



Producer Price Indexes for Water Transport Services within Australia

**24th Voorburg Group
Oslo, Norway
14-18 September
2009**

**Michelle Apsitis, Sarah
Whelan and Daryl Williams
Australian Bureau of
Statistics**

ABS PRODUCER PRICE INDEX OF WATER TRANSPORT SERVICES

INTRODUCTION

1. The Australian Bureau of Statistics (ABS) currently publishes a producer price index (PPI) for Water Transport services. The scope of this index is based on the Australian and New Zealand Standard Industrial Classification 1993 (ANZSIC 93) division 63 'Water Transport Services'. The time series for this index commenced in March 1997 and was first published in April 2000. It is currently released as part of *Producer Price Indexes*, Australia (ABS Catalogue no. 6427.0), a quarterly series of PPIs available within one month of the end of the reference period. The main use of the Water Transport Services PPI is as a deflator in the preparation of the Australian national accounts. This price index also contributes to the stage of production producer price indexes.

2. The output producer price indexes compiled by the ABS measure the prices received by producers regardless of the destination of the good or service. Therefore, producer price indexes measure business-to-business transactions but also include transactions, where appropriate, to the household sector, to government and to non-profit institutions serving households. This scope aligns with the use of the PPIs as measures of inflation and as deflators in the national accounts.

3. The Water Transport Services price index measures the transport by water of commodities on behalf of a buyer/owner or a seller. Supply of such services may be under contract, regular schedule or on demand. Different cost pressures for each type of service may affect price volatility at different times, and the service industry PPIs are designed to capture these price movements.

1. DEFINITION OF THE SERVICE BEING PRICED

4. ANZSIC 93 division 63 Water Transport Services covers establishments engaged mainly in the transportation of freight by water. ANZSIC 93 division 63 broadly corresponds to International Standard Industrial Classification (ISIC) Rev 4 structure (2008 United Nations Statistics Division) division 50 'Water transport'. The current ISIC Rev 4 structure is as follows:

- division 50, Water transport;
- group 501, Sea and coastal water transport;
- group 502, Inland water transport;
- class 5011, Sea and coastal passenger water transport;
- class 5012, Sea and coastal freight water transport;
- class 5021, Inland passenger water transport; and
- class 5022, Inland freight water transport.

5. The activities covered by ANZSIC 93 subdivision 63 also broadly correspond to a range of different services classified according to the Central Product Classification (CPC). ANZSIC 93 class 630 is the industry of origin for products classified broadly according to CPC version 2.0 as follows:

- division 72, Water transport services;
- group 721, Transport services by sea-going vessels;
- class 7211, Passenger transportation;
- class 7212, Freight transportation;

- class 7213, Rental services of sea-going vessels with operators;
- class 7214, Towing and pushing services;
- subclass 72111, Passenger transportation by ferries;
- subclass 72119, Other passenger transportation;
- subclass 72121, Transportation of frozen or refrigerated goods;
- subclass 72122, Transportation of bulk liquids or gases;
- subclass 72123, Transportation of containerized freight;
- subclass 72129, Transportation of other freight;
- subclass 72130, Rental services of sea-going vessels with operator; and
- subclass 72140, Towing and pushing services.

Towing and pushing services is not covered in ANZSIC 93 group 630, as it is classified in class 6629 Services to Water Transport n.e.c.

6. The primary types of activities in scope of ANZSIC 93 subdivision 63 are as follows:

- Freight transport service (international sea transport);
- Ocean cruise services (between domestic and foreign ports);
- Passenger transport service (international sea transport);
- Ship management service or international sea transport (i.e. operation of ships on behalf of owners);
- Boat charter, lease or rental (with crew; for any period; for coastal water transport);
- Freight transport service (coastal sea transport);
- Island ferry operation (in coastal waters);
- Ocean cruise service (between domestic ports);
- Passenger transport service (coastal sea transport);
- Ship charter, lease or rental (with crew; for any period; for coastal sea transport);
- Ship management service for coastal sea transport (i.e. operation of ships on behalf of owners);
- Vehicular ferry operation (in coastal waters);
- Cruise operation (river, harbour or lake; with or without restaurant facilities);
- Freight transport service (river, harbour or lake);
- Passenger ferry operation (river, harbour or lake);
- Passenger transport service (river, harbour or lake); and
- Water taxi service (river, harbour or lake).

Note: that the ABS water transport service PPI is restricted in coverage and does not attempt to price the following activities: Ocean cruise service (between domestic and foreign ports), Passenger transport service (international sea transport), Ship management service or international sea transport (i.e. operation of ships on behalf of owners), Boat charter, lease or rental (with crew; for any period; for coastal water transport), Ocean cruise service (between domestic ports), Passenger transport service (coastal sea transport), Ship Charter, lease or rental (with crew; for any period; for coastal sea transport), Ship management service for coastal sea transport (i.e. operation of ships on behalf of owners), Cruise operation (river, harbour or lake; with or without restaurant facilities), Freight transport service (river, harbour or lake), Passenger ferry operation (river, harbour or lake), Passenger transport service (river, harbour or lake), and Water taxi service (river, harbour or lake). This restriction in coverage is due to the limited volume of such activities within the Australian economy.

7. The ABS has revised its industrial classification to a new version of ANZSIC (ANZSIC 06), which is progressively being introduced in all industry based ABS statistics. In September quarter 2009,

PPI will be implementing ANZSIC 06 changes in Water Transport Services. Under ANZSIC 06, the primary level will change from Water Transport 63 (ANZSIC 93) to Water Transport 48. The ANZSIC 06 structure will have two secondary levels being 'Water Freight Transport' 481 and 'Water Passenger Transport' 482. Division 48 Water Transport broadly corresponds to ISIC Rev 4 division 50 and ANZSIC 93 division 63. 'Water Passenger Transport' 482 will not be included due to the limited volume of such activities.

