Exclusive Licensing of Port Towage Services

A Report to Adsteam Marine

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1. Purpose and Context

Adsteam Marine Ltd has commissioned ACIL to produce this report on the transaction costs associated with the competitive tendering of exclusive licences for harbour towage (tug) services.

The Productivity Commission is conducting an inquiry into the economic regulation of harbour towage and related services. It produced a Position Paper in June 2002 and has invited submissions from interested parties. The aspect of the Commission's work which is the focus of this ACIL study is the following preliminary recommendation (no.2):

Where port authorities currently do not have explicit discretion to licence towage operators (on an exclusive or non-exclusive basis), the relevant jurisdiction should grant them that discretion.

This should be accompanied by procedures to ensure that a port authority, if and when exercising its discretion to licence towage providers:

- demonstrates the net benefits of proposed licensing arrangements;
- formally consults with towage users in a transparent manner prior to changing existing arrangements and the conditions that attach to any licences; and
- implements 'arm's length', transparent competitivetendering processes.

This ACIL report examines the transaction costs that would be involved if there were competitive tendering for exclusive licences. These costs should be allowed for when deciding whether or not to pursue the exclusive tendering approach. The Productivity Commission's draft paper scarcely mentions these costs and it is hoped that this work will assist the Commission in expanding on this aspect when finalising its recommendations.

In preparing this report, ACIL has drawn on its own commercial experience and on comments provided to it by KPMG Corporate Finance and by a leading law firm. However, ACIL alone is responsible for the content of the report.



2. Transaction costs relevant to towage contracting

Before estimating likely transaction costs, it is necessary to establish the nature of the transaction. An exclusive licence for harbour towage has the following characteristics:

- Typical towage contracts are for 5 to 7 years;
- Annual revenue per tug varies according to tug size and to the degree of utilisation. ACIL understands that, apart from outlier cases, it ranges from approximately \$1 million per year to approximately \$4 million per year, or approximately \$7 to \$28 million per tug over a 7 year contract. There is an unusual aspect in that, while the port authority or port company would use powers conferred on it by the government to let an exclusive licence, it is the port owner's customers (ie shipping firms) that would be paying;
- The transaction is relatively straightforward as there are minimal sunk capital costs (tug boats being readily movable to an alternative place of use) and, according to the Productivity Commission Position Paper, quality does not seem to be a contentious issue. Nevertheless a formal licence may involve inherent complexities;
- Towage is a relatively low risk activity because it involves operations that are usually straighforward (apart from salvage) and that use established (though evolving) technology. The important exception is revenue risk. Tug services are typically charged at a given amount per operation per tug, which means that once the 5 to 7 year contract is struck, many of the costs become fixed. Any revenue changes will therefore have a direct impact on profits. Thus both cyclical and trend factors are important for example:
 - the business cycle for container traffic;
 - demand cycles for mineral exports;
 - a trend toward larger ships with fewer port calls;
 - improved railway efficiency following privatisation, leading to improved economics for rail "land bridging", thus further facilitating shipping companies' reduction in port calls;
 - new bow and stern thruster and rudder technology gradually reducing the need for tugs;
 - one-off stochastic issues, for example the uncertainty over the timing of the deepening of Melbourne's shipping channels, in an environment where ship sizes are increasing;
 - changes to towage guidelines that affect tug boat utilisation (eg a decision by pilots or a harbour master that a certain type of ship only needs two tugs instead of three).



In preparing the estimates below, we note that there will typically be several bidders. Adsteam's main submission of April 2002, page 31, lists prospective and actual market entrants for some of the main ports — between four and twelve, depending on the port. For the purposes of this study, we have assumed five bidders.

The transaction costs are not likely to be directly proportional to the size of the transaction. Much of the legal and other work is the same irrespective of size.

As the Position Paper sets out on page XXI, the number of tugs per port around Australia varies from one to eight. The estimates below are for a transaction amount to the middle of this range. We would expect therefore, that at smaller ports both parties would endeavour to cut costs to the minimum and that at larger ports, one or both sides might want to engage in more thorough preparation than allowed for by the costings because of the greater amount at stake.



Table 1: Preliminary estimates of transaction costs for competitive tendering: PORT AUTHORITY COSTS

