ADSTEAM MARINE PRICE NOTIFICATION – STATEMENT OF REASONS

PUBLIC REGISTER

DECISION

On 30 January 2002, five notices (the notices) were given to the Australian Competition and Consumer Commission (the Commission) pursuant to s 22(2)(a) of the *Prices Surveillance Act 1983* (the PS Act) by Adsteam Marine Ltd ABN 87 065 888 440 (Adsteam) on behalf of:

- Adsteam Towage Pty Ltd;
- Queensland Tug & Salvage Co Pty Ltd;
- Adsteam Towage Holdings Pty Ltd; and
- Waratah Towage Pty Ltd;

(the towage companies). In the notices, the towage companies proposed price increases for harbour towage services at the ports of Brisbane, Sydney (Port Jackson and Port Botany), Melbourne and Adelaide.

The Commission's assessment of these price notifications has led to the conclusion that the towage companies are not justified in raising prices at any of the ports that are the subject of the notices. It is considered that, if implemented, the proposed prices would be greater than those required to meet the efficient cost of providing harbour towage services in these ports.

On 19 February 2002, the Commission made the following decision:

1. The Commission objects to the towage companies supplying the services described in the notices at the prices proposed in the notices.
2. Pursuant to s 22(2)(b)(iii) of the PS Act, the Commission does not object to the towage companies supplying the services described in the notices on the terms and at the prices in operation at the time of notification of 30 January 2002, being prices that are lower than the proposed prices.

REASONS FOR DECISION

Statutory criteria

The statutory criteria for assessing a notification are set out in section 17(3) of the PS Act. This section specifies that in assessing a notification, the Commission is required to have particular regard to:

the last price increases in the ports which are the subject of the current notification were in:

Port Jackson	**1998**
Port Botany	**1990**
Melbourne	**1999**
Port Adelaide	**1992**
Brisbane	**1987**

Background on harbour towage industry

Demand for towage services is usually measured in terms of tug jobs provided. A tug job is defined as a tug providing assistance to a ship arriving at a port or departing from it. If two tugs assist a ship, two jobs are said to have occurred and so forth. The demand for harbour towage services is derived from, among other things, the number of ship visits, the size of ships, the composition of cargo, and the general state of the economy. A towage operator's ability to influence the size of the market is constrained by the derived nature of demand as the price of towage plays a minor role in determining the size of the market.

Ships entering a port will generally require the assistance of tugs for berthing and, possibly, departing. An exception may be ships with berthing aids, such as bow thrusters, which generally reduce tug requirements. However, in adverse weather conditions, these ships may require tug assistance.

Pilots determine the number of tugs for a particular ship manoeuvre under towage guidelines. The guidelines are developed either by the pilot alone or in conjunction with port authorities, and are justified on safety grounds. Harbour towage requirements in individual ports reflect the physical characteristics of the port, weather conditions, the size and design of ships, and the needs of shipping lines. A shipmaster cannot decide to use fewer tugs in order to reduce towage costs. This means a change in towage charges does not significantly alter demand for towage services (demand is price inelastic)[1].

Towage charges are specified in published schedules consisting of a basic charge based on vessels' gross registered tonnage (GRT) and the size of ships. In some cases, there are additional charges such as cancellation fees.

However, published price schedules are no longer applied uniformly for all shipping companies. In recent years, a system of rebates has been introduced which benefits a number of the major users of tug boat services.

Assessment Process

On 14 December 2001, Adsteam lodged five notifications with the Commission proposing changes to the pricing of its harbour towage services in the ports of Sydney (Jackson and Botany), Adelaide, Melbourne and Brisbane.

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[1] ACCC (1995), *Inquiry into the Harbour Towage Declaration.*

The Commission called for submissions from interested parties on this proposal. Fifteen parties made submissions to the Commission on the proposed changes (refer to Appendix A for the list of parties who made submissions throughout the Commission's process). Confidentiality, either in part or in total, was claimed for the majority of submissions.

On 24 December 2001, the Commission advised Adsteam that the notifications did not appear to be valid as they did not contain proposed prices, terms and conditions on which towage services were proposed to be provided in the various ports, as required under the PS Act. On 28 December 2001, Adsteam lodged the necessary price schedules and statements of terms and conditions with the Commission.

In its letter to Adsteam of 24 December 2001, the Commission also requested additional information on several key aspects of the notifications which were considered important to an understanding of Adsteam's arguments. This information was provided on 4 January 2002.

Given that valid notifications were lodged with the Commission on 28 December 2001, the 21 day statutory period for considering the notification would expire on 17 January 2002. However, on 15 January 2002, Adsteam granted the Commission a 14 day extension to consider the notifications. This meant that a decision on the notifications was required by 31 January 2002. Given the extension to the timeframe for considering the notifications, the Commission wrote to interested parties on 17 January 2002 seeking further comments on Adsteam's proposal, including the proposed price changes.

On 30 January 2002, Adsteam withdrew these notifications and submitted five new notifications. The new notifications propose identical price increases to the original notifications. This allowed the Commission until 19 February 2002 to make a decision on the new notifications.

