

# **BPM213**

## **Procurement Management**

**STUDY UNIT 3**

**Tendering Procedures,  
Prequalification of Contractor,  
Tender Evaluation and Award**



## LEARNING OUTCOMES

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At the end of this learning unit, you are expected to:

- Develop an understanding of good tendering practices and procedures for procuring facilities management and event services.
- Apply an understanding of the common tendering methods adopted including open, selective, negotiated and two-stage tendering.
- Apply an understanding on the procedures for pre-qualification of contractors and checking and evaluating tenders, including the use of the Price-Quality Method for contractors/suppliers and the Quality-Fee Selection Method for consultants.
- Understand the systems of the Building and Construction Authority (BCA) and the Government Electronic Business (GeBIZ) in registering and classifying suitable contractors, suppliers and consultants.

## OVERVIEW

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Tendering is defined as the process of selecting the most suitable contractor to carry out the work with a view of awarding the project. The methods of selecting the contractor or supplier in construction-related services are similar to other services associated with **construction**, facilities management and the procurement of events.

This study unit will deal with the tendering procedures, the principles of good tendering practices, selection criteria of contractors, methods of tendering and tender evaluation and the sources of securing a suitable list of registered contractors, suppliers and consultants for a project.

Three case studies have been used to illustrate the practical implications of the tendering methods, procedures and evaluation criterion used.

### 3.1 Introduction to Tendering

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Tendering is to the process used to obtain offers leading to a contract between a client and a contractor Turner (1995)<sup>1</sup>. It is also defined as the process of selecting the most suitable contractor to carry out the work with a view of awarding the project.

According to Hackett (2007, p27), the aim of any tendering procedure is to select a suitable contractor, at a time appropriate to the circumstances, and to obtain from

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<sup>1</sup> Turner, A. (1997). *Building Procurement*, 2<sup>nd</sup> ed., London: MacMillan Press Ltd.

him at the proper time an acceptable tender or offer upon which a contract can be let (The Aqua Group)<sup>2</sup>. Ashworth et al. (2013) points out that the methods of selecting the contractor and tendering procedures in construction work are equally applicable to maintenance work.<sup>3</sup>

The various methods adopted for tendering will depend largely on the client's intention and the nature of the project. It would not be appropriate to consider competitive tendering if the work requires special skills whereby only one firm can provide. On the other hand, if the client wanted a very competitive tender, it would not be appropriate to limit the number of bidders tendering for the job.

## 3.2 Principles of Good Tendering Practices

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The following good tendering practices are often recommended when appointing contractors or suppliers in a competitive tender:

- Follow clear procedures to that ensure that there is fair and transparent competition in a single round of tendering consisting of one or more stages.
  - Make sure that the tender process should receive feedback and competitive tenders. **Tender evaluation becomes more complex where contractors feel that they are unable to fully comply with the tender documents and wish to attach conditions to tender submissions.** This problem may be mitigated by stating clearly in the tender documents that "qualified tenders other than a fully conforming tender may be rejected, whereas alternative tenders stating the differences are allowable in addition but may not be accepted". Tenderers may decline to tender with notice given to the Consultants before the tender submission deadline if they consider that a conforming tender is not possible, and their future opportunity to be invited for future tenders would not be affected.
- The tender list should be compiled systematically from a number of eligible contractors by considering their financial standing and track records of similar contracts and contract periods, the experience and reputation of the firm, the adequacy of its management, and its capacity to undertake the project.
- Keep the tender list as short as possible.
- All conditions for tendering shall be similarly applied to all tenderers.
- Respect the confidentiality of information submitted by all parties.
- Allow sufficient time for tenderers to prepare and for the client to evaluate the tenders.
- Provide sufficient information for bidders to prepare their tenders.

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<sup>2</sup> Hackett, M., Robinson, I. & Statham, M. (2007). *The Aqua Group Guide to Procurement, Tendering & Contract Administration*, Oxford: Blackwell Publishing.

<sup>3</sup> Ashworth, A. & Hogg, K. (2002). *Willis's Practice & Procedure for the Quantity Surveyor*, 11<sup>th</sup> ed., Oxford: Blackwell Science Ltd.

- Assess tenders carefully and accept based on quality as well as price.
- Adhere strictly to practices that avoid or discourage collusion.
- Do not allow tender prices to change on an unaltered scope of works.
- Wherever available, use suites of standard contracts and forms from recognised bodies.
- Foster commitment to teamwork from all parties.

### **3.3 Tendering Procedures**

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#### **Prequalification of Contractors**

This process is aimed at reducing the number of tenderers to the most qualified to be invited to tender for the project. The common practice is for the client or his representatives to put up a notice in the local press or journals (or private clients) or via the GeBIZ portal (for public sector clients) to invite interested contractors to apply for selection as tenderers for the proposed project.

A brief description of the project and the application procedures will be included in the pre-qualification notice. Interested contractors can then apply for the application forms to complete and submit together with the required supporting documents to the designated location at a specified date and time. Suitable contractors will then be selected and invited to tender for the proposed project based on their information submitted.

This notice is different from the tender notice. The contractors, in response to the pre-qualification notice, do not submit any tender but only their "qualification" status.

#### **Tender Documentation and Invitation**

The tender documents should be sent to or made available for collection by the selected tenderers on the date stated in the preliminary enquiry. Details on the tender documentation will be covered in Study Unit 4.

Usually, one envelope should be used for the submission of the tender, enclosed with the word 'Tender' and the name of the project together with the latest date and time for the tender return. Another envelope is usually for the return of any proposals or priced schedules in support of the tender.

#### **Tender Period**

The time needed by a contractor to prepare a tender depends on both the size and complexity of the project. Tenderers should be given sufficient time to obtain competitive prices from their subcontractors and suppliers if realistic prices are expected.