Output

8. Water Transport Services conducted by manufacturers, resource mining industries, livestock and grain farmers or anyone else on their own account is included in the ABS Water Transport Services price index. Freight-forwarding (Except Road) (ANZSIC 93 class 663 and part ISIC Rev 4 5229 'Other transportation support services') is not included in the index, but is interwoven through many of the water freight operators along with warehousing, storage and packaging activities. Many of the national and international operators and some others promote themselves as providing 'supply chain solutions' (bundling of services) where there may be cross subsidisation of prices by activities other than water transport. The ABS price index of Water Transport Services endeavours to measure changes in water freight prices only.

2. PRICING UNIT OF MEASURE

9. The development of the price collections for the water freight industry has involved a wide range of diverse businesses with different pricing mechanisms. Extensive consultation with industry associations and individual businesses has been undertaken to determine the most viable approach, on a case-by-case basis. There are no fee guidelines or standards currently in use for specific activities within or across this class. Each market area has different requirements, usually depending on factors such as customer type, operating policies and type of commodity/product being shipped. When transporting livestock and grain, additional fees are charged due to the vessel needing to be cleaned to avoid contamination while wine transport has added refrigeration costs. Pricing methods also vary, such as vehicles transported by ro-ro vessels are charged by weight, wine and grain are charged by TEU or FEU (twenty or forty foot equivalent units – shipping containers), and iron ore is charged per tonne. Ports also have different charges depending on facilities provided (e.g. stevedoring, container storage, tug boat usage). Shipping agents are another factor to consider, as they act on behalf of the ship owners, who charge fees for their services. Charges can also depend on whether a vessel is making multiple stops before reaching a destination, or a direct route. Given the diverse approaches used to price water freight, the ABS adopts a specification pricing approach, with representative specifications identified in consultation with the provider.

10. Pricing mechanisms employed by the water freight industry frequently vary with differences in point-of-origin and point-of-delivery. As such, specifications must define the service in a detailed form, including origin and destination points, the type of vessel (either implicitly or explicitly), type of product being transported, and customer type. Larger vessels may also have difficulty with port size restrictions, and may require other means of loading and unloading of freight. In most instances vessels are specifically designed to ship a particular commodity e.g. oil tanker for transporting oil, ro-ro vessel for transporting vehicles. The ABS is able to price to constant quality by focussing on detailed specification pricing.

11. Over the past year, the ABS has identified a shift in pricing mechanisms due to recent increases and decreases in the price of bunker fuel. The ABS has observed that the water freight industry has been adding fuel surcharges to the actual freight costs, and hence in the recent quarters the price of freight has increased and decreased by such costs. The ABS has responded to this change in industry practice by including fuel surcharges as part of the specifications for most of the activities selected for pricing in the Water Transport Services PPI.

3. MARKET CONDITIONS AND OBLIGATIONS

Size of Industry

12. The water transport industry is a significant industry in its own right but also in its role in the general Australian economy. Water transport is an integral part of the Australian economy due to Australia's dependency on imported and exported commodities. The past decade has seen changes in the water transport industry and in the business and regulatory environments within which it operates. The size of the water freight industry has been affected by the growth of economic activities, changes in water freight rates, improvements in water freight infrastructure, quality of water freight services, and competition from other forms of transport (e.g. air transport).

13. There is limited separate data for water freight. A component of the data used is mixed undertakings of freight-forwarders and those offering more than one service (bundled) to their clientele. Currently Production values are determined using 2004-05 input output tables (see ABS National Accounts: Input-Output Tables (Product Details) - Electronic Publication, released 13th March 2009 (ABS cat. no. 5215.0.55.001)). Production of water transport services is valued at \$4.8 billion AUD and this service accounts for 10.1% of the production of transport and storage services (valued at \$47.0 billion AUD).

14. According to information covered in the BITRE (Bureau of Infrastructure, Transport and Regional Economics) Information Paper 61, the Australian sea freight fleet comprised of 96 vessels. It is estimated that the Australian fleet will reduce to 30 vessels by 2011 due to heavy competition in both coastal and international shipping; and is further explained in paragraph 16. Of the current 96 vessels, 22 vessels are small ships (mostly general cargo carriers) and the remaining 74 are larger vessels. Australian coastal shipping is represented with 31 vessels Australian registered and 4 vessels that are overseas registered. Australia's international shipping has 9 Australian registered vessels and 30 overseas registered. The majority of the 74 larger vessels engage primarily in international trade. In the 2006-07 period, the number of bulk carriers fell from 29 to 28 and bulk carriers tonnage increased due to larger vessels entering the fleet to meet increased export demand for mineral and energy commodities.

15. Greater integration is being observed within the water freight transport industry, with the water freight sector undertaking more freight-forwarding activities and becoming logistic operators. This can include other related transport services such as warehousing, stock control facilities, road, rail, and air freight.

Special conditions or restrictions

16. In Australian coastal shipping, there is a growing trend where overseas ships are coming in with imports and unloading at major ports (e.g. Sydney, Melbourne), and then take on a coastal load to a port that mainly conducts business in mineral resources; then exports the mineral resources out of Australia. Overseas vessels are required to apply for permits that are available for a single voyage (SVP) or a continuing voyage (CVP) (valid for three months), and the majority of the licences applied for are SVPs. Part VI of the Australian Navigation Act 1912 makes permits (CVPs and SVPs) and licences available for vessels including foreign owned, to participate in coastal trade. Unfortunately 'the Australian Navigation Act is a disadvantage to Australian operators as they have higher charges, administration requirements, and staffing costs compared to overseas operators' as quoted by the Australian Shipping Association.