On 4 February 2002, the Commission provided interested parties with a copy of an Issues Paper prepared on the approach to determining prices. Although the Commission received a number of submissions on the Issues Paper, confidentiality was claimed for some of them. Non-confidential submissions were received from APSA, Melbourne Port Corporation and Newcastle Port Corporation.

On 31 January 2002, the Commission sought advice from Professor Kevin Davis, of The University of Melbourne, on the financial information provided to the Commission by Adsteam. The Commission received Professor Davis' report on 12 February 2002. The public version of Professor Davis' report is set out at Appendix B.

Adsteam's Position

Adsteam argues that the price increases are necessary to recover cost increases incurred since the last notification and to restore profit margins.

Price increases are intended to achieve revenue increases as follows:

	Proposed Revenue Increases
Port Jackson	**26.2%**
Port Botany	**13.1%**
Melbourne	**23.4%**
Port Adelaide	**15.8%**
Brisbane	**11.7%**

Adsteam claims that since the last round of price notifications, there has been cumulative published price decreases in Brisbane of 8.5%. In addition, Adsteam claims to have introduced a system of rebates and has eliminated ancillary charges benefiting users in all ports. On the other hand, average costs are claimed to have risen by over 50% since previous notifications and average margins across all ports fallen to 0.7%. Adsteam states that the proposed price rises will raise revenues and achieve a margin on costs of 18% at each port. Adsteam claims that margins have been eroded by the combined effects of a reduction in tug jobs and cost increases principally associated with the maintenance of adequate tug boat services to larger ships requiring the use of larger, more powerful tugs.

Adsteam has focused on the following changes in the Australian towage industry and its cost structures as the primary reasons why the proposed price increases are justified.

Changes in the Australian towage industry

Increasing vessel sizes

Adsteam argues that the international trend to increasing ship sizes impacts adversely on its towage business. Adsteam states that the most obvious effect of this trend is that there are fewer ships calling at Australian ports for the same amount of cargo.

Adsteam contends that these trends have several important implications for its towage business.

1. When ship calls are static or decline, so do tug jobs.

2. The requirement to station a tug fleet capable of servicing these ships remains. There is no scope for Adsteam to reduce its tug fleet in any port simply because there are fewer ships calling.

3. In fact, the trend to larger ships fuels the demand by harbour pilots for larger, more powerful, and inevitably more expensive tugs.

4. The marginal improvement in tug job price (bracket creep as the price per tug job increases when the ship is bigger) fails to compensate for the loss of tug jobs.

Reduction in tug usage

Adsteam argues that in addition to a decline in tug utilisation brought about by the increasing size of ships, the readiness of harbour pilots to manoeuvre ships with fewer tugs than previously also impacts on tug utilisation. Adsteam contends that when benign weather conditions prevail, a pilot will be encouraged to operate with less tugs, secure in the knowledge that a tug can still be called up if required.

Adsteam argues that it must maintain the same tug fleet and labour in each port. It therefore contends that the same fixed cost base is incurred, irrespective of actual tug usage. Adsteam claims that it has almost no scope for reducing costs to compensate for lost revenue.

Increased regulation by port authorities

Adsteam argues that port authorities are increasingly willing to use regulatory power, either directly or in reserve, to hold down prices irrespective of the effect on the commercial position of the towage company. It adds that this has been a major factor in the price restraint that has been experienced in the towage industry over the last decade. Adsteam contends that such price restraint over such an extended period carries an ultimate penalty. Either the commercial viability of the towage company is seriously threatened, or the rate rise (when it comes) is of a magnitude that inevitably elicits strong and loud opposition.

Increased competition

Adsteam states that it has been unable to move prices as if it were a monopoly because port authorities are willing to invite competitors in and because these competitors are ready to respond. Adsteam argues that it has been reluctant to move prices because of its awareness of the permanent presence of competitors who are waiting for the opportunity to enter the market. Therefore, Adsteam believes that the towage market has been strongly affected by the sense of competition, resulting in an "overwhelming constraint" on Adsteam's pricing behaviour.

Rebate pricing

Adsteam notes that the introduction of a rebate structure has reduced the cost of towage to major customers with high volume usage. It adds that the traditional standard price schedule has been retained, meaning that the reduction in pricing at the high volume end of the market has not been matched by an increase at the lower volume end.

Cost Issues

Labour costs

Manning levels have been reduced for the majority of Adsteam's fleet from 4 to 3 per tug boat. This resulted in redundancy expenses for all ports in the notification. In addition, Adsteam claims to have introduced a number of changes to work practices in an effort to raise labour efficiency. Adsteam also claims that it has been able to achieve lower rates of growth in labour costs by breaking away from the Tug Operators

Committee in 1996 and implementing Enterprise Based Agreements rather than follow the Tugboat Industry Award. [Sentence deleted pursuant to a confidentiality claim.]

Adsteam notes that some initiatives to improve work practices have resulted in higher labour costs. These include the introduction of 24 hour operation centres in Brisbane, Sydney and Melbourne, the introduction of a shift system for crews in Brisbane and Melbourne and measures introduced to deal with more stringent standards in respect of occupational, health and safety issues.