Item	Estimated Costs (\$000)	Comment
Setup	20	Assumes one month of officials' time (salary plus overheads) arranging for authority to implement exclusive licences and for any other authority required to proceed. This would include discussions with the government, and preparation of a paper making the case (including objectives, reasoning, criteria). It does not apply where such authority already exists and where there are no other policy issues to decide. Where there are such issues — eg if there is debate within the government about competitive tendering for exclusive licensing, in the light of Adsteam and other criticisms — the amount could be higher.
Cost Benefit Analysis	50	This is the analysis, referred to in the Commission's recommendation, which the Port Authority would have to undertake before deciding that it was worthwhile proceeding. It is assumed that it would be done by a consultant.
Draft Contract	25	It is assumed that the Port Authority or company, with a need to ensure sound preparation, would engage one of the major law firms. The equivalent of one week of work is assumed.
Tender Management	100-150	This includes initial scoping, formal consultation as in the Productivity Commission recommendation (possibly with guidelines and a customer survey), advertising, preparation of information memoranda and due diligence documentation, possibly a model analysing port use, financial advice, consultation and answering questions, bid evaluation, and negotiations between the time a preferred tenderer is selected and the time the deal is closed.
		It is assumed that the financial input (mainly at the bid evaluation stage) would be from a major accounting firm, and that legal input (assistance with due diligence information and with negotiation) would be from a major law firm.
		The assumed breakdown is port authority staff time \$50,000, accounting firm \$20,000, law firm \$20,000 and other \$10,000, although there is scope to move work around somewhat – eg law firms can handle much of the due diligence, or some can be done in-house.
		See section 3 for elaboration.
Probity Audit	20-30	It is assumed that in the case of public sector port authorities, a probity auditor would be engaged to provide assurance to bidders and the public that processes were correct.
Contract Management	Uncertain	Public sector port authorities may not have extensive experience in managing commercial contracts, which could mean that difficulties arise which may take money to address. It is reasonable to assume that a contract lasting 5 to 7 years would be "incomplete", ie that it would not be possible to foresee all the circumstances likely to arise over the period, so adjustments or renegotiations would be necessary. "Bidding tension" increases the likelihood of pressure to renegotiate – see discussion below.
Total	215-275 plus uncertain items	Uncertain items include policy debate during the setup phase, contract management and contract renegotiation.



Table 2: Preliminary Estimates of transaction costs for competitive tendering: BIDDER COSTS

Item	Estimated Costs (\$000)	Comment
Local Study	20	A new entrant would probably not be familiar with the local area and would have to engage locally based advisers, or others familiar with the area, to assist in identifying any unusual local characteristics that might pose a risk for the company, to identify potential mooring areas, and to identify whether suitable staff are potentially available. (Note that staff require appropriate training in tug operation and in local geography. The new entrant would either have to hope to get staff from the incumbent or would have to train them. Training costs are not included in the estimate)
Demand Study	30	Because of the importance of revenue risk as discussed above, it is assumed that the bidder would want to engage a consultant to advise on likely fluctuations and trends in revenue over the contract period.
Secure Tugs	Uncertain	Companies other than the incumbent will have to organise access to suitable tugs in order to be able to undertake the contract if it is awarded. Most likely bidders would have links with brokerage firms specialising in tug leasing. They will also have to arrange access to back-up tug(s) unless the same company also operates at a nearby port.
Travel	5 - 10	For 2 or 3 people (operational and commercial) from elsewhere in Australia and/or from overseas, to familiarise themselves with the port and talk to local parties.
Preparation of Bid	75-100	This includes diversion of management time, advice from lawyers, accounting firms (both accounting and corporate finance). It is assumed that, unlike the Port Authority, the bidder would engage second tier accounting and law firms.
		The assumed breakdown is management time \$40-\$60,000 (2 person months including overheads), law firm \$15,000 (1 week to review the draft contract, consult with the client, advise on insurance and indemnities, and assist with negotiations), accounting firm \$20,000-\$25,000 (2 weeks to analyse the revenue study, tug costs and staff costs, advise on the price to bid and assist with documentation). There is scope to move some of this work between in-house and advisers.
		See section 3 for elaboration.
Quality Accreditation	10	Assumes only a QA audit is necessary. Starting from scratch, QA could cost up to 100.
Termination and handover	20	If the winning bidder is not the incumbent, the incumbent will have to terminate any supply contracts, redeploy its tugs, redeploy its staff unless they move to the new operator (and/or pay severance, not included in the estimate), and liaise with the new operator.
Contract Management	10	It is assumed that the successful bidder's ongoing responsibilities would be easily met by periodic provision of information and occasional attention to minor issues that arise. The number would be bigger if there were major issues.
Renegotiation during Contract	Uncertain	As noted earlier, it is likely that adjustments will be required to the contract during a 5 to 7 year period.
Total	170 - 200 plus uncertain items	Uncertain items include training, obtaining tugs, possible QA costs over and above an audit, contract management issues and possible renegotiations.



Assuming five bidders but allowing for only the incumbent incurring handover costs and only one (winning) bidder incurring QA and contract management costs, the estimated total bidder costs (of the successful bidder and the four who were unsuccessful) would be **of the order of \$7-800,000**. The total resource cost (port authority, bidders, advisers) would thus be **of the order of \$1million**, plus the cost of the uncertain items as described above¹.

The figures may seem high, but they aim to cover all costs including diversion of management and staff time. They are small compared with the transaction costs for large complex transactions. For example, Victoria's passenger rail franchising cost \$70 million on the vendor side and an estimated \$5-10 million per bid. One of the bidders for Victoria's City Link tollway had spent \$24 million by the time the deal was completed².