## Opening Tenders

All tenders shall be opened as soon as possible after the published time for their receipt. It would be appropriate if at least 2 persons (especially the client's representatives) are present. Upon its opening, all tenders are opened, inspected to check for completeness and then recorded. Selected pages of the tender document will be witnessed and signed, especially those pages that show the tender sum, summary of prices including any cover letters. A form is usually used to record information such as the tender results, contract period, alternative offers and qualifications. The tabulation will be signed by all the parties witnessing the opening of the tender after information on all the results and qualification are recorded. Photocopies of the signed tabulation will then be distributed to the parties present.

## Tender Compliance

To ensure fair and competitive tendering, any unauthorised amendments to or qualifications of the tender documents by bidders should not be allowed as this can lead to the rejection of tender for non-compliance. **However, another matching envelope is usually for the return of any proposals or priced schedules in support of the associated tender if alternative tenders could be considered.**

## Late Tenders

All contractors are obliged to submit the tenders at the date and time as specified in the tender document. Any late submission will be considered as withdrawal from the tender and will not be accepted or evaluated. All tenderers must then be notified if the deadline may, for valid reasons, be extended by the client.

## Checking and Examination of Tenders

The documents are normally checked by the client's representatives or consultants if necessary. **It would be prudent to check all returned tenders for any arithmetic error in any event in order to ensure that no inadvertent ranking results before tender evaluation.** The documents shall be checked for the following:

1. Any items that are left unpriced.
2. Any errors arising from the extension, i.e. multiplying the quantity by the unit rate.
3. The total amount collected of each page is correct.
4. The total amount from each page is transferred correctly to the collection sheet and summaries.
5. The total sum on the summary page is correctly transferred to the form of tender.
6. **Any evidence of pricing tactics involving front loading of tender, which would benefit the successful tenderer's cash flow but pose a risk to the client in the event of contract failure.**
7. **To ensure that there is no missing page and that the correct Addendum page is incorporated (if issued) in the returned tenders.**

If any major errors are discovered, the commonly adopted methods are as follows:

- The contractor will be given a chance to stand by his offer based on the final price indicated in the form of tender. Alternatively, he is allowed to withdraw his offer. If he withdraws, the checking process is repeated with the next lowest tenderer. If he is prepared to stand by his tender, the pricing document is then endorsed to the effect that all rates and prices shall be adjusted in the same proportion as the corrected total of the priced items. **As an alternative to “endorse on the pricing document that all rates and prices shall be adjusted in the same proportion as the corrected total for the priced items” (which may entail a rubber stamp to this effect for all priced pages), usually a similar clause is included in the tender document, with the provision that a total net error below a specified percentage will not apply to all priced rates, or else this may be spelt out in the Letter of Acceptance to be counter-signed by both parties.**
- The tenderer shall be advised of his errors and given the chance to amend the tender to correct genuine errors or to withdraw his offer. If he amends and the amended tender sum is no longer the lowest, or if he withdraws, the examination process is repeated with the lowest tenderer.

## **Tender Evaluation and Report**

The tender report is an important document that is used to recommend and determine the strategy and method of interview used. The important points covered in a tender report include the following:

1. List of tender sums
2. List of tender qualifications and consultants' comments
3. Comparison of rates and consultants' comments
4. Comparison of preliminaries and consultants' comments
5. Comments on the programme, samples, qualifications, alternative proposals and method statements, etc.
6. Any recommendations from the client and his consultants, especially on pertinent clarifications

A tender report with comments on issues for which the tenderer is responsible will be prepared by the consultants. After considering the report, the client and his consultants will then meet to decide on the following:

1. A shortlist of tenderers to be interviewed
2. The time and location of interview
3. The order of the interview
4. The interview strategy including any clarifications and the need for further submission

Please refer to Study Unit 5 Appendix 1 for a sample copy of the tender evaluation report,

## **Tender Interviews**

During the interview, queries will be made to the tenderer to seek clarification on his tender submission concerning the following items:

1. tender qualifications
2. material samples
3. method of working
4. unit rates, any inconsistency in pricing and any items which are highly priced, etc.
5. any alternative offers and proposals, etc.
6. design proposals (if applicable)

Negotiations on the tender sum may start after clarification from the tenderer. The tenderer may be requested to re-submit his tender, adjust his tender sum and confirm any clarifications and agreements made during the tender interview. A second and

usually third round of interview may take place before the client finally decides on which tenderer to be awarded the contract.

### **Award and Notification of Tender Results**

It is recommended, once the tenders have been opened, that all but the three lowest tenderers should be notified that their tenders have not been successful. At the same time, the second and third lowest should be advised that they are not the most favourable but can be approached again should the lowest tenderer withdraw his offer. Once the client has decided to accept a bidder, all unsuccessful tenderers should be notified and to return submitted priced documents.

A letter of acceptance will be issued to the successful tenderer with details of the agreed contract sum, the date for possession, and any post-tender negotiations that deviate from the tender documents, as well as clarifications. normally, the successful tenderer is required to counter-sign on the letter of acceptance to confirm the contents.

The employer should be encouraged to decide as quickly as possible which tender to accept. It is a good practice for each tenderer to be provided with the tender results and a complete list of the tender prices received once the contract has been let. Although this practice does not disclose who tendered which amount, it allows each tenderer to see how they stand in relation to other bidders.

## **3.4 Criteria for Selecting Contractor**

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### **Introduction**

It is important that a suitable contractor is selected to ensure that the proper execution of the project to the client's requirements. The main aims of selecting a suitable contractor are as follows:

1. Transfer the responsibility of construction from the client to the contractor with the knowledge, expertise and experience to carry out the work.
2. Ensure that the client's project requirements in term of time, quality and price are best achieved.

According to Ramus (1989), the client needs to consider the following fundamental factors before selecting a suitable contractor to carry out the project<sup>4</sup>:

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<sup>4</sup> Ramus, J.W. (1989). *Contract Practice for Quantity Surveyors*, 2<sup>nd</sup> ed., London: Heinemann Newnes.

## 1. Price level of the tender

Price is considered in many cases as the prime consideration for selecting a Contractor, especially the need by public sector clients for accountability in the use of public fund. Hence, there is a need for public sector clients to adhere closely to (and to be easily seen as so) the guiding principles of the Government Procurement Framework, i.e., maintain an open and transparent procurement system, to allow an open and competitive environment and to procure from sources that meet the requirements of the best value for money.

