

International port cost comparison project

Objective

Previous cost exercises conducted by SAL gave a snapshot of how port costs compare around Australia. The project undertaken in 2010 was designed to give a comparison of Australia's main container ports to a number of major international ports utilising publicly available tariffs. The costs calculated were direct terminal costs and excluded charges such as Stevedoring and miscellaneous utility charges. Pilotage, towing and linesman costs were included to reflect a proper comparison to those ports that provide these services (i.e. not privately owned separately to the terminal). Totals were then calculated in Australian dollars. Conversion rate used were taken from MSN Money and x-rates.com (New Zealand dollar) as of August 9 2010.

It was expected that the results of the project would show the impact of continual increases in Australian port charges and highlight how un-competitive Australian ports are becoming on a world scale.

Specification

To obtain the relevant data a hypothetical sized vessel was used as calculated using aggregate data from a number of vessels calling the selected ports. Whilst it is understood that a vessel of this particular size and specification may not call all of these ports, an average was needed for a direct comparison. The vessel parameters were:

GRT	Ship NT	Ship DWT	Ship LOA	Draft	Breadth	Vessel TEU Capacity
40700	24776	50964	258	12.8 m	32.2	4500

The next set of values needed was a median exchange of containers for comparison:

Import	Export	Empty Import	Empty Export	Transshipment	Full Weight	Empty Weight
1000 TEU	500 TEU	0 TEU	200 TEU	0 TEU	14 Tonnes	2.3 Tonnes

Vessel time at berth, number of tugs, duration of tugs and marine pilot required:

Berth Time	2 Tugs	Pilotage
16 hrs	2 hrs	2 hrs

Exchange rate – Monday August 9 2010

Currency	AUD	NZD	JPY	HKD	CNY	SGD	EUR	USD	KRW
AUD	1	0.79860	0.01276	0.14102	0.16154	0.80989	1.44373	0.91333	0.00094

Data obtained

A major point highlighted by the exercise was the way in which different ports calculate and apply their tariffs. Direct agreements with shipping lines and specific ports is more commonly how tariffs are applied calculating how frequently a vessel calls a particular port is a major factor. For example Port charges in the port of New York reflected on paper a cost comparable to Sydney and Melbourne yet in reality actual cost can be over two thirds cheaper than what is reflected in the comparison. These agreements are in place for many international ports. Such agreements do not exist for Australian ports. However some ports such as Adelaide provide a structured reduction in their equivalent of the Marine Service Charge for regular port calls for a specific vessel.

Project findings

The title used for the calculation of cost was condensed and general terms were utilised. The Marine Service Charge encompassed such different titled costs such as Navigational charge, Harbour Dues, Tonnage Rates and so forth.

Contrasts in charges were evident in ports that are privately owned and run as opposed to government owned. With the exception of Brisbane, the ports owned by respective governments displayed lower overall costs and went further to exclude cost like wharfage in Rotterdam and Hamburg. Wharfage costs in these ports is charged through Stevedoring and is not additionally charged by the ports and as private contracts were not included in this exercise and thus these ports returned questionably low port costs. Pilotage and Towage were included as the majority of the tariffs schedules used for the project reflected these charges.

A total of 16 ports were used in the comparison though the Japanese and Chinese ports were condensed as the calculation of port costs revealed almost identical figures as the tariff schedule for these countries is set by the respective governments with only minor variances port to port.

The original draft included data from the following ports:

Japan - Nagoya
- Yokohama
- Osaka

China - Tianjin
- Shenzhen
- Guanzhou
- Shanghai
- Ningbo

Conclusion

As a result of this study even before agreements between individual lines and ports is factored into Australian ports with the exception of Adelaide and Fremantle represent 3 of the top 6 most expensive ports of call in terms of port charges. Of note was the frequency of price rises identified in relation to the yearly increases seen in Australian Ports, as some of the international tariffs dated back as far as 1996. Once the factoring of agreements and the continual price rises being seen in Australia by port authorities could see the major Australian Ports set pricing levels above the rest of the world.