

Procurement Methods - Price Quality Methodology

Recommendations

That the Board:

- i. Endorses the recommended changes to Auckland Transport's (AT) Price-Quality Methodology (PQM) for tender evaluation.
- ii. Notes that NZTA's endorsement for these changes will be sought, and following its endorsement the changes will be incorporated into AT's Procurement Strategy.

Executive summary

PQM is one of four tender evaluation methodologies approved by NZTA and specified in AT's Procurement Strategy. All the approved methodologies are designed to ensure that the evaluation of tenders is structured, robust, and transparent. PQM is used in the majority of tenders, and seeks to combine the evaluation of price and non-price attributes by converting differences in the non-price (or 'quality') aspects of a proposal into a Supplier Quality Premium (SQP).

On the whole the tender process does elicit competitive proposals, and the application of PQM does provide transparency in the evaluation process. There is an inherent tension in evaluation processes between the need to provide transparency, and the sometimes iterative processes that are necessary to understand the best value proposition. AT's PQM methodology is currently balanced in favour of transparency. The opportunities to refine the process were recently reviewed and improvements developed through a workshop process with AT Group Managers, GM Business Technology, Procurement, and NZTA. These improvements, described in detail below, are aimed at making AT's approach more commercial.

Strategic context

AT has a significant operational and capital spend. In addition to its various public body obligations, as an NZTA 'approved organisation' AT has a number of procurement obligations which are included in section 25 of the Land Transport Management Act 2003:

LTMA (2003) s25 Procurement procedures

- 1) *For the purposes of this Part, the Agency must approve 1 or more procurement procedures that are designed to obtain the best value for money spent by the Agency and approved organisations, having regard to the purpose of this Act.*
- 2) *In approving a procurement procedure, the Agency must also have regard to the desirability of—*
 - a) *enabling persons to compete fairly for the right to supply outputs required for approved activities, if 2 or more persons are willing and able to provide those outputs; and*
 - b) *encouraging competitive and efficient markets for the supply of outputs required for approved activities*

These obligations are embedded in the procurement processes that NZTA approves within AT's Procurement Strategy. The current version of this document was approved in 2012 and is due for re-approval in 2015.

Background

PQM is the most frequently used of AT's four approved tender evaluation methodologies. The remaining three are:

- Lowest Price Conforming (LPC)
- Purchaser Nominated Price (PNP), and
- Quality Based Method (QBM)

The currently prescribed steps for each of these methodologies are shown in Attachment 1; all are designed to ensure that the evaluation of tenders is structured, robust, and transparent.

Under PQM, to ensure fairness in the selection process, tenders are first evaluated on non-price attributes. This non-price evaluation is conducted blind to the price proposal. Once the non-price evaluation has been completed differences in the aggregate non-price score for each proposal are converted into a 'Supplier Quality Premium' (SQP). This calculation is based upon the original estimate for the procurement, the non-price scores, and the non-price/price weighting. A high original estimate, significant range in aggregate non-price scores, or a high non price weighting will create higher SQPs. When the SQP has been calculated and approved the non-price evaluation is usually locked and the price envelope is opened. The relevant SQP is then deducted from the total price for each proposal and the proposals are ranked lowest net price first.

Issues and options

The issues with AT's current PQM process are largely due to the inherent tensions between its robustness and the efficiency and/or effectiveness of its implementation. These can be summarised as follows:

- There is a tension between need to preserve transparency through a systematic process where the assessment of non-price attributes are concluded prior to assessing price, and need to make trade-offs (sometimes iteratively) between functionality details and price. This is particularly so in procurements where the outputs / outcomes are not commoditised or highly defined, e.g. in IT projects where it is difficult to objectively assess the benefit of specific functionality elements without first understanding their cost;
- There is a need to preserve integrity of the non-price evaluation while ensuring that the resulting SQP does not unduly distort the outcome or provide an opportunity for suppliers to 'game' the process. Conditions for potential 'gaming' include when a supplier understands their competition in the market to the extent they believe they will be able to achieve a substantially higher non-price score than others, and there are one or more of the factors present which may generate a high SQP (i.e., as above, a high original estimate or high non-price weighting). Where there is a large range in bid prices and a high calculated SQP then tender evaluation teams need to be alert to the heightened risk of selecting a 'premium' bid, irrespective of whether that premium is genuine (and represents an affordability issue) or not;

- For lower value procurements there is a need to provide a more expeditious process and to focus the evaluation on the key attributes of proposals which will deliver greatest value;

These issues were addressed in a workshop supported by NZTA. The process flow charts at Attachments 2 and 3 show the proposed revisions to AT's PQM process. In both charts red text indicates proposed changes to the current process, and grey boxes indicate optional additional steps.