Other costs

Adsteam notes that fuel costs have been controlled to the maximum extent possible, partly through implementing a national fuel tender for the Australia-wide Adsteam tug fleet. Adsteam states that an 8% overall reduction in fuel costs was achieved through this tender.

Adsteam contends that its insurance premiums will rise by at least 20% in the forthcoming year, following the events of 11 September and their impact on the world re-insurance market.

Feedback From Interested Parties

There was consistent feedback from interested parties over both process issues and content issues arising from the notification.

Timing of notification

The Association of Australian Ports and Marine Authorities (AAPMA), Shipping Australia and Sydney Ports Corporation express concern at the lack of time that parties have had to comment on Adsteam's proposed price increases.

AAPMA argues that Adsteam's decision to lodge a notification over the Christmas period is "quite cynical" to the extent that it is abusing the time provisions in the PS Act in regard to a matter that can have quite profound impacts on trade to and from Australia, and therefore requires detailed consideration by not only the Commission, but also by ports, shipping companies, and importers and exporters. It claims that the timing of this application by Adsteam denies everybody this opportunity.

Shipping Australia argues that its member companies believe that due to time constraints imposed by Adsteam, there is a "totally inadequate opportunity over the holiday period to fully address all their concerns associated with this submission." It contends that as there is only one tug operator per port, the closest public scrutiny of any proposal to increase prices is necessary to ensure that efficiency is at the highest level possible and operating costs are kept to the absolute minimum. Shipping Australia argues that Adsteam's notification does not meet this criteria.

Calls for a public inquiry

AAPMA, the Australian Peak Shippers Association (APSA), Fremantle Ports, Melbourne Port Corporation, National Bulk Commodities Group, the National Farmers' Federation (NFF), Newcastle Port Corporation, P&O Nedlloyd, Port Kembla Port Corporation, Shipping Australia, the State Chamber of Commerce (New South Wales) and Sydney Ports Corporation have all argued that a detailed enquiry into towage in Australia is required.

Magnitude of proposed price increases

AAPMA, APSA, NFF, Melbourne Port Corporation, Shipping Australia, the State Chamber of Commerce (New South Wales) and Sydney Ports Corporation all express concerns about the magnitude of the proposed price increases.

AAPMA argues that such substantial price increases are not justified at the current time. Indeed, AAPMA queries whether there should be any price increases at all in general terms.

APSA argues that it is concerned that Adsteam is proposing increasing towage charges when global economies are in decline and, as a consequence, commodity prices are falling. APSA adds that towage charges in Australia are already higher than those of equivalent ports worldwide.

Melbourne Port Corporation argues that the proposed increase of 23.4% for the Port of Melbourne is "very substantial indeed" especially in the context of an increase of 10% less than two years ago.

The NFF considers that Adsteam's proposed increases in towage costs are unjustified. It argues that Adsteam's submission does not justify the cost increases because it: emphasises irrelevant factors; focuses on the level of costs, not change in costs; overemphasises cost increases while understates cost decreases; and understates Adsteam's market power.

Shipping Australia argues that it has a concern, based on its own towage models, that Adsteam's proposed rate of return is "excessive and unreasonable." Indeed Shipping Australia contends that its member companies believe "a strong case can be made for towage rates to be reduced rather than increased in those ports."

The State Chamber of Commerce (New South Wales) does not support the price increases because of the likely impacts of such profound increases on New South Wales business.

Sydney Ports Corporation questions whether a benchmark margin of 18% is appropriate. Sydney Ports Corporation adds that it is not clear whether the margin is to be applied to costs or revenue.[2]

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[2] The Commission notes that the notification lodged by Adsteam on 30 January 2002 was amended to clarify this issue.

Comments on Adsteam's supporting arguments

Brisbane Marine Pilots argues that it has observed operational efficiencies in the past few years, with improvements in the availability of tugs and a change to the times the tug crews relieve each other. It also concurs with Adsteam's comments on increasing vessel sizes and the reduction in tug usage.

AAPMA, APSA, NFF, Shipping Australia, the State Chamber of Commerce (New South Wales) and Sydney Ports Corporation, however, take issue with a number of the arguments Adsteam has put forward in support of the price increases.

Operational issues

APSA, NFF and Shipping Australia argue that, with the exception of Melbourne, there have only been minor reductions in tug usage since 1997. These parties note that a 10% increase in prices was allowed in 1999 to compensate for this reduction in tug usage in Melbourne. Shipping Australia adds that, on their own, reduced ship movements should not justify increases in towage rates given that such levels can fluctuate over time.

The State Chamber of Commerce (New South Wales) argues that there has only been a small decrease in the number of vessels entering Port Jackson and Port Botany, and therefore such large price increases cannot be justified.

Sydney Ports Corporation contends that at Port Jackson and Port Botany there has been a relatively constant total number of vessels since 1995/96, but with a constantly increasing average gross tonnage. It argues that any fall in revenue caused by a reduction in tug usage (tug jobs per ship call) has been balanced by the higher towage rates for the larger vessels.