If the price appears to be above market value, then the highly priced sections or items that are favourable to the contractor, needs to be identified. It would be unfair for the client to pay more than what the job is worth for such overpriced sections/items. Likewise, there is a need to identify the trades/items that are under-priced or if the tender price is too low because it would be unwise to hold contractor to the tender sum at which he would then be working at a lower profit and possibly at the expense of compromised quality and workmanship.

## 2. Method of pricing

Many contractors often adopt a strategy of pricing known as front loading of tenders. The strategy involves over-pricing the sections or items of work that will mainly be completed in the early stages of the project (for example, the substructure work) while under-pricing those that are expected to be completed in the later stages. The higher or inflated prices quoted in the early stages of work are then balanced with lower rates in the finishing sections. This enables the contractor to secure higher progress payments in the earlier valuations to improve his cash flow position. The pricing method works against the client's interests, especially when the contractor goes into liquidation before the contract was completed.

## 3. Extent of errors and inconsistencies in pricing

Two forms of errors or inconsistencies can be found in a tenderer's pricing: arithmetical errors and patent errors.

Arithmetical errors can be detected in the following ways:

- Errors in the extension of an item, e.g. through multiplication of a quantity of an item by the unit rate.
- Errors in addition of an item, e.g. in the totalling of a page, transfer of page totals to collections or summaries, etc.

Patent errors can be detected in the following ways:

- Using the wrong basic cube rate for a superficial item or using superficial rate for a linear item.
- An item has not been priced at all of which one would normally expect it to be priced due to an oversight.
- Identical items from different sections of the schedule of rates or bills are priced differently without any good reason.

**4. Other selection factors:**

- Contractor's relevant and past experiences with this type and scale of work and the types of contracts encountered, and his performance record.
- The Contractor's current workload and future plans.
- The Contractor's financial strength and credit rating.
- The Contractor's reputation and his relationships with the client.
- The Contractor's management systems and expertise including quality assurance, safety, planning, scheduling, estimating and cost controlling techniques.
- Design – depending on whether the contractors are required to design the whole or part of the works.

However, it should be clearly stated in the tender documents that the client is not bound to accept the lowest tender or any tender.

## **3.5 Tendering Methods**

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There are three basic types of tendering namely:

- (a) Open Tendering
- (b) Selective Tendering
- (c) Negotiated Tenders

In addition, the Two-Stage Tendering and the use of Request for Proposals will also be discussed.

### **3.5.1 Open Tendering**

This method allows almost any organisation that responds to an advertisement, or on journals or websites to submit a tender; sometimes without any prior enquiry to their ability. The advertisement normally includes information on the brief details of the proposed works of which the client invites interested contractors to apply for the relevant tender documents. The advertisement also provides the outline details of scope and scale of the work and other relevant matters.

As the advertisement is only an invitation to offer by the client, the contractor's completed, priced and submitted documents will serve as an offer. A contract will only be considered completed when the client accepts the offer. However, the client is not bound to accept the lowest tender offer as factors other than price must be considered before selecting a suitable contractor.

Open tendering is often adopted by public sector clients where accountability is a major consideration due to the need to achieve best value for money including price, quality and performance concerns.

**Advantages**

1. No favouritism is shown among the tenderers.
2. Competitive tenders can be expected.
3. Price fixing by **colluding** contractors **may** be prevented.
4. Equal opportunity is given to all eligible contractors to tender for the job.
5. The client does not bear the tendering costs.
6. The system offers public sector clients with accountability for the use of public funds for most infrastructure projects.
7. It provides a true reflection of current market prices.
8. Tenders or quotations submitted can be used as a basis of comparing factors like alternative proposals by tenderers on the contract period, design and management.

**Disadvantages**

1. While the lowest tender is often selected for the job; the contract may be awarded to one makes the most mistakes.
2. There is no limit on the number of tenderers, leading to longer evaluation time.
3. Unless an analysis is made on the contractor's reputation and track records, there is no guarantee on performance.
4. Since only one contractor will awarded the contract, several other unsuccessful tenderers will incur abortive costs due to a huge waste of time in preparing the tender estimates.
5. If no eligibility criteria has been used, unknown companies with dubious reputation may be introduced to the project.
6. The client's professional advisers may not be able to vet the tenderers' eligibility before tender submission if no information on the tenderers' eligibility is provided.
7. With this method, restriction on full communication between design team and tenderers on the design details and site operations.

**Tendering Procedure**

1. The client advertises in the press or on websites to invite interested contractors to tender for the project.
2. The interested contractors (or tenderers) collect the tender documents based on the specified date, time and venue.
3. The tenderers shall price for the project.
4. A priced tender document shall be submitted by the tenderers to the client or the consultants at the stipulated closing date.
5. The tender submission shall then be evaluated by the client and his consultants.
6. A few tenderers will then be shortlisted by the client and his consultants for tender interviews before the award of the contract.

### 3.5.2 Selective Tendering

Selective tendering involves the procedure of selecting a limited number of firms before inviting them to tender.

The client will only short-list or select reputable contractors to be invited to tender for the work. The shortlist by may be obtained or collated from an approved list; for example, the Building and Construction Authority (BCA)'s list from the Contractor' Registration System (CRS), or a private listing, or through a pre-qualification process.

At least two contractors are recommended to be kept as reserves, in case any short-listed contractors decline the invitation to tender. Although the contractor who submits the lowest tender is normally awarded contract, the employer reserves the right not to accept lowest or any tender. The recommended number of tenderers invited may vary from three to eight to avoid wastage arising from abortive tendering from the unsuccessful bidders.

### **Advantages**

1. Only the eligible or approved contractors are invited to tender.
2. It reduces the risk of project failure by an incompetent contractor.
3. The cost of abortive tendering is reduced.
4. The successful tenderer may still gain a reasonable profit.