Proposed changes to the standard price-quality method shown in Attachment 2 allow:

- The tender evaluation team an understanding of the bid range prior to establishing the SQP
- A multi-stage evaluation of non-price attributes and the ability to shortlist through that process
- Finalisation of the SQP based upon the lowest conforming proposal (as opposed to an estimate)
- The opportunity to seek a 'best and final offer' (BAFO); this could be exercised for example where AT develops an understanding during evaluation that removing some desired functionality could result in a significant reduction in the total cost of the output.

While the process above may appear more complex than that currently approved, in practical terms it simply addresses issues that arise with the current process in some complex procurements. It is important however that the process is well managed, and as a consequence the Procurement function will be involved in all large and significant evaluations which employ this methodology.

In addition, a further PQM process has been developed for key professional services. This process, shown at Attachment 3, would be applied where innovation in design has potential to add significant value, and time/delivery is critical. In this case:

- Proposals are very short and focus on outline solutions, clearly identifying the innovation which will be brought to the particular design challenges
- An 'expert panel' is used to evaluate / challenge what is being proposed. Assessment of proposals is rapid, employs some of the proposed enhancements to the standard PQM, and is focussed on the solution being proposed
- There is a clear understanding that intellectual property (IP) developed through proposals may be used by AT

The proposed changes outlined above will allow AT to approach its procurement processes on a more commercial basis while still ensuring that those processes remain transparent and equitable.

Next steps

- 1) Seek endorsement from NZTA for PQM process changes outlined, and seek approval to use until AT's Procurement Strategy has been updated;
- 2) Incorporate changes into 2015 Procurement Strategy review

Document ownership

Recommended by	Chris Morgan Head of Procurement	
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Approved for submission	David Warburton Chief Executive	

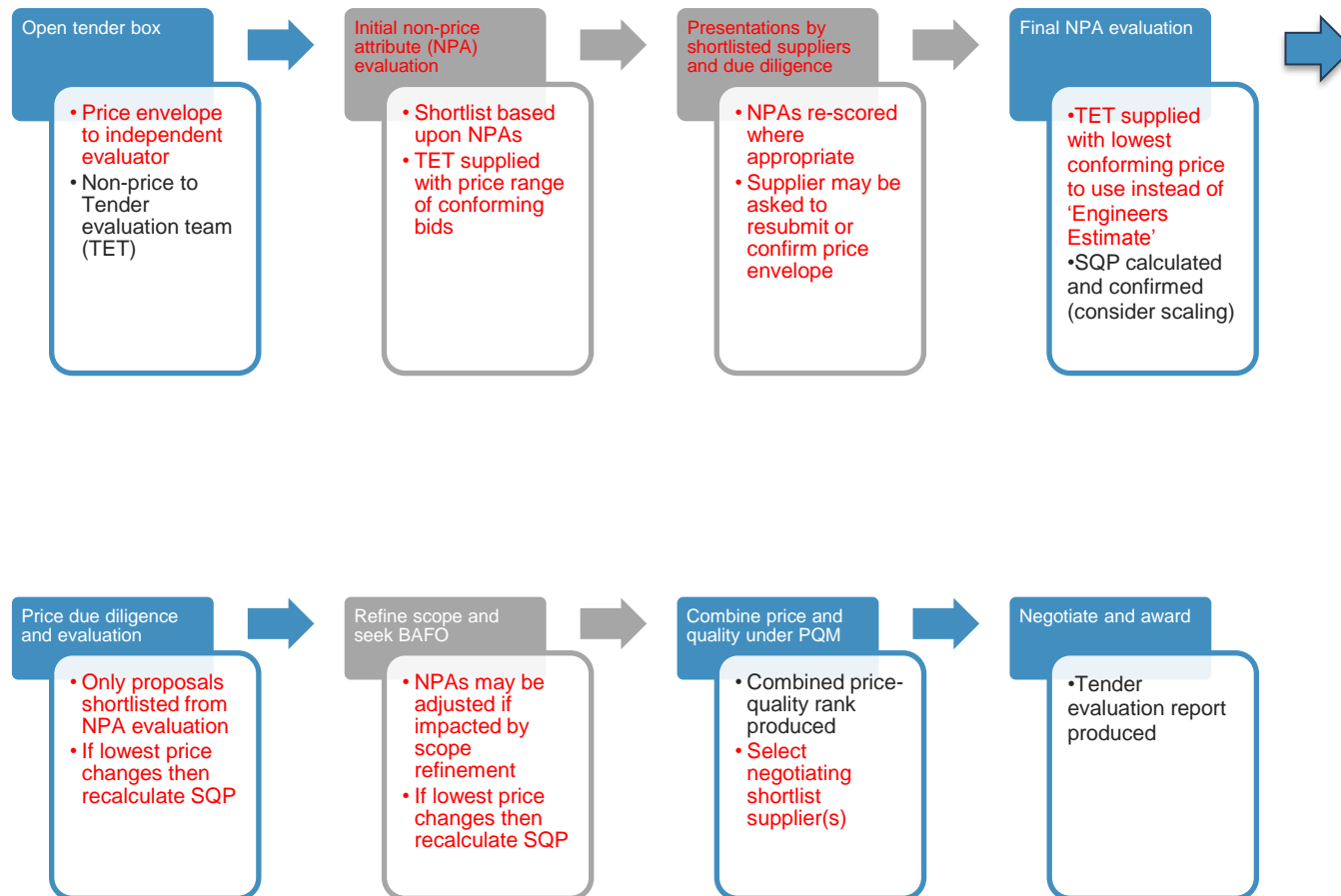
ATTACHMENT 1 – Approved tender evaluation methodologies (Source - AT Procurement Strategy 2012-2015)