Shipping Australia also takes issue with Adsteam's arguments concerning the number and size of tugs required to handle larger ships. Shipping Australia argues that Adsteam's assertion that the most common tugs in Australia's capital city ports now have a build cost of over $10 million each needs to be tested on the basis of the size of port tugs required by Adsteam's customers.

Sydney Ports Corporation similarly contends that the introduction of new technology, particularly where it is a contributor to increased prices, should only be undertaken after full consultation with industry. The NFF argues that it is reasonable to assume that the purchases were made to improve Adsteam's bottom line, given that the industry did not request these purchases.

Shipping Australia also questions whether there are too many tugs in certain ports. It notes that this and/or other methods of achieving increased efficiencies, such as reducing the number of tug crews, may negate Adsteam's proposal to increase prices. Sydney Ports Corporation contends that the introduction of the new, more powerful, tugs into Australian ports should open up opportunities for efficiency improvements in the form of reduced tug requirements.

Competition and contestability

Both Shipping Australia and Sydney Ports Corporation question Adsteam's claims on the extent of increased competition in harbour towage and whether the introduction of rebates justify a price increase. Sydney Ports Corporation notes that while Port Jackson and Botany Bay are not regulated with respect to towage, "an incumbent service provider is in a very advantageous position, particularly when rebates may be offered to major customers on an Australia-wide basis."

The NFF notes that the competition for licences to operate in a market does not indicate that there is competition in the market after the licence is issued. The NFF also points to a number of recent studies that have concluded that harbour towage is a natural monopoly, with high sunk costs and a lack of competitive rivalry.

AAPMA, meanwhile, notes that Adsteam's arguments on the level of competition and contestability in harbour towage were considered at length in the Federal Court case brought against Bunbury Port Authority by Adsteam and "found wanting." APSA argues that previous studies have found that competition in the towage industry is insufficient to constrain excessive profits and poor work practices.

Fremantle Ports, who in November 2000 issued a request for proposals for the supply of towage services in Fremantle, notes that in its experience the introduction of serial licencing was necessary to obtain benefits from contestability, leading to a view that the structure of the industry and economies of scale do make it a natural monopoly.

Costs

Shipping Australia also believes Adsteam's argument that shipowners have achieved cost savings in Australian towage costs as a result of the diesel fuel rebate and the decline in the value of the Australian dollar is spurious. The NFF and Sydney Ports Corporation similarly argue that any exchange rate effect is an irrelevant factor which should not be taken into account when considering Adsteam's prices.

In its discussion other aspects of Adsteam's costs, the NFF notes that it is unclear how changes to labour costs and the recent decline in fuel costs can be used to justify the proposed price increases. In addition, while understanding that increased insurance premiums would have an impact on Adsteam's costs, the NFF questions how material these increases in fact are, assuming that insurance forms only a small portion of the total costs of operating a tug.

The NFF and Shipping Australia both note that the Adsteam submission makes no mention of reduction in administration costs as a result of the merger with Howard Smith. The NFF adds that Adsteam's submission appears to make no allowance for any further cost reductions. Melbourne Port Corporation similarly argues that consideration needs to be given to offsetting savings that were foreshadowed at the time of the recent takeover of Howard Smith and from recent changes in manning levels.

Responses to the Issues Paper.

In response to the Commission's Issues Paper released on 4 February 2002, five

submissions were received, two of which are confidential submissions.

APSA notes that local towage charges are already higher than those in equivalent ports worldwide. It adds that Adsteam does not provide evidence to suggest that it has done everything possible to cut costs, and questions whether Adsteam has overcapitalised in purchasing tugs that are too large for Australian ports. It notes that issues such as these can only be answered in a public inquiry.

Melbourne Port Corporation argues that Adsteam's market leasing approach to determining its revenue requirement raises a number of unanswered questions, and may well yield a higher level of revenue than other methodologies. It states that an alternative model which uses the depreciated market value of assets would be more appropriate.

Newcastle Port Corporation argues that Adsteam's proposed use of an imputed lease cost appears subjective. It believes that a preferred model would be to determine a realistic written down current replacement cost of the tugs and apply depreciation and a charge based on the Weighted Average Cost of Capital (WACC). Newcastle Port Corporation adds that interest and finance costs are already outlined in the cost of capital charge and therefore should not be double counted in the operating costs.

ACCC's Assessment

The Commission has assessed the notification according to the criteria outlined in section 17(3) of the PS Act.

A number of interested parties initially expressed concern at the lack of time that parties have had to comment on Adsteam's proposed price increases. This resulted from both the fact that Adsteam was only prepared to grant the Commission a 14 day extension on the time period for considering the original notification and the fact that the notification was lodged over the Christmas period.

The Commission considers that information gathered from a public consultation process is important to its understanding of the issues in significant notifications. The Commission acknowledges that in this instance the consultation process has been less than ideal. This is notwithstanding the fact that the total period of time for considering Adsteam's submission was lengthened by Adsteam's decision to withdraw its original notification and notify again.

Under the provisions of the PS Act, any decision concerning whether to grant an extension to the 21 day statutory time period for considering a notification, and the period of any extension, is at the sole discretion of the applicant.