17. Attachment A lists in detail section VI of the Australian Navigation Act 1912.

18. Attachment B illustrates advantages / disadvantages to Australian owned vessels in Australian coastal shipping.

Record keeping practices

19. Record keeping practices in the water transport industry for the intention of bringing together price and value data vary by type of commodity being transported. All commodities transported have detailed record keeping because of mandatory International, Federal and State regulations. The character of the commodity determines if additional requirements or restrictions are needed to be placed on the commodity being transported. Dangerous goods such as petroleum will have more record keeping requirements in comparison to commodities such as computer parts. Freight-forwarders rarely have and are not required to have detailed record keeping requirements when compared to a captain of a vessel who has comprehensive details and log books of all goods being transported. Most businesses price on distance covered, weight and type of commodity transported, which inherently therefore contains a component for bunker fuel, labour and normal running costs. Additional costs such as individual harbour charges, customs inspection fees, peak season fees and special conditions may be factored into the total.

20. Ship owners and captains of vessels in Australia are required to maintain detailed records and logbooks to ensure that all commodities being transported are stored correctly and reach their final destination. A vessel receiving container freight in China will most likely make multiple stops at different countries loading and unloading cargo, before the container reaches its final destination. Freight-forwarders select container vessels on their availability and time it takes to reach a destination rather than specific shipping companies. For container carrying vessels the shipping company charges by the container (usually a TEU), so it is not unusual for a freight-forwarder to have several clients freight bundled into the one container. For the transportation of mineral and energy resources, mining companies will either provide their own vessels, lease or hire vessels to make a direct sailing route to a specific destination/ client.

21. As mentioned in paragraphs 19 and 20, record keeping by the industry is not always geared towards reporting costs or prices on a \$/tonne/destination. This is why the ABS prices special services from pick-up to destination for a specific customer and/or commodity. As the ABS's pricing method is based on particular specifications for a customer and/or commodity between origin and destination, there is more consistency in pricing the same service over time. This process picks up any changes in the character of the service (eg. market movement) and quality adjustments can be applied where necessary.

22. Under Australia's Federal system of government, constitutional responsibility for the regulation of water transport lies with the Federal Government, states and territories. In accordance with the Australian Navigational Act 1912, Australian owned and overseas trading vessels sailing in Australian waters are covered under this Act; with the exception of Australian fishing boats, steam-ships, naval vessels, inland waterway boats, and pleasure craft. A government agency, the Australian Maritime Safety Authority (AMSA) was established to enhance efficiency in the delivery of safety and other services to the Australian maritime charter. AMSA regulate shipping safety, marine qualifications, shipping registration, search and rescue, and marine environmental protection within Australia. AMSA was established to develop key elements of national water transport law and levy legislation within the shipping industry. Private organisations such as the Australian Shipping Association (ASA) and Shipping Australia also assist the government in legislation amendments, and represent Australian ship owners.

23. There has been some impact from recent technological development in the water transport industry in Australia, and the technology employed by the industry is rapidly changing. Over the past decade the trend has lent towards using fewer vessels with larger holding capacities. Smaller vessels have been replaced with larger ships due to increased export demand for minerals and energy commodities from Australia. Heavy competition within the industry has ensured that the benefits of these technological developments have been passed onto users of Water Transport Services.