### **Disadvantages**

1. Favouritism is shown to a few shortlisted bidders who are then invited to tender.
2. As compared with open tendering, the method may lead to higher tender prices.
3. A long period may be spent on clarification and negotiation.

### **Tendering Procedures**

1. A few contractors shall be shortlisted or selected for invitation to tender for the project.
2. The selected contractors shall notify the client of their decision to either accept or decline the invitation to tender.
3. The client shall inform the selected contractors of the venue and time to collect the tender documents.
4. The selected contractors shall each prepare and submit a fully priced tender to the client or his representatives at the stipulated closing date.
5. **All tenderers' enquiries shall be replied in writing and notified to all tenderers before tender closing if potential issues of parity are involved.**
6. The tender submission shall be evaluated by the client or his representatives.
7. The client or his consultants shall conduct a few rounds of interviews with a few selected contractors for further clarification and negotiate on the price.
8. The client awards the contract to a suitable tenderer.

### **3.5.3 Negotiated Tender**

In this arrangement, a single contracting firm is nominated to carry out the works at an agreed and negotiated tender sum. This method is adopted when the client has a preference for a particular firm, due to his past satisfactory work for the client (Ramus, 1996). The contract conditions and the agreed sum are finalised through a

series of clarification and negotiation. Usually, a set of tender documents is prepared to serve as a basis for negotiation.

### **Advantages**

1. Greater speed in appointing a contractor but the opposite may also be true if the time for negotiations is prolonged.
2. Eliminate abortive tendering with lower cost of tendering.
3. The Contractor can be involved in the earlier stage of the tender and design. This enables a faster start up after the award of the contract.
4. All parties involved in the design, site operations and pricing of specialist items can communicate fully among themselves.
5. Only the capable and approved contractor is allowed to tender.
6. Closer team spirit and cooperation can be fostered between client's professionals and the contractor and many extraneous claims avoided during the contract period as well as during preparation of the final account.
7. Fewer pricing errors can be expected from the contractor.

### **Disadvantages**

1. As compared with competitive tendering methods, the tender sum is likely to be higher.
2. Both the main contractual parties need to rely on the skill and strategy of negotiation heavily.
3. As a result, a long time may be required to complete the negotiations before tender award, and further time loss will be incurred if the negotiations are unsuccessful.
4. The system is not suitable for most public sector projects due to a lack of accountability to ensure best value for money.
5. Any perceived weaknesses of the client and the design team can be exploited by the claims-minded contractor during negotiations as well as any claim for variations.

Negotiated tenders are recommended under the following situations:

- The need to foster business relationship - e.g. resulting in reciprocal trading, joint partnership, etc.
- For Contractor-financed projects – e.g. particular financial arrangements in partnering or using Public-Private Partnership.
- For continuation of contract – where there is a similar design for the new contract, and confidence shown by the client and the contractor, etc.
- For special circumstances - e.g. damage by fire or storm to building during construction requiring emergency repairs.
- Projects requiring special expertise or equipment from contractor, e.g. having the appropriate proprietary systems.
- During an over-heated industry where too many jobs are chasing after too few reputable contractors.
- The urgency for a project to start as soon as possible

### Tendering Procedures

1. One selected contractor is invited by the client or his representatives to tender for the project.
2. The contractor will be informed of the location and time to collect the tender documents after acceptance of the client's invitation.
3. The contractor then prices for the project.
4. The client or his representatives arrange with the contractor to clarify, discuss and negotiate on the contract sum and conditions.
5. After both parties have agreed on the contract sum and terms, the client awards the contract to the contractor.

#### 3.5.4 Two-stage Tendering

The main objective of the two-stage tendering process is to involve the chosen contractor on the project as early as possible. It has the tendency in getting the design team to consult the contractor on his expertise in his construction methods before the design is finalised. As a further advantage, the selected contractor is able to commence work on site earlier than would be the case with other methods of contractual arrangements.

The term, two-stage tendering, is used to describe the procedure where a contractor is selected in one operation and the contract sum is agreed in a second.

An appropriate contractor must be selected in the first-stage tender when the client invites suitable companies to price the major items of work from the project based on a brief but precise documents related to a set of preliminary drawings. A simplified bill of quantities or an ad hoc schedule of rates is prepared and includes the preliminary items, major items and specialist items, allowing the contractor to price for his profit and overhead percentages. The prices of these items, together with a proposed work programme and a proposed sub-letting of specialist work, will form the basis for subsequent agreement achieved through negotiation, but not as a contract sum. Discussion with each contractor may be conducted during this stage to provide the client with an understanding of their proposals and to enable the contractors to make any suggestions with regards to design, the work programme and construction method. When these procedures have been concluded, a contractor is then selected to proceed to the second stage. It is important that, in accepting the first stage tender, **the parties should define the procedures for either of them to withdraw, and the compensation of tendering cost and intellectual property acquired (if any), should the second stage negotiation fail.**

The early selection to allow the contractor's participation in the design process is recommended for the following reasons:

- The contractor's expertise in his construction methods can contribute significantly to a feasible design, for example, the use of his specialist proprietary systems.
- Construction difficulties can be avoided by incorporating the contractor's management skills and buildability.
- It is also adopted where there is a shortage of materials or time, for example, due to long delivery times, alternative construction solutions are sought.
- The design can be altered to suit the specialist plant as prior knowledge of the proprietary system allows design to take advantage of its use.

**Advantages**

- As the contractor is chosen at an early date and the documentation for first stage kept to a minimum with a shortlist of suitable contractors, the cost of overheads of tendering is reduced.
- A more reliable contractor can be chosen from the employer's approved list or from an ad hoc list of firms with established reputation, expertise, integrity, responsibility and proven competence for work of character and size contemplated.

During the second stage, and after consulting the selected contractor, the design is finalised with the detailed documents describing the proposed works prepared and priced on the basis of the first stage tender. This is followed by negotiations between the parties on the price until agreement is reached and a total contract sum arrived at, and the parties will finally enter into a contract for the works.