In its *Draft Statement of Regulatory Approach to Price Notifications*, the Commission also encouraged declared companies to discuss any prospective notifications with the Commission, and to submit *draft* notifications in an attempt to resolve issues, such as interpretation of data provided and provision of information, prior to formal lodgement with the Commission. Adsteam has chosen not to adopt this process in this instance.

The Commission has given due consideration to the information provided by Adsteam and consulted as widely as possible in the preparation of this statement of reasons.

In its analysis of this notification the Commission firstly presents the financial analysis of Adsteam's arguments for its proposed increases in rates. This analysis finds that, based on the year ended 30 June 2001 and applying its current rate structure Adsteam can achieve reasonable rates of return on its investment at the five towage operations which are the subject of the price notification. Consequently, the Commission can not approve the proposed rate increases for the towage operations at the aforementioned ports. Secondly, the Commission evaluates the arguments put forward by Adsteam for the proposed increases in towage rates. It is noted however that this analysis has not had a material impact on the Commission's decision to object to Adsteam's proposed price increases.

Financial Analysis

This section provides an analysis of the financial data provided by Adsteam. Much of the analysis focuses on a discussion of capital charges, given their significance in the costs put forward by Adsteam to justify its proposed price increases.

Capital Costs

Capital costs are a substantial component of total costs at all ports. Capital costs per tug job increased significantly in 2001 relative to 2000. The increase in capital charges reflects investments in new tug boats by Adsteam in all ports except Port Jackson. With the exception of Port Jackson, the rise in capital costs per tug job in 2001 was a substantial contributor to the overall increase in Adsteam's proposed revenues.

In the confidential information provided to the Commission, Adsteam has included an estimate of what it describes as "arms length charter rate for a tug". Adsteam claims that this is a measure of the estimated opportunity cost of deploying a tug in a particular port. It is measured as the charter fees that Adsteam Marine would incur if it had to charter a tug on a commercial basis. This figure replaces the accounting measure of depreciation which Adsteam argues does not reflect the economic diminution of an asset's value over time. By calculating capital charges in all ports on the basis of the opportunity cost of deploying a tug, Adsteam is attempting to achieve consistency in measurement of cost bases and be able to make meaningful comparisons across ports.

The charter rates include a rate of return that the owner of a tug boat would expect to earn from leasing tugs. This target rate of return was derived using the Capital Asset Pricing Model and benchmarked against stockbroker analyst estimates of Adsteam Marine's cost of capital. Adsteam has provided the Commission with advice from an independent ship brokerage firm that the charter rate derived using this target rate of return is approximately representative of leasing rates for tug boats. This advice did however, recognise that the charter rates comprised a return on capital and return of capital (depreciation).

Adsteam's charter rates are calculated as a percentage of market value. The Commission's view is that the use of market values of assets has some merit in terms of an economic measure of assets employed in a business. Additionally, where market values for an asset can be observed over time a measure of economic depreciation can be made as the change in value from year to year. Adsteam, in confidential information provided to the Commission, estimated economic depreciation for each of its tugs (adjusted for inflation) and their market value in 2001. The Commission has adopted this measure of economic depreciation in its analysis.

As Adsteam has chosen to measure the economic cost of utilising tug boats by applying "market" lease rates to its fleet, this means in effect that notionally Adsteam does not own tug boats. Adsteam determines its revenue requirement by adding a margin to total costs, in this case 18%, rather than applying a target rate of return to its investment base. Adsteam proposes to implement price increases that will generate total revenue at each port consistent with a margin on total costs of 18%. Adsteam argues that a margin on costs of 18% is "reasonable for the towage industry" (Adsteam notification, page 1).

In order to assess the reasonableness of Adsteam's methodology in respect of capital charges and proposed revenues, the Commission has compared Adsteam's total revenue requirements with a benchmark for revenue requirements derived under the building block approach[3]. This requires deriving estimates for efficient operating expenditures, return of capital and return on capital. This approach generates an estimate of the revenue that Adsteam would be required to generate to cover economic costs. It provides a measure of the maximum revenues which a firm in the towage business would earn in a competitive market for towage services.

For the purposes of analysing Adsteam's proposals, the Commission has made the following assumptions:

- The market value of tug boats provided by Adsteam is a reasonable approximation of the Depreciated Optimised Replacement Cost value of assets used by Adsteam.

- The annualised average depreciation estimated by Adsteam for its tug boat fleet represents an acceptable measure of economic depreciation, viz the loss of the assets' future earning capacity.

- A benchmark return on equity of 12.3%.

- There is no significant capital investment in each port other than the tugs.

The Commission has found that Adsteam's revenue at all ports following imposition of the proposed price increases would exceed the revenue requirements for a towage operator in a competitive market. Indeed, the prices in place over the year ended 30

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[3] The ACCC's approach to applying the building block approach is set out in the *Draft Statement of Principles for the Regulation of Transmission Revenues* (May 1999) and the *Post-Tax Revenue Model* (October 2001).