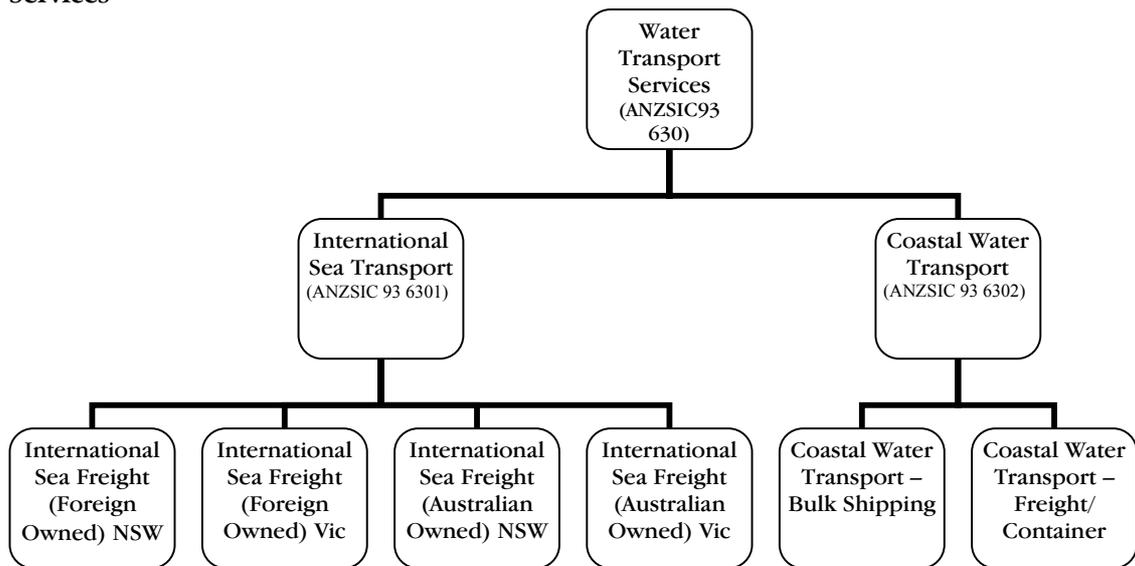
4. STANDARD CLASSIFICATION STRUCTURE

Current Practice

24. Services are classified according to their ANZSIC 93 industry of origin (4-digit class level). ANZSIC Classes 6301 International Sea Transport and 6302 Coastal Water Transport are children to Group 630 Water Transport and Sub-division 63 Water Transport Services. Whilst the 4-digit class levels are the lowest level of ANZSIC, these levels of detail are not sufficient to capture different price determining characteristics for water transport activities. The price indexes International Sea Transport and Coastal Water Transport utilise specifically designed structures below the 4-digit class level, developed with the aim of classifying water activities into homogenous sectors that align better with industry practice.

25. As noted in paragraph 9, the origin of vessel, destination, and type of commodity being transported are the main price determining characteristics for Australian Water Transport Services. The index structure used for the price index of Water Transport Service is therefore structured primarily according to the state in which the shipping company is based or type of vessel utilised. Such a structure reflects industry practice, especially when there are specially designed vessels with additional costs used for transporting particular types of freight such as cattle, natural gas, refrigerated foods, chemicals, or wine. Such commodities are usually transported by specialist shipping companies due to the type of vessel required.

FIGURE 1 Current structure of the price index of Water Transport Services



26. In the current ANZSIC 93 structure, the three most significant contributions in weight based on the 2008-09 input-output data, price updated to March quarter 2009, are from International Sea Freight (Foreign owned) NSW, International Sea Freight (Australian owned) VIC, and Coastal Water Transport - Freight /Container, which accounts for almost 76% of the measured activity. Coastal Water Transport - Bulk Shipping, International Sea Freight (Foreign owned) VIC, and International Sea Freight (Australian owned) NSW represent the remaining 24%.

Future Directions

27. As part of its ongoing sample review and maintenance program, the Producer Price Index Section will be implementing a new structure for the price index of Water Transport Services in the September quarter 2009, to better reflect changes within the water transport industry and the implementation of ANZSIC 06. In setting up the structure, consideration has been given to the nature of the influences that affect the industry to allow for item substitution in the index with minimum risk of future structural change being required.

28. The Transport and Storage Index (Division I) will be changing to "Selected Output of Transport, Postal and Warehousing Index", with the implementation of ANZSIC 06. With the proposed changes to Water Transport Services, the index will report under the group of 'Water Freight Transport' 481. The Water Freight Transport class will have seven reporting elementary aggregates: international sea freight/ Australia NSW; international sea freight/ Australia Vic; international sea freight/ foreign NSW; international sea freight/ foreign Vic; coastal transport-bulk shipping; coastal transport-freight/container; and ocean and inland water freight transport services.

29. The benefits of the proposed new structure are that the resulting elementary aggregates are more homogenous in terms of price level, price behaviour, and item replacement. The current structure reflects these differences to a certain point (for example; transportation of iron ore differs from transportation of vehicles). The proposed new structure introduces a higher grade of detail, allowing for transformability within broad headings.

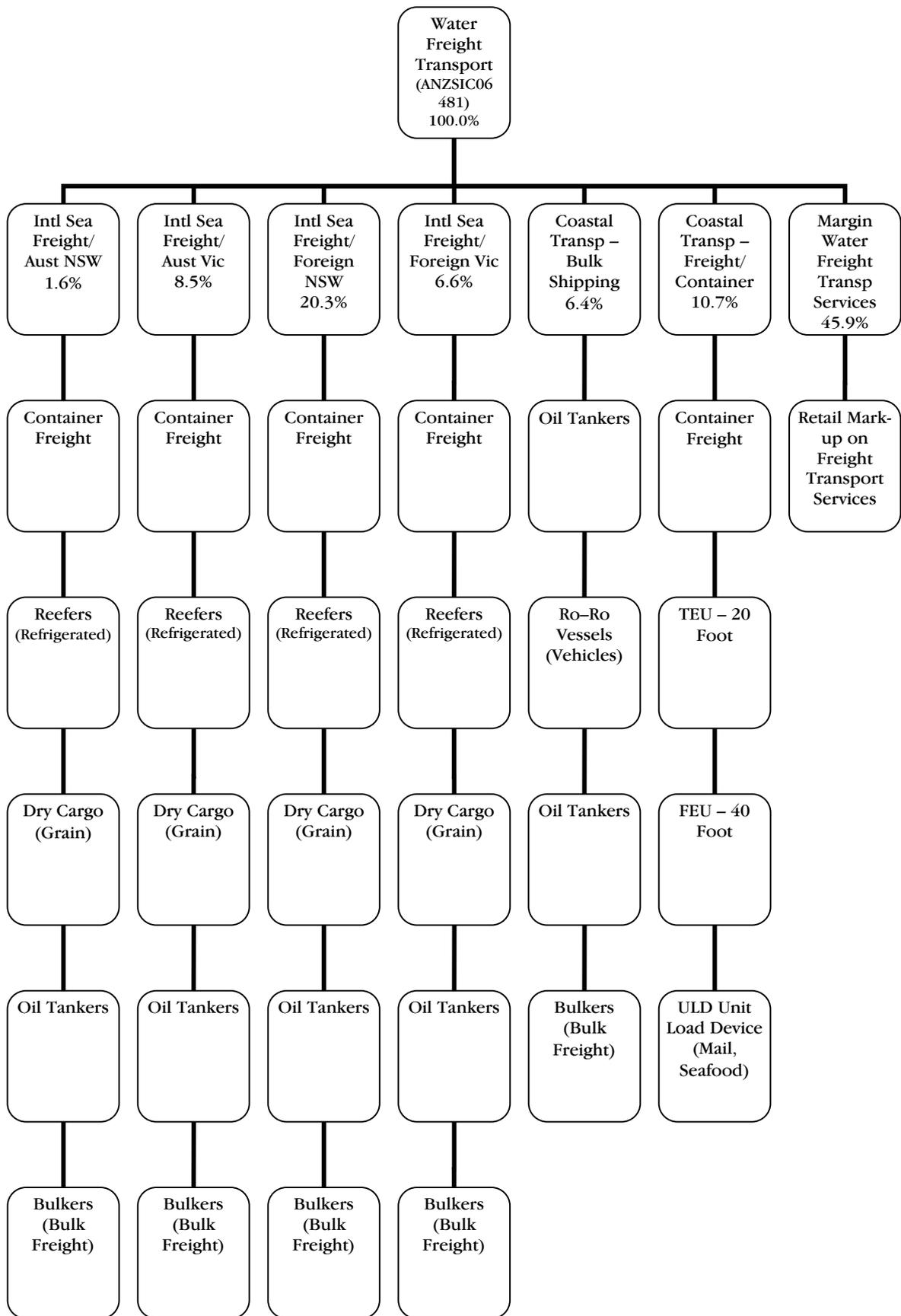
30. Under the new structure, the most significant contribution will be made by Margin - Ocean & Inland Water Freight Transport services (45.9%). The contribution from the remaining elementary aggregates is: International Sea Freight/ Foreign NSW 20.3%; Coastal Transport - Freight/ Container 10.7%; International Sea Freight/ Australia Vic 8.5%; International Sea Freight/ Foreign Vic 6.6%; Coastal Transport - Bulk Shipping 6.4%; and International Sea Freight/ Australia NSW 1.6%.