### 3.5.5 Request for Proposal

A request for proposal (RFP) is an early-stage procurement process, where the client issues an invitation to contractors/suppliers, often through a tendering process, to submit a proposal on a specific facility, commodity or service. The RFP process aims to provide the structure and format for the contractor or supplier to make the procurement decision and to clearly identify the risks and benefits at an early stage.

The RFP is aimed at:

- Obtaining the correct information to enable sound business or purchasing decisions to be made.
- Deciding on a proper procurement strategy.
- Leveraging on the client organisation's purchasing power to secure a favourable deal.
- Providing a broader and creative range of procurement options for consideration.

This method is applicable in situations where:

- the specifications cannot be easily spelt out in detail due to the complexity and skills required of the services or works;
- it is not the practice of that industry to call for tenders;

- other considerations, such as technical approach or skills are the key criteria for selecting the contractor or vendor;
- there is a need for some flexibility and diversity in the proposals, e.g., consultant services like event management services, property and facilities management services; interior designing, landscaping, architectural services.

Some sections of a proposal for events management services can be used to help clients visualise their events (e.g. the event theme, design, etc.), while others will be used to present details, facts, figures and information (e.g. event logistics, venue, costs, etc.). An event proposal, according to Allen (2002, p48), can be made up of the following:<sup>5</sup>

1. Cover letter
2. Event and venue review
3. Executive summary
4. Event concept or theme
5. Staging and logistic requirements
6. Special features (e.g. pyrotechnics)
7. Transport requirements
8. Hotel accommodation
9. Daily itinerary
10. Cost summary breakdown
11. Inclusions and exclusions on detailed programme
12. Options for programme and enhancement of the theme
13. Risk management plan
14. Company profile
15. References
16. Back-up materials

The contents of the proposal will vary in accordance to the type of event.

### **3.6 Case Studies on Tendering and Tender Evaluation Criteria**

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#### **Case Study 1 – Tender for a Conference and Event Management in South Africa**

IMC, a public-private sector organisation was assigned to market South Africa for the purpose of attracting investment, trade and tourism as well as to enhance foreign relations. IMC marketed the country's brand through the theme "Brand South Africa: Alive with Possibility".

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<sup>5</sup> Allen, Judy (2002). *The Business of Event Planning: Behind-the-scenes Secrets of Successful Special Events*, Ontario: John Wiley & Sons.

A request for proposals (including the bid) was then raised by IMC for a specialist conference organiser with extensive international conference organising capability to provide services for the logistics, delegate recruitment, registration, programme management, event sponsorship and stakeholder management. Detailed specifications, blank schedule with provisional quantities, conditions of tender and information on the company are included in the tender documents.

IMC also specified to tenderers the following key performance indicators to measure the results of the event:

1. Attendance (including target audience interest)
2. Registration fees collected
3. Excellence in organising the conference programme including high-level good quality speakers and practical working session programme
4. Amount of sponsorship/partnership raised

The evaluation criteria for the selection of the successfully tenderer were as follows:

Key Element	Weighting (%)
Ability to manage conference logistics	30
Ability to manage conference programme	20
Registration and fee managerial system	20
Ability to raise sponsorship	20
Stakeholder relation	10

#### **Case Study 2 – Tender for Event Management for an Opening Ceremony for a New Plant in an Asian City**

Reputable contractors had been invited by a government corporation to tender for the event management for its new plant in an Asian city.

The scope of work involved the provision of the VVIP stage with backdrop, seating arrangements for the guests, audio and visual facilities, exclusive fabric decoration for the cafeteria, temporary toilets for VVIPs, rest areas for VVIPs, floor carpeting, gates, interior decorations, lighting and barricading arrangements, coloured flags with posts, remote curtain raising, photography, audio visual display, PA system, breakfast, lunch and high tea, and any other infrastructure work within the designated venue.

As no site showround was arranged, tenderers were advised to visit and familiarised themselves with the site location and the prevailing working conditions before submitting their tenders.

The contractual and tendering arrangements used were a two-stage selective tendering with a measurement contract. The tender documents included a tender

invitation notice, general and special specifications and conditions of the contract, and a bill of quantities.

### **Tender Evaluation**

The two-stage tendering involves the following:

**Stage 1 (Technical and Commercial Bid)** - This evaluation was carried out based on the technical and commercial competence of the tenderers, their financial standing and their past track records (with performance certificates). The number of tenderers was then shortlisted for Stage 2.

**Stage 2 (Price Bid)** - The tenders were then evaluated by comparing the tender sums shown in the price schedule and the bill of quantities.

### **Case Study 3 – Tender for the Event Management for Road Shows**

A state-owned tourism corporation invited proposals from reputable and experienced agencies for appointment as Event Manager to co-ordinate the various activities in relation to road shows to be organised in various cities in an Asian country.

The scope of work covered:

- Organising road shows in various cities;
- Designing and printing invitation cards and sending the same to travel agents;
- Designing, printing and pasting of backdrops;
- Creating of a reception counter at the entry point, traditional welcome and venue decoration based on the theme of the road show;
- Providing stage arrangement with the facility with enough space for small cultural performance, podium, light, sound, projector and LCD screen;
- Anchor;
- Preparing event kit;
- Providing videography (for 30 minutes) and photography (maximum 50 photographs);
- Co-ordinating with local public relations agency for wider pre-event and post-event publicity; and
- Preparing of closing report containing the details including photographs of the event.

The two-stage selective tendering process was divided into the following stages:

1. Technical Bid: The tenderer had to submit the concept for implementing the event along with information on its technical expertise, experience and other relevant details.
2. Financial Bid: The tenderer had to submit the financial bid based on a given open price schedule.

The criteria for the selecting and evaluating the agency were as follows:

- The tenderer should have a minimum of 3 years' experience in similar events based on its submission for the details of road shows organised over the said period.
- The tenderer should have its own office or tie-up with similar agencies in cities and towns mentioned in the tender documents.
- The tenderer should have a well-trained professional team with expertise required for the event.
- The technical bid shall include details of manpower requirement and experience.
- Information about all offices (area, locations, size, contact particulars, etc.).
- The tenderer could bid for one city or a number of cities if it fulfilled the necessary criteria.