June 2001 would have allowed for revenues either approximately equal to or above economic costs. On the basis of these findings, the Commission objects to Adsteam raising charges at any of the ports which are the subject of this notification.

The Commission has not analysed in detail the nature of Adsteam's operating expenditures given the time constraints imposed by this assessment process. In arriving at a view on economic costs, the Commission has based its analysis on operating expenditures as advised by Adsteam. To the extent that inefficiencies may be present in Adsteam's operating costs, this would require a downward revision of the estimate of economic costs. The excess of current and proposed revenues over economic costs would thus be increased and the justification for higher charges would be further lessened.

Weighted average cost of capital

In its *Draft Statement of Regulatory Approach to Price Notifications*, the Commission stated that in assessing price notifications it will direct its attention to, among other things, the reasonableness of the rate of return that the declared company is seeking.

Adsteam has targeted an 18% "margin on costs" in deriving its proposed prices.

Adsteam's proposal uses a methodology that does not explicitly target a WACC. Rather, the 18% margin on costs is interpreted as a "mark-up" on the costs to the business and may therefore be equivalent to 15.25% of required revenues.[4] Adsteam's view is that this "mark-up" represents an accounting measure of EBIT (Earnings Before Interest and Tax). This EBIT can then be compared to required revenues to derive a ratio of EBIT/Revenue. This figure, Adsteam argues, may then be compared to publicly available information as reported by comparable companies or as estimated by analysts.

The Commission notes that there are a number of complications in determining a margin by this means. First, this methodology appears to be no more precise than benchmarking a firm's cost of capital with publicly available information. Second, EBIT/Revenue is an accounting measure and therefore the benchmarks will tend to reflect, among other things, costs based on the historic cost of assets. The application of these benchmarks to the Adsteam methodology of costs based on asset values that are adjusted for inflation or for market conditions may be problematic.

The Commission has therefore assessed the outcome of Adsteam's methodology with the building block methodology as set out in the *Draft Statement of Principles for the Regulation of Transmission Revenues*. The Commission believes that the methodology proposed by Adsteam is no more precise than the building block methodology. The Commission used as inputs to its cost of capital estimation information provided by Adsteam.

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[4] This follows from simple mathematics. For example, a cost base of $100 increased by a margin of 18% equals revenues of $118. The $18 margin between costs and revenues as a percentage of revenues is approximately 15.25%

The Commission's modelling using the building block methodology indicated that, based on an analysis of the year ended 30 June 2001, the prices currently approved for each of the ports would have been sufficient for Adsteam to achieve or exceed its cost of capital.

The Commission's decision therefore is that the pricing proposal put forward by Adsteam would be likely to represent an unreasonably high rate of return.

Operating Expenditures

As the Commission has concluded that, even using Adsteam's measures of operating costs, that price increases are not supported and as such, it has not been necessary to carry out a detailed analysis of operating expenditures. In the event that issues related to capital costs did not overwhelm the impact of changes in operating costs, and given a more extended period of time to consider the notification, the Commission would have made further enquiries on a number of costs included in financial statements provided by Adsteam. One example is:

- *Administration Salaries*. There have been substantial increases in administration salaries in a number of ports, notably Brisbane, Melbourne and Adelaide.

Conclusion based on the financial analysis

In principle, a cost model based on leasing rather than ownership of assets should lead to a similar revenue requirement. This point is discussed in the attached report by Professor Kevin Davis which forms part of the Commission's reasons for its decision (see Appendix B). In the application however there have been differences in the costs estimated depending upon whether the Commission's approach or Adsteam's approach is used.

Ultimately, there is a conceptual test that may be applied to determining a revenue requirement using a methodology based on leasing rather than owning assets. If leasing capital assets amounts to a higher cost to the business than owning those assets then, in a competitive market, a firm would not able to charge prices based on an inefficient financing decision.

The Commission's assessment of capital charges and cost of capital has led to the conclusion that Adsteam's revenues in 2000/2001 exceeded economic costs, even when costs included operating expenses as advised by Adsteam. As a result no price increases are justified. Consequently, and bearing in mind that under the PS Act price decreases cannot be enforced, the Commission considers that there is no immediate need to attempt to identify and quantify potential cost inefficiencies in operating costs and remove them from Adsteam's cost base.

Evaluation of Adsteam's arguments for an increase in towage rates

Even though in the current case price rises are not justified on the basis of the submitted financial information, the Commission has also evaluated Adsteam's arguments for rises in towage rates on other grounds. Given the short time frame and the complexities of the issues, the following analysis is to be considered preliminary. Reaching definitive conclusions on these issues would require a longer investigative

process such as a public inquiry. In the current case, however, these issues are not crucial to the finding that any increase in rates is not warranted.

The remainder of this section is structured as follows. It outlines the factors that the Commission may take into account in deciding whether rate rises are justified and secondly examines the empirical evidence on trends in demand and operating efficiencies / costs to examine whether Adsteam's case is supported.

