Water Transport Services

ABS approach to the Producer Price Index for Water Transport Services
1. Service being Priced

- ANZSIC 93 - division 63
  - ISIC4.0 - division 50
  - CPC2.0 - division 72

- Water Transport Service
  - Excluding:
    - Ocean cruise service (between domestic and foreign ports, between domestic ports)
    - Passenger transport service (international sea transport, coastal sea transport, river, harbour or lake)
    - Boat charter, lease or rental (with crew; for any period; for coastal water transport)
    - Ship charter, lease or rental (with crew; for any period; for coastal sea transport)
1. Service being Priced (continued)

- Ship management service or international sea transport, and 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 services (river, harbour or lake)
- Passenger ferry operation (river, harbour or lake)
- Water taxi service (river, harbour or lake)

- Excluded due to limited volume of such activities within the Australian Economy
1. Service being Priced (continued)

- Measures (quarterly) prices of Water Transport Services received by producers
  - Business to business
- Similar actions are measured elsewhere:
  - Freight-forwarding
  - Logistics (supply chain solutions)
- ABS is only concerned with pricing Water Transport Services
- Measures the transport by water of commodities on behalf of the buyer/owner or seller.
2. Pricing Unit of Measure

- No standard pricing mechanism

- Service defined by:
  - Origin and destination
  - Vessel transporting goods
  - Commodity being transported
    - And volume
  - Customer type

- Recent changes include separate collection of fuel surcharge price
3. Market Conditions and Obligations

- Water Transport Services $4.8 billion AUD

- Gradual move to integrated solutions
  - Freight-forwarders/Logistics
    - Road
    - Rail
    - Air
    - Warehousing
    - Stock control
3. Market Conditions and Obligations (continued)

- Levels of operation
  - Australian vessels in Australian coastal waters
  - Australian vessels in international waters
  - Foreign owned vessels in Australian coastal waters
  - Foreign owned vessels in international waters

- Australian shipping fleet = 96 vessels

- Australian Navigation Act is a disadvantage to Australian operators
3. Market Conditions and Obligations (continued)

- Overseas vessels need to apply for permits to undertake water transport within Australian coastal waters:
  - Single Voyage Permits (SVPs)
  - Continuing Voyage Permits (CVPs)
- Fuel surcharge offset by increased competition
  - Margins tightening
- Australia's geography and population distribution
  - Large area
  - Low population density - both sparse and bunched
- Australia is an island with little inland shipping
Australian major railways and sea ports

3. Market Conditions and Obligations (continued)

- Record keeping practices
  - No one rule covers everything
  - Detailed records for commodities transported
  - The commodity determines if additional requirements or restrictions are needed
    - e.g. petroleum, grain, livestock

- Priced by:
  - distance covered
  - weight
  - type of commodity

- Recent innovations:
  - Smaller vessels being replaced with larger holding capacity vessels
4. Standard Classification Structure

- Current structure ANZSIC 93

- ANZSIC 93 6301 International Sea Transport and 6302 Coastal Water Transport are the lowest levels of the Australian industrial classification

- Index structure currently reflects type of water vessel is conducting business, and if vessel is Australian or foreign owned
Figure 1 Current Structure of the Price Index of Water Transport Services
4. Standard Classification Structure (continued)

- New structure ANZSIC 06 implemented from September 2009

- Water Transport 630 will change to Water Freight Transport 481

- Transport and Storage Services Index (Division I) will change to 'Selected Output of Transport, Postal and Warehousing Index'
Figure 2 Proposed New Structure of the Price Index of Water Freight Transport Services
4. Standard Classification Structure (continued)

- Benefits of the new structure:
  - Transformability within broad headings
  - More homogenous in terms of price level, price behaviour, and item placement
  - Higher grade of detail
  - Index level of detail accommodates future emerging markets
  - More flexibility

- Improvements:
  - Imputation
  - Output Editing Notes
5. National accounts concepts and measurement issues

- Adopts "output indicator" method
  - Begin with measure of current price gross value
  - Extrapolate via output indicator
- Same classification adopted
- Value added approach produces chain volume measure for ANZSIC 6301 and 6302
- Output indicator is changes in income from sales of goods and services from Quarterly Business Indicator Survey (QBIS)
- Sales income deflated by PPI for water transport
6. Pricing Methods and Criteria

- Specification pricing
  - Type of commodity transported
  - Origin and destination
  - Type of customer
  - Conditions of sale (of service)
    - Tailored by commodity and/ or business
    - Exclude "non-water freight" components (bundling)

- Pricing methods:
  - Specification pricing
  - Contract pricing
6. Pricing Methods and Criteria (continued)

- **Price**
  - Transaction price (price received) within the Australian marketplace
  - Not list price

- **Price to constant quality each quarter**
  - Specifications tailored to each Respondent
  - Measure price each quarter, bi-annual and annual

- **On a reporting basis, if required:**
  - Determine variations in specifications from period to period
  - Determine reasons for price change
6. Pricing Methods and Criteria (continued)

- Representativeness:
  - Sample Reviews
  - Sample Maintenance

- Need to ensure cooperation of respondents
  - Tailored forms
  - Personal interviews at enrolment
7. Quality Adjustment Methodologies

- Vital in compilation, to ensure that each specification in the price basket is priced to constant quality over time.

- Overlap pricing method of quality adjustments is used in most instances
  - Essential to determine true market price for changed service in the previous period.
8. Evaluation of Comparability with Turnover/Output Measures

• National accounts use QBIS data
  – Gross value at current prices
  – Output indicator (sales of goods and services)

• Classification of Type of Activity Unit (TAU) potential issue
  – Bundling of water transport, freight-forwarding, logistics
9. Summary

• ABS currently compiles a quarterly producer price index of Water Transport Services.

• The scope of the index is determined by the ANZSIC 93 classes 6301 International Sea Transport and 6302 Coastal Water Transport.
9. Summary (continued)

- Industry practice shows that providers of Water Transport Services have increasingly diverse business structures
  - Some establishments have developed the ability to substitute between water transport and other methods of transport (freight-forwarding)

- The ABS will be implementing ANZSIC 06 into its current structure, from September 2009.