## 3.7 Tender Evaluation Methods

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### 3.7.1 Price-Quality Method (PQM) in Tender Evaluation

#### Introduction

The Price Quality Method (PQM) is a structured tender evaluation framework which considers both price and non-price (i.e. quality) attributes to evaluate construction tenders. It 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.

The PQM applies to all construction tenders under the BCA Construction Workheads (CW01 and CW02) and with an estimated construction cost of \$3 million and above. For further information concerning the guidelines on scoring quality attributes, read the Building & Construction Authority website on the section entitled *PQM Framework with effect from 1 November 2024*.

#### Aim

PQM aims to provide a more structured framework for non-price qualitative criteria (like quality) to be assessed alongside price. 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 of PQM

- Both price and non- price attributes are given weightings and are scored based on the guidelines provided. The tenderer with the highest combined price-quality-productivity score shall be awarded the project.
- The weightings among the price and quality attributes, the maximum points assigned to each quality attribute, and the scoring method for the quality attributes have to be made known upfront in the tender.
- PQM adheres to the procurement principles of transparency, openness and fairness and value for money. **Discriminatory** criteria should be allowed in line with the World Trade Organisation regulations.
- After the award of the tender, tenderers can request in writing for their tender performance.

#### Scoring Methodology for PQM

#### Price-Productivity-Quality Weighting and Quality Attributes

1. The following range of weightages can be considered, depending on project requirements such as the complexity of the project, and the extent of design input required from the tenderers:

Component	Weightages for building tenders	Weightages for civil engineering tenders
Price	40% - 60%	50% - 70%
Quality	60% - 40%, correspondingly	50% - 30%, correspondingly

## Tender Submissions

Two methods of tender submissions can be adopted: 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 with no subjective judgment. The safety performance based on MOM's List of Contractors with Demerit Points is an example of an objective scoring for quality attributes. Alternatively, the two-envelope system can be used.

### One-envelope system

The tenderers submit the price and quality attributes together in one envelope. The price and quality scores will be computed **at the same time** and the tenderer with the best combined score will **then** be awarded the contract.

### Two-envelope system

The tenderers submit the quality envelope separately from the price envelope. **Government agencies** would open and compute the quality score first, before opening the price envelope and computing the price scores and the combined scores. The tenderer with the best combined score will be awarded the contract.

## Scoring Methodology

### Price Component

1. The maximum price score will be awarded to the bidder who submits the lowest tender price. The price scores of the other tender prices will be inversely proportional to the lowest tender price. The formula below shall be used to compute the Price-score (P-score).

*Price Score (P-Score) = (Lowest Tender Price)/(Tenderer's Price) x Price Weightage*

2. Except for the attendance fees on nominated subcontracts, the provisional sums and value of the nominated subcontracts should not be included in the tenderer's price (P-score) **(both numerator and denominator)** when calculating the price score.
3. Any alternative bid submitted by any tenderer will be treated as a separate bid and be assessed accordingly, provided that the client allows such an alternative bid, and it must meet the technical requirements.

### Quality Component

1. The Quality score will be calculated from the summation of past performance, safety performance and the GPEs' own quality attributes as follows:

$$\begin{array}{lclclclclcl} \text{Quality score} & & \text{Past} & & \text{Safety} & & \text{Environmental} & & \text{GPE's Own} \\ (\text{Q-score}) & = & \text{Performance} & + & \text{Related} & + & \text{Sustainability} & + & \text{Quality} \\ & & & & \text{Attributes} & & & & \text{Attributes} \end{array}$$

2. Attributes covered under the Quality component include:
  - a) Past Performance (compulsory). This could include performance in past or ongoing projects in areas such as timeliness and quality (based on C41 reports and/or GPEs' in-house performance assessment system). To recognise contractors which have provided quality work in past projects, the past performance is a mandatory attribute. Please refer to Table 1 or Table 2 for the minimum weightage. **The information in C41 Report is published by the Building and Construction Authority (BCA) and only accessible to Government Procuring Entities (GPE) and Town Councils (TC) in Singapore to evaluate construction and construction-related tenders.**
  - b) Safety-related attributes (compulsory). This could include safety performance based on the Ministry of Manpower (MOM) Safety Demerit Point System, GPEs' in-house safety performance score or records. To give due emphasis to site safety, the safety performance is a mandatory attribute. Please refer to Table 1 for the minimum weightage.

c) Environmental Sustainability Attributes (compulsory – only applicable to tenders with an estimated construction cost (without contingency sum) above \$50 million raised after 31 January 2025). This may include:

- i. Climate-related disclosures in accordance with international standards
- ii. Adoption of practices that decarbonise the construction work processes such as electrification of construction equipment that are conventionally fuel-powered
- iii. Green Certifications and Qualifications
- iv. Proposal on sustainable construction practices complete with analysis on the environmental benefits and emission impact

d) GPEs' own Quality attributes, e.g.:

- i. Relevant track records of tenderer or specific competencies that enhances the tenderer's suitability for the project;
- ii. Project Specific Proposals including work methods and resources assigned to the project;
- iii. Awards or other attributes (if any);
- iv. Contractors' productivity efforts where technical proposals are sought as part of tender evaluation; and
- v. Relevant key transformation areas under the Built Environment Industry Transformation Map (BE ITM) e.g. Integrated Planning & Design (IPD) and Advanced Manufacturing & Assembly (AMA) related quality attributes.