Tendering (>\$100k)	Lowest Price Conforming (LPC)	<p>Where AT determines that best value for money will be obtained by suppliers competing on price alone. Of the suppliers that meet the requirements of the tender (conforming), the one with the lowest price will be awarded the contract. This method is most suited to lower cost, low risk contracts.</p>	<p>Step 1 Rank proposals in ascending order based on price.</p> <p>Step 2 Evaluate all proposals (except for alternative proposals).</p> <ul style="list-style-type: none"> • Commence with the lowest-priced proposal. • Determine that the proposal is within the RFP's scope and requirements. • Evaluate each non-price attribute on a pass or fail basis. • Reject (exclude from further consideration) any proposal that fails against an attribute. • Cease evaluating proposals when the first conforming proposal is identified. <p>Step 3 Evaluate alternative proposals.</p> <ul style="list-style-type: none"> • Evaluate all alternative proposals (regardless of price) in accordance with the second, third and fourth bullets under step 2. • Evaluate in accordance with the relevant rules contained in section 10.16 <i>Alternative proposals</i>. • Determine any added value premium in accordance with section 10.17 <i>Added value premium</i>. • Deduct any added value premium from the price of the alternative proposal. <p>Step 4 Identify the preferred supplier.</p> <ul style="list-style-type: none"> • The preferred supplier is the supplier that presents the proposal that is within the RFP's scope and requirements, passes on all non-price attributes and has the lowest price after deducting any added value premium.
	Purchaser Nominated Price (PNP)	<p>Where AT requires outputs which are difficult to specify or may be completed to a varying degree, and the price that it is prepared to pay has already been determined. Best value for money is obtained by selecting a supplier that provides the best proposal for the price set in the tender.</p>	<p>Step 1 Evaluate proposals.</p> <ul style="list-style-type: none"> • Determine that the proposal is within the RFP's scope and requirements. • Grade each non-price attribute for each proposal from zero to 100. • Reject (exclude from further consideration) any proposal that fails against an attribute. • Multiply the weight (specified in the RFP) by the grade for each non-price attribute and divide by 100. The result is the index for each non-price attribute. • Add all the indices for each proposal. The result is the weighted sum of the non-price attribute grades. <p>Step 2 Identify the preferred supplier.</p> <ul style="list-style-type: none"> • The preferred supplier is the supplier that presents the proposal that is within the RFP's scope and requirements, passes on all non-price attributes and has the highest weighted sum of the non-price attribute grades.
	Price Quality Method (PQM)	<p>PQM is a supplier selection method where the preferred supplier is selected by balancing price and quality through the use of a formula. PQM should be used where AT determines that best value for money will be obtained by having suppliers compete on both price and quality and selecting the supplier that offers the best combination of the two. The process that AT uses to determine how additional quality is</p>	<p>Step 1 Grade the non-price attributes.</p> <ul style="list-style-type: none"> • Open envelope 1. • Determine that the proposal is within the RFP's scope and requirements. • Grade each non-price attribute for each proposal from zero to 100. • Reject (exclude from further consideration) any proposal that fails against an attribute. <p>Step 2 Calculate the weighted sum margin.</p> <ul style="list-style-type: none"> • Multiply the weight (specified in the RFP) by the grade for each non-price attribute and divide by 100. The result is the index for each non-price attribute. • Add all the indices for each proposal. The result is the weighted sum of the non-price attribute grades. • Deduct the lowest weighted sum from each proposal's weighted sum. The result is the weighted sum margin for each proposal. <p>Step 3 Calculate the supplier quality premium.</p> <ul style="list-style-type: none"> • Calculate the supplier quality premium for each proposal using the following formula: <i>Supplier quality premium = estimate * (weighted sum margin/price weight)</i>