We note that the costs in the table would apply in a first round of bidding. Once experience had been gained, subsequent rounds after 5 to 7 years would be cheaper for both sides but still significant. For example, we expect that it would be prudent to do another cost benefit analysis to take account of changing circumstances.

We also note that:

- For smaller transactions where there were only one or two tugs, the two sides would endeavour to cut back on expenses. For example, contrary to the Productivity Commission's recommendations, the cost benefit analysis could be rather perfunctory, the draft contract might be prepared by a lower level of law firm, and tender management might be done on a minimalist basis. On the bidder side, the bidder might rely on judgement or "feel" for at least part of the local and demand study aspects and might cut corners in preparing its bid. If they are aware of the consequent potential for error, bidders may price cautiously.
- The incumbent supplier of towage services might arguably be able to prepare a bid at lower cost because of the knowledge it already has. On the other hand it might want to prepare its bid carefully because of the downsides to it of losing existing business, including the loss of accumulated goodwill.

² Report on Ministerial Portfolios, Victoria Auditor General's Office, June 2000, page 106. Bidder cost and City Link estimates: personal communication.



¹ If there was a different number of bidders, the total cost should be adjusted by \$130-155,000 per bidder.

If the tendering process leads to "bidder tension" and irrationally aggressive bids, the result will be "winner's curse" — ie the winner finds it cannot earn enough to justify its investment. This can lead to the cutting of corners (eg reduced quality of service) or to contract management tensions and pressure to renegotiate.

We have not allowed for any resources employed on possible trade practices implications with the port authority or port company securing power to act as an agent of its customers. The issue of port authorities using their position to maximise their share of any rents is discussed in Adsteam's main submission, pages 51 and 62-63.



3. A transaction cost example: Fremantle

This section elaborates on the "Tender Management" and "Preparation of Bid" parts of the tables.

To give some feel for the range of information that bidders might have to provide and that port authorities would have to analyse, we draw from a recent Fremantle Port Authority Request for Proposals³ for harbour towage services. The Authority's criteria are:

- "proven ability of the respondent to operate a towage service according to best practice in terms of safety, reliability, competitiveness, responsiveness and the ability to provide such a service to the shipping industry in the Inner Harbour and/or the Outer Harbour;
- the quality of the guarantees proposed regarding the availability of equipment and labour for the uninterrupted supply and overall continuity of towage services;
- the competitiveness of the charges proposed for towage services;
- the preparedness and ability of the respondent to expand, improve and innovate on its services to cater for future growth and expansion of the Port of Fremantle;
- the preparedness and ability of the respondent to show flexibility and reschedule services at relatively short notice with reduced penalty or no penalty;
- the quality assurance provisions [including Quality Assurance Accreditation] proposed; and
- the ability to provide interim services should they be required after the licence or licences are agreed but prior to the [formal] commencement"

The Authority requires respondents to prepare a written submission covering these criteria, and to fill in the following forms:

- 1. Executed form of proposal
- 2. Scope of services to be provided
- 3. Particulars of tugs
- 4. Proposed berthing arrangements
- 5. Timeframes required to set up of services
- 6. Training of tug crews

³ Fremantle Port Authority, Request for Proposals – Supply of Towage Services Fremantle Inner and Outer Harbours, Proposal Number 101C00, closing date 1 February 2002.



- 7. Details of ordering procedures [eg minimum notice required for ordering, rescheduling and cancelling orders and the numbers of tugs that would be available within the minimum notice period]
- 8. Proposed charges per tug per service
- 9. Guarantees for availability and continuity of services
- 10. Quality assurance provisions
- 11. Insurance cover
- 12. Collusive conduct statutory declaration.

Most of the work on the written submission and the forms would be done in-house, consistent with the substantial amount of management time allowed for in our estimates. Legal input would assist with the executed form of proposal, the guarantees, insurance, and indemnities; a lawyer would also normally review other material submitted. Accounting input (and the demand study) would largely relate to the proposed charges, although often an accounting firm will also provide more general commercial advice. Local knowledge would be needed for some of the selection criteria and several of the forms.



4. Assessment

The above estimates are the result of a small exercise drawing on several individuals' commercial experience, rather than the result of a detailed analysis of bidding for towage services. Actual experience, of which there is little to go on so far, may be somewhat different, but we consider the orders of magnitude above are reasonable at this stage in the debate. Little is said about transaction costs in the Position Paper, so we hope that the preliminary estimates and discussion in this report will assist the Commission in its deliberations about the question of tendering for exclusive towage licences.

ACIL's overall conclusion is that the transaction costs of tendering for exclusive licences for towage services would be significant in relation to the size of the transactions, especially for small and medium sized ports. It will be important to allow for such costs in a cost benefit analysis before making any decision to proceed because, in some cases, they could be high enough to alter the decision.