3. The range of the weightages of the quality attributes are shown in Tables 1 and 2.

Table 1: Range of weightages of the quality attributes

% of Overall PQM Score				
	Building			
	Civil Engineering (CE)			
Price weightage	70%	60%	50%	40%
Quality weightage	30%	40%	50%	60%
Safety-related attributes	Min. 5.0%	Min. 6.0%	Min. 7.5% (3)	Min. 9.0%
Past Performance	Min. 3.0%	Min. 4.5%	Min. 6.0% (3)	Min. 7.5%
Environmental sustainability	Up to 5.0%	Up to 5.0%	Up to 5.0%	Up to 5.0%
GPEs' own quality attribute	Max 22%	Max 29.5%	Max 36.5%	Max 43.5%

4. GPEs will decide which attributes are relevant for a particular project and assign the maximum points for each quality attribute.
5. The scoring method for the specific quality attribute selected shall be set by the GPEs. Either of the following approaches can be adopted for the scoring method:
  - 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 tenderers 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 tenderers which fare worse or better can score lower or higher according to their relative performance. Alternatively, firms which fare worse can be given no points.
    - ii. The benchmark performance can be set at 100% of the quality points and tenderers which do worse can score less or no points.
  - b) Ranking method – This is used for attributes where it may be difficult to peg a benchmark performance level e.g. for project specific proposals. GPEs can rank the tenderers based on such attributes and allocate quality points according to the relative merits of the proposals.
  - c) Banding method - Similar to benchmark performance method, the scoring for this method is based on bands rather than on reference made to a fixed benchmark. The range and allocated score for each band will be decided by the agency depending on how the agency wishes to treat tenderers that fall into each band.
  - d) Raw score method – This is used for quality attributes such as the project specific proposal in which there will be subjective assessment involved. The scoring will then be based on a list of sub-attributes which describes how points will be assigned to each area of the proposal, agencies could give any score from 0 to the maximum score assigned for the sub-attribute to the tenderer based on the extent to which the tenderer has met the specific evaluation criterion. A two-envelope system shall be adopted for any specific evaluation criterion involving subjective assessment, e.g. project specific proposals.
6. Quality Score Computation - The maximum quality score will be awarded to the tenderer with the highest total raw quality points. The quality score of the other tenderers will then be calculated proportionally to the highest total quality points. The Quality-score (Q-score) will be calculated as follows:

*Quality-score (Q-score) = [Tenderer's total Quality Points / Highest total Quality Points] x Quality Weightage*

#### Optional Requirements for Quality Attributes

GPEs may choose to adopt any of the following optional requirements:

- Set a specific Quality attribute as a minimum qualifying criterion, which must be stipulated upfront in the tender documents so that potential tenderers which do not meet this criterion need not tender. This is to minimise the wastages in the firms' tendering efforts. If any GPE intends to specify track record as a minimum qualifying criterion, it should not be overly onerous such that it limits the number of eligible tenderers unnecessarily; or
- Set a minimum total Quality points for tenderers to meet. Tenders which do not meet the minimum total Quality 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.

### **Information to be made known in tender documents**

The following items must be clearly made known at tender stage:

- Price-Quality weightage.
- Quality attributes applicable and their assigned maximum points.
- Scoring method for each attribute. Benchmarks used in the benchmark performance method must be made known, together with the scoring method on how tenderers who perform better or worse than the benchmark.
- Any minimum qualifying criterion for a specific quality attribute, which, if not met, would disqualify the bidder (if applicable).
- Any minimum total quality points below which bidders will not be further considered (if applicable).

### **Hong Kong Housing Authority's Three-envelope System**

The Hong Kong Housing Authority had been encouraging innovations for green design and construction. An innovative "3-Envelope System" was launched in 2009 to procure an integrated design and build contract on a 5.7-hectare site with existing piles at Kai Tak Site 1B, based on price, quality and innovation. It offered a unique opportunity with constraints for tenderers to innovate in the delivery of some 8,000 flats with a greening ratio exceeding 30%. The additional Envelope requires tenderers to propose any specific innovations plus the corresponding price adjustments.<sup>6</sup>

The first envelope includes the technical bid which only relates to the client's design and proposal. The second envelope requires tenderers to (a) list any alternative

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<sup>6</sup> Chartered Institution of Civil Engineering Surveyors, Hong Kong website, retrieved from:

<http://www.cices.org.hk/home.php?lang=tc&page=event&page2=&eventid=85&showoldevent=1>

proposals as innovations, and (b) corresponding benefits and costs. **The unsuccessful tenderers would at that point of time be paid a one-off lump sum (subject to a specified maximum)** for acquisition of intellectual property right for their innovations, especially for Design and Build contracts.<sup>7</sup> The last envelope will contain the price bid.

Read up the seminar slides of Ada Fung JP at the Seminar on Research and Development Work: *Innovation Management in Infrastructure Development*; by Deputy Director of Housing and Development, Hong Kong Housing Authority;

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<sup>7</sup> Fung, Ada JP. Seminar on Research and Development Work: *Innovation Management in Infrastructure Development*; by Deputy Director of Housing and Development, Hong Kong Housing Authority.

### 3.7.2 Quality-Fee Method (QFM) for Selection of Consultants

#### Quality-Fee selection Method (QFM) Framework

The QFM is a structured tender evaluation framework for the selection of the most suitable bid proposal that provides the best value for the tender. It is a competitive selection method that considers both Fee and Quality proposals submitted by firms. QFM is therefore based on both fees and non-fees attributes (i.e. quality) to evaluate construction-related consultancy tenders. QFM adopts a range of weightages for evaluating attributes and formalising the assessment of non-fees attributes into quantitative scores. The framework optimises value by enabling the tenderer with the highest combined QFM score (i.e. best offer) to be selected for award. QFM is adopted in conjunction with the Public Sector Panels of Consultants (PSPC). The QFM framework is revised in line with the Government's efforts to transform the built environment sector under the Construction Industry Transformation Map (ITM).

The framework applies to all public sector consultancy tenders with the estimated construction cost (EPV) exceeding the quotation limit called under the Public Sector Panels of Consultants (PSPC).

A separate version of the QFM was also implemented in May 2020 for the procurement of accredited checking (AC) services. The QFM for procurement of AC services aims to place a strong emphasis on quality in the evaluation of procurement for AC services. The evaluation method shall be based on the principles of QFM. The QFM for AC (i.e. QFM (AC)) is applicable to all procurement of AC services through quotation and tender approach.