31. The level of detail in the proposed index structure will better reflect the desired outcomes for both editing and imputation practices. For example, the addition of greater detail in the index design allows the new index structure to better reflect different practices that arise for inland water freight and passenger services. Increasing the level of detail ensures that future emerging markets can be incorporated into the index, and there is more flexibility.

5. NATIONAL ACCOUNTS CONCEPTS AND MEASUREMENT ISSUES

32. Within the production approach to GDP as measured by the Australian national accounts, International Sea Transport (ANZSIC 93 6301) and Coastal Water Transport (ANZSIC 93 6302) are the sole contributing classes to the ANZSIC 93 subdivision 63 Water Transport. The classes (and group 630 Water Transport) reflect the same classification principles as outlined above. The production approach in the Australia national accounts uses the "output indicator" method for measurement of quarterly chain volume estimates of industry value added for the water transport industry.

Figure 2 Proposed new structure of the price index of Water Freight Transport located on page 9.



33. The output indicator method is the one most commonly used by the ABS. It involves extrapolating reference year estimates of current price gross value added using movements in a volume indicator of output. In some instances the output indicator is just a single statistic, but in most cases it is a composite of several statistics. In no situations do these output statistics precisely meet the national accounts definition of output, but in most cases they approximate the national accounts definition reasonably closely. In some cases the output statistics are highly correlated with the national accounts definition of output, as when turnover data are used as the output indicator for wholesale and retail trade. The principal output of these industries is their margin on the goods they sell (the margin is the difference between the price at which goods are sold and the price at which those goods are bought by the wholesaler or retailer).

34. The output indicator used for the measurement of water transport is income from sales of goods and services collected in the Quarterly Business Indicators Survey (QBIS). These sales estimates are deflated by the producer price index of Water Transport Services.

6. PRICING METHODS AND CRITERIA

35. In previous discussions regarding the output of the shipping industry, the pricing techniques depend on type of commodity, origin and destination. This may also exist for price discrimination between customers, and customer (or customer type) is often a price-determining characteristic, as with many services. It is for these reasons that the ABS prefers the use of specification pricing method for Water Transport Services. Data availability, accounting and contractual requirements of individual respondents also influence the pricing methods employed by the ABS. Therefore, the pricing method adopted in the water transport PPI is determined on a business-by-business or commodity-by-commodity basis.

36. A common issue that arises in pricing Water Transport Services is the use of a contract negotiated to cover a range of services provided to a particular customer. Such contracts can often extend beyond water transport services where services are bundled to include storage, freight-forwarding, customs clearance, and port services. Contracts may also include arrangements for a single or multiple shipments. In addition, contract terms are unique to each agreement in respect of customised product features, negotiated prices linked to the unique buyer/seller relationship, or quantity differences. Pricing water transport activities separately when such contracts are encountered often imposes a greater burden on the selected provider.

37. Types of pricing methods used within the water transport services in the ABS are:

- Specification pricing - clearly defined representative services are selected along with conditions of sale
- Contract pricing - clearly defined specifications to respondent's key clients are monitored over ongoing large contracts.

38. Prices collected under specification pricing are actual prices charged for a service that has occurred in the Australian marketplace, and are not a list price. This is achieved through use of very detailed specifications, specifying the length of freight trip or alternatively the beginning and end location of a trip, type of vessel being used (e.g. ro-ro vessel, reefer) and type of commodity being transported. The specifications are also structured so as to capture discounting, and fuel surcharge. The valuation basis is basic prices, which is in agreement with the use of the price index in the Australian National Accounts.