Factors the ACCC may take into account in deciding whether price rises are justified

In a competitive market, all companies would be forced to cut costs and lower prices in response to a demand fall, regardless of whether that fall was due to structural changes in the market such as a trend of increasing vessel size or cyclical factors. So in the absence of strong evidence of cost efficiency and the need to maintain profitability for investment (employment) considerations, there is no general reason why prices should rise in response to a fall in demand. However, there may be other considerations that should be taken into account in assessing whether price rises are justified in these circumstances. These include:

- whether the fall in tug jobs and associated towage revenue, owing to decreases in the tug job per vessel call ratio (tug utilisation) which can be attributed to initiatives of Adsteam, outstrip any falls in costs due to these same initiatives. The reasons that this may occur is that pilotage flexibility and harbour master regulations may allow the towage operator to lower the number of tugs that actually service a vessel on a particular day, but they must remain on stand by. This may lower the actual revenue per job while not commensurately lowering the operating costs to perform that job. That is, operating efficiencies that are initiated by the tug boat operator may lead to greater revenue falls than those of costs because of other regulatory imperatives. Adsteam has asserted that it has no control over their tug utilisation (vessel/ tug job call ratio) and that increased pilot flexibility can lead to less tugs being demanded on any particular day but this does not allow Adsteam scope to reduce costs by reducing the size of the tug fleet.

- whether there is a long term increase in average vessel size such that it necessitates replacement by powerful and larger tugs with no scope for reduction in tug fleet numbers. In this situation, there may be a case for price increases to compensate for higher capital costs. That is, the change in vessel sizes has imposed increased capital and operating costs on the operator while at the same time the revenue base has not grown and the operator cannot reduce its costs.

- whether Adsteam is cost efficient both in terms of its capital and operating costs. That is, whether Adsteam has invested in the appropriately sized tug for the current and projected size of vessel and the associated fleet number for the current and projected size of vessel and number of concurrent vessel movements. It also should have appropriate numbers of crew and manning levels.

A preliminary analysis of demand trends and operating efficiencies is presented below and some preliminary conclusions are reached concerning whether towage operations at individual ports would be allowed to raise its rates if there were no issues with the measurement of the company's rate of return, as previously discussed.

Issues concerning the demand for and usage of tugs

Adsteam has argued that increasing average vessel sizes combined with a reduction in tug usage has impacted adversely on its towage business. Interested parties, however, have noted that, with the exception of the port of Melbourne, there have only been minor reductions in tug usage.

Demand for towage services is a derived demand and towage services are dependent upon the number of vessel calls that are made. The numbers of tugs that are demanded are subject to the number of vessel calls and the operational efficiency of the tug [5](the tug job to vessel ratio). Declines in the latter ratio imply that increases (or decreases) in the number of vessel calls will be greater than the increases (decreases) in the number of tug jobs. Towage company revenue is directly determined by the number of tug jobs.

The following paragraphs briefly describe past demand trends at each of the five ports in order to determine whether demand, in terms of numbers of tug jobs, has fallen appreciably over the period 1996/97 to 2000/01. Where this appears to be the case, whether the fall in the number of tug jobs can be attributed to trends in the number of vessel calls or to changes in the tug job to vessel call ratio will be discussed.

Port of Adelaide

Since 1991/92 annual demand for tugs, as reflected in the annual numbers of tug jobs, has increased significantly. In 1996/97, there was a substantial increase in the number of tug jobs over the previous year and this represents a ten-year peak in the number of tug jobs. Over the period 1996/97 to 2000/01, the annual numbers of tug jobs has fluctuated, falling and rising in alternate years. The falls are on average greater than the rises implying slightly downward trend in tug job numbers since 1996/97. In 2000/01, the tug job numbers increased over that for the previous year, reversing most of the decline in 1999/00. In 2000/01, the number of tug jobs was marginally less than that for the peak year 1996/97. Furthermore, based on tug job numbers for the five months to November 2001, Adsteam forecasts a further marginal increase for tug job numbers in 2001/02.

The underlying pattern of ship calls at Port Adelaide since 1996/97 appears to be reasonably correlated with the annual fluctuations in tug job numbers. For the period 1996/97 to 2000/01, vessel calls peaked in 1998/99 and again in 2000/01. However, the range of fluctuations in the numbers of vessel calls over the past five years is small.

The tug job to vessel call ratio has remained reasonably static over the past five years, indicating that there has not been substantial changes in the number of tugs used to service vessels at Port Adelaide. Furthermore, the static nature of recent tug job trends

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[5] This may be a misnomer, as there are many factors that can cause the tug job to vessel call ratio to improve over time, some of which have nothing to do with the tug. These include greater prevalence of bow and stern thrusters on vessels, therefore requiring less tugs, more flexible pilotage discretion, flexible availability of crews and tugs as well as more powerful and manoeuvrable tugs.

since 1996/97 appears to be reasonably correlated with a static trend in the numbers of vessel calls to the port.

Trends in gross revenue, not subtracting lost income through rebates, indicate that gross revenue has increased significantly since 1991/92. Annual fluctuations in gross revenue mirror those of tug job numbers, and have fluctuated within a narrow band after a significant increase in 1996/97. However, gross revenue actually reached a ten-year peak in 1999/00, rather than in 1996/97 and moreover, in 2000/01, gross revenue is not significantly lower than that recorded in 1999/00. The unit revenue data does not show any significant upward trend in price bracket creep over the past five years.

