume cargo operations commence within one hour of entering the berth and stops one hour prior to vessel exit from berth.



Part C: Automotive Study: Unitary Vessel Dimensions, Parcel size & Assumptions

Assumptions: 1. Number of days in port: 1 Day & 8hours (32hours) 2. Automotive Parcel Size: 1299 cars, export 409 cars/ 3715.64 tons, import 890 cars/ 8085.32 tons 3. Vessel Dimensions: Length: 198m Breadth: 32m Draft: 8.6m DWT: 19 893 GT: 56439 NT: 17959 4. The vessel utilises the port within normal working hours of the port, and abides by all rules and regulations of the port. 5. No additional surcharges, waiting fees, penalties or cancellation fees are applicable within the vessel call. 6. There is no use of miscellaneous services, such as Fire & Emergency services, Fire Protection, 7. Port charges such as Security service fees, fresh water fees, electricity and removal of refuse, etc, where a minimum fee is not stipulated, will be excluded from the Port charges. 8. Assume away all reductions (based on the number of calls) in the port charges offered to vessels. 9. Assume a vessel of this size will always require the assistance of two tugs for one hour. 10. Pilotage is always required. Shifting tariffs are excluded. 11. Assume one vessel call per port per month. 12. Assume vessel call at non-concessionary terminals and berths. 13. This study is based on new automotive vehicles imported/exported at the selected ports. 14. Assume all vehicles imported/exported are for one vehicle manufacturing company 15. The vessel is a Car Carrier vessel 16. Car dimensions (per car): Length- 4.54m, Width- 1.76m, Mass- 1735 kg



Part D Container Study: Unitary Container Vessel Dimensions, Parcel size and Assumptions

2012 Standardised Ship Call:					
	Land	Landed		ed	
	Deep sea		Deep sea		
	Full	686	Full	427	
	Empty	71	Empty	288	
I Io:	Coastwise		Coastwise		
Total TEU Parcel Size = 1,853	Full	2	Full	9	
	Empty	4	Empty	8	
	Transhippe	Transhipped		Transhipped	
	Full	148	Full	148	
	Empty	30	Empty	32	

Assumptions

- 1. 2012 Vessel Dimensions: Length: 221m, Breadth: 32m, Height: 25.91m, Draft: 12.2, DWT: 41t,800, GT: 35,800t, NT: 14,444, Power Output: 26,270 kw
- 2. The vessel utilises the port services within normal working hours of the port, and abides by all rules and regulations of the port.
- 3. Assume the vessel enters the berth on weekdays, except on public holidays, at 08h00 and exits the berth at 08h00. (i.e. number of hours in berth= 48hours)
- 4. No additional surcharges, waiting fees, penalties or cancellation fees are applicable within the vessel call.
- 5. There is no use of miscellaneous services, such as Fire & Emergency services, Fire Protection, etc
- 6. Port charges such as Security service fees, fresh water fees, electricity and removal of refuse, etc, where a minimum fee is not stipulated, will be excluded from the Port charges.
- 7. Assume the Vessel is a Liner Trade which operates on a scheduled basis.
- 8. Assume away all reductions (based on the number of calls)in the port charges offered to vessels.
- 9. Assume the following weights of TEUs:

Full= 21 Tons Empty= 2.5 Tons

- 10. Unless otherwise specified, assume a vessel of this size will always require the assistance of two tugs for one hour.
- 11. Unless otherwise specified, assume a vessel of this size will always require the assistance of a pilot for one hour. Shifting tariffs are excluded.



- 12. Where no tariffs are allocated to Coastwise & Transshipped Cargoes, the Deep sea rates will be used.
- 13. Assume one vessel call per port per month.
- 14. Assume vessel call at non-concessionary terminals and berths.
- 15. Where there is more than one service provider, an average of the tariffs was taken.
- 16. Assume all information about the vessel & cargo is provided in advance in accordance with requirements of each port prior to the arrival/departure of the vessel & cargo to/from the port.
- 17. Assume vessel needs to use the port's mooring or unmooring ropes.
- 18. Vessel always makes use of the port's equipment.
- 19. Assume all imported transhipment containers are transhipped within 14 days of arrival at the port.
- 20. Assume all transhipment containers landed/shipped are foreign-going transhipment containers
- 21. Assume all transhipment containers are shipped from the same port terminal it landed in.
- 22. Assume one container move to load or off load containers for terminal handling charges.
- 23. Klang Northport and Jawaharlal Nehru cargo dues and terminal handling charges are consolidated into a single charge.
- 24. Container loading and unloading operations begin within 2hours after the vessel enters the berth and ends 2hours before the vessel exits the berth. i.e. cargo operations are completed in the 44 hours the vessel is at berth.
- 25. No amendments have been made to reduce total handling and port authority charges of non South African ports for efficiency differentials.
- 26. Terminal Handling Charges includes vessel to stack, vessel to truck, vessel to rail wagon, rail wagon to vessel, truck to vessel, stack to vessel as appropriate.