Representation of Current Water Transport Population

39. The ABS ensures continued representivity of its Producer Price Indexes through a sample review and maintenance program.

40. The majority of the ABS producer and international trade price indexes have detailed aggregation structures below the fixed level of the regimen item down to the elementary aggregate (this does not include specifications within an elementary aggregate). The ANZSIC 93 classes 6301 International Sea Transport and 6302 Coastal Water Transport are regimen items for the broader price division I Transport and Storage Services index. The structure below the regimen item includes components that represent transportation of different types (e.g. bulk, containerized). With the implementation of ANZSIC 06, Water Transport will be published at the class level of Water Freight Transport 4810.

Timely Measure

41. The quarterly price index of Water Transport Services is published within a month of the end of the reference period as part of Producer Price Indexes, Australia (ABS cat. no. 6427.0). The release date for each quarterly publication is announced six months prior to the actual release.

42. Pricing to constant quality within the price index of Water Transport Services is maintained by utilising three clear methods. Firstly, the practice of pricing specifications ensures that the service being priced is clearly defined through shaping of specifications to the individual providers, thus ensuring that all price-determining characteristics for a particular producer-product pair are included. Secondly, the Survey of Producer Prices measures prices and also captures reasons for price movement and identifies any changes in the services being priced. And finally, when quality changes are identified, the previous period price is quality adjusted so that the price movement is determined from the outlook of the current (or ongoing) quality.

7. QUALITY ADJUSTMENT METHODOLOGIES

43. It is vital in the compilation of all Producer Price Indexes that each specification included in the price basket be priced to constant quality over time. Not pricing to a constant quality could result in a price index that measured price change and quality change. In addition to a price change the index would also (incorrectly) measure the impact of a change in the quality of the product being delivered.

44. In order to identify changes in quality it is necessary to collect a substantial amount of detailed information regarding the services being priced. A portion of this information is obtained in the process of gathering and checking data during compilation of the price indexes. Respondents are requested to provide information of any changes to their price or services, supplied on a quarterly survey form. Some examples of quality changes can be due to a change in the price of services, physical characteristics, volume, different locations, and timing. Instances of unexplained price changes that are outside set tolerances are checked to determine if it is a genuine price change, or if it is a change in quality. Contact with the respondent (usually by telephone) is the main source of information to determine quality change and measuring changes that have occurred. Media reports and confirmation with other price indexes can also assist in obtaining more detailed information on quality.

45. If changes to price determining characteristics are identified, quality adjustment of the previous period price is undertaken. For water transport services, the overlap method of quality adjustment is used in most instances to price to constant quality. In interactions with service providers it is essential to determine the real market price at which the changed service would have sold in the previous period.

8. EVALUATION OF COMPARABILITY WITH TURNOVER/ OUTPUT MEASURES

46. Compilation of the Australian national accounts utilises revenue data obtained from the QBIS (Quarterly Business Indicator Survey). The QBIS survey measures output of Type of Activity Unit (TAUs), with ANZSIC is the primary classification. The TAU is comprised of one or more business entities, sub-entities or branches of a business entity within an enterprise group that can report production and employment data for similar economic activities. When a minimum set of data items is available, a TAU is created which covers all the operations within an industry sub-division (and the TAU is classified to the relevant sub-division of the ANZSIC). Where a business cannot supply sufficient data for each industry, in most situations a TAU is formed which contains activity in more than one industry sub-division. However, if the business has significant activity in more than one industry the TAU is 'split' by the ABS to produce estimates in respect of each industry.

47. An area of potential concern for Water Transport Services is the blurring of activities between different levels of the industrial classification. Many providers of Water Transport Services also provide bundled services such as freight-forwarding which provide 'logistics solutions' to customers. It is this bundling that creates concern, for both output measures and the compilation of price statistics. The explanation taken by QBIS, and hence by the output measures in the national accounts, is to categorize all outputs of a business according to the primary activity of the TAU. The method adopted in the compilation of producer prices (which needs to measure prices in homogenous groups) is to measure price changes of distinct service activities. This causes concern if particular differences exist between the price movements of the primary and secondary activities of the industry. For the Water Transport Services index, the largest influences on cost continue to be fuel and labour, and these costs are also associated with the secondary activity of freight-forwarding.

48. Given the resemblance in price movements between the primary and secondary activities of providers of Water Transport Services, the concern regarding the different approaches to classification is considerably softened.

9. SUMMARY

49. The ABS currently compiles a quarterly producer price index of Water Transport Services. The scope of the index is determined by the ANZSIC 93 class 6301 International Sea Transport and 6302 Coastal Water Transport, with some small exclusions e.g. Inland Water Transport (6303) due to limited economic significance. This price index is then used in the production of chain volume measures in the Australian national accounts for that ANZSIC class.

50. Whilst the classification of Water Transport Services is uniform across ABS economic statistics, industry practice shows that providers of Water Transport Services have increasingly diverse business structures. With Water Transport Services being a competitive industry, some establishments have developed the ability to substitute between water transport and other methods of transport (freight-forwarding); which can 'blur' the distinction from bundling services.

51. A recent review of the ABS producer price index of Water Transport Services shows that significant improvements can be made by structuring the price index into more homogenous groups of service activity. The improvements will be incorporated into the index structure following the implementation of ANZSIC 06 in the September 2009 quarter.

APPENDIX

Attachment A

Australian Navigation ACT 1912

Part VI—The coasting trade

284 Application of Part

This Part shall, except where otherwise expressed, apply to all ships, including ships to which Part II does not apply.