Port of Brisbane

Over the period 1995/96 to 1999/00 the annual number of tug jobs performed by the towage operator at the Port of Brisbane has consistently increased every year to peak in 1999/00. By contrast with demand trends for the Port Adelaide towage operations, some of the annual increases in the number of tugs jobs have been significant. There were significant annual rises in tug job numbers in 1996/97, 1998/99 and 1999/00, implying a significant cumulative increase in the number of tug jobs over the six years to 1999/00.

During the four years to 1999/00, the tug to vessel call ratio fell very slightly, indicating the increases in tug jobs at the Port of Brisbane have resulted from significant increases in vessel calls at the port over the period 1996/97 to 1999/00. As is the case with tug jobs, vessel calls peaked over that period in 1999/00. In 2000/01, tug jobs fell for the first time in 5 years, however, in 2000/01 the number of tug jobs performed is still significantly greater than that recorded in 1998/99.

Trends in gross revenue largely mirror tug job number trends. Gross revenue has increased significantly over the period 1996/97 to 1999/00, and peaked in the latter year. Like tug job numbers, gross revenue increased significantly in 1996/97, 1998/99 and 1999/00. The increase in the latter year was not as great as the increase in the number of towage jobs reflecting the fact that the then towage operator lowered its rates by 3% in January 2000. In 2000/01 gross revenue fell for the first time in 5 years and but is still significantly above that for 1998/99.

The unit revenue data does not show significant evidence of bracket creep.

Port of Melbourne

Trends in tug job numbers have exhibited a downward trend since 1996/97, falling consistently in every year since, resulting in a significant cumulative fall in the number of tug jobs over the five-year period. There was a significant annual fall in the number of tug jobs in 1997/98 and major falls in 1999/00 and 2000/01. By contrast to these trends, the numbers of vessel calls has remained reasonably static since 1996/97. The number of vessel calls in 2000/01 is marginally less than that in 1996/7, however, the number of tug jobs in 2000/01 is significantly lower than that recorded in 1996/97. On the other hand, the tug job to vessel call ratio has fallen significantly over the period 1996/97 to 2000/01, with significant annual falls in 1997/98 and 1998/99. This indicates that unlike the other ports falls in towage demand at the Port of Melbourne

have been greatly impacted by increases in towage operating efficiency, rather than by changes in the number of vessel calls. Adsteam predicts a marginal increase in the number of tug jobs for 2001/02, due to a predicted marginal increase in vessel calls.

Over the period since 1996/7, trends in towage gross revenue for the operator at the Port of Melbourne largely reflect trends in the number of tug jobs. However, after both indicators reached a six-year peak in 1996/97, the number of tug jobs fell every year since, while towage revenue displayed disparate annual trends. In March 1999, the Commission approved a 10 % increase in towage rates at the Port of Melbourne for the then operator Howard Smith. This contributed to increased towage revenues in 1998/99 and 1999/00. However, despite this, towage gross revenue fell significantly in 2000/01, reflecting a large annual fall in tug jobs in that year.

It appears that increases in operational efficiency as measured by reductions in the tug job to vessel call ratio have had a significant impact on towage revenues for the operator at the Port of Melbourne. The Commission has already appreciated this argument as part of the basis of its approval for a 10% increase in towage rates in March 1999.

Port Jackson

Over the period 1996/97 to 2000/01, while the annual numbers of tug jobs at Port Jackson fluctuated on an annual basis it demonstrated an overall slight upward trend and reached a five year peak in 1999/00. In 2000/01 there was a significant fall in the number of tug jobs to below levels recorded in 1996/97 (a five year low). Vessel calls increased marginally in every year from 1996/97 to 1999/00, when they reached a five year peak. By contrast in 2000/01, as is the case with tug jobs, there was a large fall in the number if vessel calls to below levels recorded in 1996/97 (a five year low).

Over the period 1996/97 to 2000/01, the tug job to vessel call ratio remained reasonably static, recording its greatest annual fall in 2000/01. This indicates that for this port trends in vessel calls are the major determinant of the trends in numbers of tug jobs.

Gross revenue for the operator increased in every year from 1996/97 to 1999/00, reaching a four-year peak that year. Adsteam raised its towage rates for the port by 15% in February 1998 and imposed a surcharge on the use of the fourth tug. As a result gross towage revenue on a cumulative basis increased significantly between 1996/97 and 1999/00 even though the number of tug jobs did not increase significantly. In 2000/01 Adsteam experienced a decline in gross towage revenue, though in percentage terms it is not as great as the fall in the number of tug jobs. This suggests that Adsteam may have benefited from an increase in the price per tug in 2000/01 (bracket creep).

Port Botany

For Port Botany the numbers of tug jobs in 2000/01 is significantly greater than it was in 1989/90. In January 1996, Waratah towage, Adsteam's subsidiary towage operator in the Sydney ports merged with J Fenwick and Company. In 1995, the Commission estimated that the respective market shares of both Waratah and Fenwick were 60 and