	<p>to be valued must be clearly described in each tender.</p>	<ul style="list-style-type: none"> The estimate used in the formula must exclude any amount fixed by the approved organisation, such as any provisional sums contained within the schedule of quantities. <p>Step 4 Confirm the supplier quality premium.</p> <ul style="list-style-type: none"> Review the supplier quality premium calculated for each proposal. Confirm that the supplier quality premium for each proposal represents the amount more that the approved organisation is prepared to pay for a higher-quality supplier. Replace any supplier quality premium with an acceptable figure if the review shows that any supplier quality premium does not represent the extra amount that the approved organisation is prepared to pay. Confirm the new figure with those responsible for determining the preferred supplier. <p>Step 5 Calculate the added value premium.</p> <ul style="list-style-type: none"> Calculate the supplier quality premium for alternative proposals by following steps 1–4 above. Calculate the added value premium for each alternative proposal by following the method set out in section 10.17 <i>Added value premium</i>. <p>Complete steps 1–5 before opening envelope 2.</p> <p>Step 6 Identify the preferred supplier.</p> <ul style="list-style-type: none"> Open envelope 2. Deduct each proposal's supplier quality premium and each alternative proposal's added value premium from the price.
<p>Quality Based Method (QBM)</p>	<p>QBM is a method where quality attributes of suppliers who meet the requirements of the tender are graded and the preferred supplier is selected solely on that basis. Price is then negotiated with the preferred supplier, based on their price proposal. This method should be used where it is determined that the best value for money will be obtained by selecting a supplier on the basis of quality alone. There is no competition on price.</p>	<p>Step 1 Grade the non-price attributes.</p> <ul style="list-style-type: none"> Open envelope 1. Determine that the proposal is within the RFP's scope and requirements. Grade each non-price attribute for each proposal from zero to 100. Reject (exclude from further consideration) any proposal that fails against an attribute. <p>Step 2 Calculate the weighted sum.</p> <ul style="list-style-type: none"> Multiply the weight (specified in the RFP) by the grade for each non-price attribute and divide by 100. The result is the index for each non-price attribute. Add all the indices for each proposal. The result is the weighted sum of the non-price attribute grades. <p>Step 3 Identify the preferred supplier.</p> <ul style="list-style-type: none"> The preferred supplier is the supplier that has the highest weighted sum of the non-price attribute grades. <p>Step 4 Negotiate with the preferred supplier.</p> <ul style="list-style-type: none"> Open the preferred supplier's envelope 2 and enter into price negotiations. Negotiation must be conducted in accordance with the RFP and any contract let must be within the scope of the RFP. If agreement cannot be reached with the preferred supplier, that proposal must be rejected. The supplier that has the next highest weighted sum of the non-price attribute grades is then the preferred supplier. Begin step 4 again with the new preferred supplier. When a contract is awarded, the unopened envelope 2 from each supplier that did not take part in the final negotiation process must be returned.

ATTACHMENT 2 – Proposed changes to standard PQM process

- Red text indicates proposed changes to the current process
- Grey boxes indicate optional additional steps



ATTACHMENT 3 – Proposed revision of PQM process for key professional services (<\$300k)

- Red text indicates proposed changes to the current process
- Grey boxes indicate optional additional steps