286 Permits to unlicensed ships

(1) Where it can be shown to the satisfaction of the Minister, in regard to the coasting trade with any port or between any ports in the Commonwealth or in the Territories:

- (a) that no licensed ship is available for the service; or
- (b) that the service as carried out by a licensed ship or ships is

inadequate to the needs of such port or ports;

and the Minister is satisfied that it is desirable in the public interest that unlicensed ships be allowed to engage in that trade, the Minister may grant permits to unlicensed ships to do so, either unconditionally or subject to such conditions as he or she thinks fit to impose.

(2) The carriage, by the ship named in a permit issued under this section, of passengers or cargo to or from any port, or between any ports, specified in the permit shall not be deemed engaging in the coasting trade.

(3) A permit issued under this section may be for a single voyage only, or may be a continuing permit.

(4) If:

(a) a continuing permit is in force in respect of a particular unlicensed ship; and

(b) at any time, the Minister forms the view that it may be no longer desirable in the public interest for that permit to remain in force:

the Minister may, by notice in writing:

(c) inform the permit holder that he or she is of that view; and

(d) invite the permit holder to show cause, within 7 days of receipt of that notice, why the permit should not be cancelled.

(5) A notice under subsection (4) is not a legislative instrument for the purposes of the *Legislative Instruments Act 2003*.

(5A) If, after having regard to any representations made by or on behalf of the permit holder and to any other relevant matter, the Minister is satisfied that it continues to be desirable in the public interest for the continuing permit to remain in force, the Minister must inform the permit holder that he or she is so satisfied.

(5B) If, after having regard to any representations made by or on behalf of the permit holder and to any other relevant matter, the Minister is satisfied that it is no longer desirable in the public interest for the continuing permit to remain in force, the Minister must:

(a) cancel the permit with effect from a specified day at least 14 days after the Minister becomes so satisfied; and

(b) notify the permit holder of the fact of the cancellation and its date of effect and of the reasons for the cancellation.

(5C) The Minister must, within 14 days of making a decision under subsection (1) to grant a continuing permit or a decision under subsection (5B) to cancel such a permit, notify in the *Gazette*:

- (a) in the case of a decision to grant a permit—the issue of the permit and particulars of the permit issued; or
- (b) in the case of a decision to cancel a permit—the cancellation of the permit, particulars of the permit cancelled and the date from which the cancellation takes effect.

(6) Where it is shown to the satisfaction of the Minister that the tourist traffic between any ports in the Commonwealth or in the Territories is being injured or retarded, and the Minister is satisfied that it is desirable that unlicensed ships be allowed to engage in the trade, the Minister may, by notice published in the *Gazette*, grant permission to unlicensed ships of such size and speed as are specified in the notice to engage in the carriage of passengers between those ports subject to such conditions (if any) and for such period as are set out in the notice.

(7) The carriage of passengers between those ports, by a ship of the description specified in any such notice and under the conditions (if any), and during the period, set out in the notice, shall not be deemed engaging in the coasting trade.

(8) In this section:

permit holder in relation to a continuing permit granted under this section in respect of an unlicensed ship, means the master, owner, charterer or agent to whom the permit was granted.

287 Ships in receipt of subsidies

(1) The master, owner and agent of a ship commit an offence if:

- (a) any one or more of the master, owner and agent engage in conduct; and
- (b) the ship:
 - (i) is receiving, directly or indirectly, any subsidy or bonus from the Government of a country other than Australia; or
 - (ii) is to receive such a subsidy or bonus under an arrangement; or
 - (iii) has received such a subsidy or bonus in the 12 months immediately preceding the conduct; and
- (c) the conduct results in the ship engaging in the coasting trade.

Penalty: \$5,000.

(1A) An offence under subsection (1) is an offence of strict liability.

Note: For **strict liability**, see section 6.1 of the *Criminal Code*.

(2) Any payment for services *bona fide* rendered in the carriage of mails, passengers, or goods, at rates based solely on the actual commercial value of these services, shall not be taken to be a subsidy within the meaning of this section.

288 Licensing of ships to engage in coasting trade

(1) Subject to this Act, where a ship that is not licensed to do so engages in the coasting trade, the master, owner and agent of the ship are each guilty of an indictable offence punishable on conviction by a fine not exceeding \$5,000.

(2) Licences to ships to engage in the coasting trade shall be for such period, not exceeding 3 years, as is prescribed, and may be granted as prescribed.

(3) Every licence shall be issued subject to compliance on the part of the ship, its master, owner, and agent, during such time as it is engaged in the coasting trade, with the following conditions:

- (a) That the seamen employed on the ship shall be paid wages in accordance with this Part;
- (c) That where a library is provided for the use of passengers, every seaman shall—where no library for their special use is provided—be entitled to obtain books therefrom under the same conditions as may regulate the issue of such books to the passengers.

(4) Where a condition referred to in paragraph (3)(a) is not complied with, the owner of the ship is guilty of an offence punishable on conviction by a fine not exceeding \$5,000.

(5) Before granting any licence, the Minister may require security to be given to his or her satisfaction by the master, owner, charterer or agent for compliance with the conditions of the licence and the requirements of this Part.

(6) In addition to, or in lieu of, any penalty otherwise provided, the Minister may cancel any licence if he or she is satisfied that a breach of any of the above conditions has been committed.

(7) No licence shall be cancelled unless an opportunity has been given to the master, owner, or agent of the ship to show cause against cancellation.

(8) An offence under subsection (1) or (4) is an offence of strict liability.

Note: For **strict liability**, see section 6.1 of the *Criminal Code*.

