THE PRICE-QUALITY METHOD (PQM) IN TENDER EVALUATION

AIM

1. The aim of PQM is to provide a more structured framework for such non-price criteria to be assessed alongside price. In effect, PQM translates the qualitative attributes into quantitative scores which, when combined with the price scores, will enable the most suitable firm that provides the best offer to be selected for award.

PRINCIPLES

2. PQM adopts the following principles:

   a. Both price and quality attributes will be given weightages and scored based on the guidelines provided; the firm with the best combined score would be awarded the project.

   b. The weightages between price and quality, the quality attributes, the maximum points to be assigned to each quality attribute, and the scoring method for the quality attributes will be made known upfront in the tender.

   c. PQM still adheres to the principles of transparency, openness and fairness and value for money in procurement. In addition, it should also comply with the WTO regulations such as having non-discriminatory criteria.

   d. Tenderers can request for their rankings derived from the combined scores after tender award.

METHODOLOGY FOR PQM

Price-Quality Weightage and Quality Attributes

3. The weightage between price and quality will range from 60:40 to 80:20, depending on the complexity of the project. For design-bid-build projects, since majority of the design by consultants has been done and the technical specifications have been specified, agencies shall adopt price-quality weightage of 80:20 except for special circumstances. For design and build projects, agencies can consider price-quality weightage of between 60:40 to 70:30.

4. The quality (non-price) attributes can comprise:

   a. Performance in past or ongoing projects in areas such as timeliness, safety and quality. To give due emphasis to site safety, it is mandatory that safety performance accounts for at least 15% of the overall quality points.
b. Relevant track records or specific competencies that enhance the tenderer’s suitability for the job.

c. Project specific proposals, including work methods and resources assigned to the project.

d. Constructability Score Index, to give due recognition to the adoption of labour-efficient construction methods and technologies for productivity improvement. The Constructability attribute is mandatory for building developments that are subject to the minimum Constructability Score requirements under the Code of Practice on Buildability and will account for 15% of the overall quality points.

e. Other attributes, if any.

5. Agencies will decide which attributes are relevant for a particular project and assign the maximum points for each quality attribute.

**Tender Submissions**

6. The Agency can adopt the one-envelope or the two-envelope system. As a guide, a one-envelope system can be adopted for projects whereby the scoring of the specified quality attributes is based on quantified templates, such that no subjective judgement is required. Otherwise, a two-envelope system is preferred.

**One-envelope system**

7. The firms will be asked to submit the price and quality bids in one envelope. The price and quality scores will be computed and the firm with the best combined score will be awarded the contract.

**Two-envelope system**

8. In this system, the bidders submit the quality proposal separately from the bidding price. Agencies would open and compute the quality score first, before opening the price envelopes and computing the combined scores. The firm with the best combined score will be awarded the contract.

**Computing Quality and Price Scores**

9. The agency will compute the quality points of each attribute to derive the total quality points for every bidder. The firm with the highest total quality points will be given maximum quality score. The quality score of other bidders will be calculated proportionally to the highest total quality points.
10. If price loading is applicable under Bonus Scheme of Construction Quality (BSCQ), the new price (loaded according to the Total Price Loading Factor) shall be used for computing the price score.

11. When computing the price score, the tenderer’s price should not include provisional sums and value of nominated subcontractors except for attendance fees on nominated subcontractors. The firm with the lowest bid in the selected shortlist, if any, will be given the maximum price score. The price scores of the other bidders will be inversely proportional to the lowest bid price.

12. Any alternative bid, by any of the firms, will be treated as a separate bid and be assessed accordingly, provided alternatives are allowed and they meet the technical requirements.

13. The successful firm is the one with the highest combined score.

GUIDELINES ON SCORING QUALITY ATTRIBUTES

Specific Quality Attributes

14. The Agency will set out the scoring method for the specific quality attribute selected. The points given will be according to the relative performance of the bidders for the attribute. The scoring method can adopt either of the following approaches:

a. Benchmark performance method
A benchmark performance level may be determined for a particular attribute. The benchmark performance level for this attribute can be set at 50% to 100% of the quality points depending on how the agency wishes to treat firms that do better or worse than the benchmark level:

i) For example, the benchmark performance can be set at 70% of the quality points, and firms which do worse or better can score lower or higher according to their relative performance. Alternatively, firms which do worse can be given no points.

ii) The benchmark performance can be set at 100% of the quality points and those who do worse can score less or no points.

Illustration
For assessing quality performance based on CONQUAS scores, the benchmark performance level is set at 3 projects achieving CONQUAS score 80 points or above within the past 3 years.

If method ii) above is chosen, and the maximum points for this attribute is 10 points, firms having 3 or more projects achieving CONQUAS score 80 points or above within the past 3 years, will all get 10 points, while those who do not meet the requirement may get less points or no points.
b. Ranking method

For some attributes, for example, the project specific proposal, it may be difficult to peg a benchmark performance level. For such attributes, agencies can rank the bidders and allocate quality points according to the relative merits of the proposals. If a proposal is unsatisfactory, the bidder can be disqualified altogether.

Stipulating minimum qualifying criterion for a specific attribute

15. Minimum qualifying criterion for an attribute, if any, must be stipulated upfront in the tender documents so that potential tenderers who do not meet this criterion need not tender. This is to minimize the wastages in the firms' tendering efforts.

Setting a minimum total quality points

16. The agency may set a minimum total quality points for firms to meet. Firms with lower points will be ‘disqualified’ and their price scores will not be computed. If the two-envelope system is used, the price envelopes from the non-conforming tenders should not be opened.

Illustration

“Passing Mark” is set at half of total quality points (i.e. 50 points).

<table>
<thead>
<tr>
<th>Tenderer</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points*</td>
<td>91</td>
<td>84</td>
<td>82</td>
<td>80</td>
<td>77</td>
<td>72</td>
<td>64</td>
<td>43</td>
<td>41</td>
<td>40</td>
</tr>
</tbody>
</table>

* Total quality points

Tenderers with total quality points below 50, i.e. Tenderers No. 8, No. 9 and No. 10 in this case, will not be considered for further evaluation. Correspondingly the computation of price score will be based on those conforming tenders (i.e. 1 to 7).

Information to be made known in tender documents

17. The following items must be clearly made known at tender stage:
   a) Price-quality weightage
   b) Quality attributes applicable and their assigned maximum points
   c) Scoring method for each attribute e.g. benchmark performance method or ranking method. Benchmarks used in the benchmark performance method must be made known, together with how tenderers who perform better or worse than the benchmark will be scored.
   d) Any minimum qualifying criterion for a specific quality attribute, which, if not met, would disqualify the bidder.
   e) Any minimum total quality points below which bidders will not be further considered.