289 Payment of Australian rates of wages

(1) Every seaman employed on a ship engaged in any part of the coasting trade shall, subject to any lawful deductions, be entitled to and shall be paid, for the period during which the ship is so engaged, wages at the current rates ruling in Australia for seamen employed in that part of the coasting trade, and may sue for and recover those wages.

(2) In the case of ships trading to places beyond Australia, the wages to which a seaman is entitled under this section shall be paid before the departure of the ship from Australia, and the master of such a ship shall produce to the officer of Customs to whom application is made for a clearance under the Customs Act for an international voyage from a port in Australia evidence to the satisfaction of that officer of such payment, and the officer of Customs may refuse to grant the clearance, and the ship may be detained, until such evidence is produced to him or her.

290 Indorsement of rate of wages on agreement

(1) If the seamen employed on any ship were not engaged in Australia, the master shall, before the ship engages in the coasting trade, make and sign an indorsement or memorandum on the agreement specifying the wages to be paid to the seamen whilst the ship engages in the coasting trade, and that indorsement or memorandum shall have effect as an agreement under section 46 between the master and those seamen.

(2) Where under the original agreement a seaman is entitled to be paid at a higher rate of wages than the rate ruling in Australia for seamen in a corresponding rating, nothing in this section shall affect the seaman's right to such higher rate during the engagement of the ship in the coasting trade.

291 Seamen's rights not affected by agreement

(1) No provision in any agreement, whether made in or out of Australia, shall be taken to limit or prejudice the rights of any seaman under this Part.

(2) Where, by reason of a seaman's being entitled to a higher rate of wages while the ship on which the seaman serves is engaged in the coasting trade:

(a) any deduction is made from his or her wages earned out of Australia; or

(b) the seaman is paid a lesser rate of wages outside Australia than is usual in voyages of a similar nature;

it shall be deemed that the seaman is not paid wages in accordance with this Part while the ship is so engaged in the coasting trade.

292 Evidence of rates of wages

An Australian Pay and Classification Scale (or *APCS*) or a transitional award within the meaning of the *Workplace Relations Act 1996* which is binding on or applicable to seamen employed in any part of the coasting trade is prima facie evidence of the rates of wages in Australia for those seamen.

293 Responsibility of master, owner and agent for compliance with Act

The master, owners, and agents of any ship engaging in the coasting trade, shall be jointly and severally responsible for compliance with this Part by or in respect of the ship.

293A Power to suspend provisions as to coasting trade

(1) The Governor•General may, if at any time he or she considers it expedient in the public interest to do so, by Proclamation suspend, for such time as is specified in the Proclamation, the operation of any of the foregoing provisions of this Part, as regards any ship or class of ships, and either unconditionally or subject to such conditions (if any) as he or she thinks fit to impose.

(2) A Proclamation issued in pursuance of subsection (1) may provide for suspension for the period specified in the Proclamation, or may provide for suspension until the issue of a Proclamation revoking the prior Proclamation.

Attachment B

Australian Shipping Association

**Submission to the Productivity Commission
Review of National Competition Policy 2004**

Summary of competitive advantages/ disadvantages in the Australian coastal trade

✓ = competitive advantage ✗ = competitive disadvantage	Foreign Owner	Australian Owner
1. Shipping Registration Act 1981 applicable? (if yes, obliged to register in Australia)	✓ NO	✗ YES
2. Can registration be chosen to optimise fiscal/tax arrangements?	✓ YES	✗ NO
3. Navigation Act 1912 – Permit or licence under Part VI – Coasting trade provisions	PERMIT	LICENCE
4. Customs Act 1901 – Ship imported because not deemed to be on international voyage?	✓ NO	✗ YES
5. Migration Act 1958 – Special Purpose Visas available to foreign crew?	✓ YES	✗ NO
6. Obligated to employ Australian because Special Purpose Visas not available?	✓ NO	✗ YES
7. Workplace Relations Act 1996 applicable?	✗ YES	✗ YES
8. Australian EBAs applicable?	✓ NO	✗ YES
9. Does Part II Navigation Act apply because ship is Australian-manned or licenced?	✓ NO	✗ YES
10. Does Seafarers' Rehabilitation & Compensation Act 1992 apply (due to coverage under Part II Navigation Act 1912)?	✓ NO	✗ YES
11. P&I Insurance for crew claims available?	✓ YES	✗ NO
12. Does Occupational Health & Safety (Maritime Industry) Act 1993 apply (due to coverage under Part II Navigation Act 1912)?	✓ NO	YES

BIBLIOGRAPHY

- Shipping Australia Limited, A Blueprint of Australian Shipping - Independent Review of Australia, September 2003.
- Australian Bureau of Statistics, Producer and International Trade Price Indexes, Concepts, Sources and Methods 2006.
- Australian Bureau of Statistics, Australian and New Zealand Standard Industrial Classification 1993, December 1992.
- Australian Bureau of Statistics, Australian and New Zealand Standard Industrial Classification 2006, February 2006.
- Australian Ship Owners Association, The World is our Horizon ASA member profile 2008 Edition, Melbourne, December 2007.
- Department of Infrastructure, Transport, Regional Development and Local Government (BITRE), Australian Sea Freight 2006-07 Information paper 61, May 2008;
- Department of Infrastructure, Transport, Regional Development and Local Government (BITRE), Waterline 44, July 2008.
- Department of Infrastructure, Transport, Regional Development and Local Government (BITRE), Australian Transport Statistics 2008.
- Department of Transport and Regional Services, Australian Sea Freight 2005-06 Information paper 60, November 2007
- International Monetary Fund, Producer Price Index Manual, Theory and Practice, 2004.