#### Key principles of QFM

1. Primarily Quality-focused: The QFM takes into consideration Quality and Fee proposals submitted by firms in the tender. It is primarily Quality-based with a higher weightage given for Quality component. This includes stating explicitly the weightages of the various quality criteria sought for in the quotation or tender, on top of stating the Quality: Fee weightage. The emphasis is on the firms' capacity and capability to undertake the project and quality of service; and to discourage fee-diving behaviour in tenderers. Fee score for low outlier bids is capped. Outlier bids are excluded from the computation of the average fees to prevent skewing of the average.
2. Open and Transparent: The QFM procedures will be operated in an open and transparent manner to ensure all tenderers' proposals are evaluated objectively and not affected by the fees proposed. The QFM adopts a two-envelope system, to ensure that the evaluation of each tenderer's Quality proposals is objective and not affected by the respective Fees proposed.

3. Resource Efficient: The QFM will be carried out in an efficient manner to reduce costly efforts in tender pre-qualifications, tendering procedures and tender evaluation. This includes the conducting of a shortlisting exercise prior to the actual tender so as to optimize resources. Tenders are only opened to tenderers from specific PSPC panels, which provides the first sieve to ensure firms' capacity and capability. 5 tenderers are selected for tender stage through the Expression of Interest (EOI) shortlisting process. Standard templates are used for the shortlisting and tender exercise and optimizing the specifications of documents required.

The main features of QFM include:

- (a) Weighting for QFM: The following range of weightages can be considered, depending on project requirements such as the complexity of the project
  - i. Quality: 70% - 90%
  - ii. Fee: 30% - 10% correspondingly
- (b) Separate shortlisting and tender Stage: In order to optimise resources of the GPEs and the industry, a shortlisting exercise called the Expression of Interest (EOI) stage, will be carried out before the actual tender so as to restrict the tender to five bidders. The shortlisting will be performed either by ballot (1-stage QFM) or by selection by merits (2-stage QFM) based on the Estimated Construction Cost of Project as shown below:

Project value	1-stage QFM	1-stage QFM or 2-stage QFM	2-stage QFM
	(Balloting)	(Balloting or Selection by merits)	(Selection by merits)
	Up to \$50mil	Above \$50mil and up to \$105mil	Above \$105mil

- (c) Two-envelope system – The Quality Proposal envelopes are first opened and computed before the envelopes for the Fee proposals are opened and the Fee scores computed. This is aimed at maintaining objectivity and eliminating the possible influence of Fees on the evaluation of Quality.

### Scoring Methodology

The QFM score is calculated by adding up the Quality and Fee scores.

$$\text{QFM score} = \text{Quality score (Q-score)} + \text{Fee score (F-score)}$$

## Quality Score

The tenderer with the highest total Quality Points shall be given maximum Quality score based on the quality weightage (e.g. if the quality weightage is 70%, the tenderer should receive a maximum Quality score of 70). The Quality scores for the other tenderers shall then be calculated in proportion to the highest total Quality points. This is to enhance differentiation in Quality scores to better influence the award of the tender to keep QFM quality focused. The Quality Points shall be calculated by adding up the Consultants Performance score (CP) and other quality attributes:

$$\text{Quality score (Q-score)} = \frac{\text{Highest total Quality Points among all tenderers}}{\text{Quality weightage}}$$

The Quality Points are derived by adding up the Consultants Performance score (CP) and other quality attributes:

$$\text{Quality Points} = \text{Consultants' Performance} + \text{Other Quality Attributes}$$

1. Compulsory attribute: Consultants' Performance score (CP)
  - a) This is based on the overall consultants' performance scores derived from Consultants' Performance Appraisal System (CPAS) i.e. CPAS-score and/or other agencies' in-house consultants' performance score. The consultants' past performance shall have a minimum weightage of 10% out of the total QFM weightage.
  - b) Tenderers shall be awarded raw scores based on the rankings of tenderers past performance scores:

Ranking based on tenderers' CPAS scores	Points (assuming 10% weightage is assigned to past performance)
1 <sup>st</sup>	10
2 <sup>nd</sup>	7
3 <sup>rd</sup>	5
4 <sup>th</sup>	3
5 <sup>th</sup>	1

- c) For cases where only one or none of the tenderers has consultant's performance score (e.g. because the tenderer has not completed any public sector projects before), all tenderers (including the tenderer that has consultant's past performance score) will have 0 point for past performance.
- d) For cases where at least two of the tenderers have consultant's past performance score, those without a past performance score shall be given the average performance score across all conforming tenderers and accorded points after ranking.

2. Other Quality attributes. This is generally derived from the assessment of the other quality attributes which can include the following:
  - a) Written Proposal - a written outline of the firm's approach and understanding of agencies' project requirements and constraints but does not include any form of drawings or presentation (e.g. sketches or visuals with design solutions). This shall be limited to two A4 sheets to minimise wastage of tendering efforts and resources by firms
  - b) Concept Design Proposal (for 2-stage QFM tenders only). Within the Quality component, the evaluation criterion on Concept Design Proposal is usually given significant Quality points.

The Written Proposal and Concept Design Proposal could include evaluation of innovative proposals in the relevant key transformation areas under the Built Environment Transformation Map:

- i. Advanced Manufacturing & Assembly (AMA) / Construction productivity. For example, adoption of Prefabricated Prefinished Volumetric Construction, Mass Engineered Timber, structural steel, mechanical & electrical (M&E) buildable design features, standardisation and any other proposed innovations to improve construction productivity,
- ii. Integrated Planning and Design (IPD). For example, proposed BIM team and its BIM capabilities and experience both at organisation and personnel level, pre-contract BIM Executive Plan (e.g a write-up on how the Consultants, together with the BIM team, intends to adopt BIM from the commencement of preliminary design through project completion),
- iii. Environmental Sustainability. For example, considerations of passive design strategies,
- iv. Design for Maintainability (DfM). For example, improves building performance for long-term benefits.

- c) Other quality attributes. Other quality attributes could include but not limited to the following:
  - i. The company's track records
  - ii. Relevant expertise, accreditation and experience of the project team
  - iii. Awards attained by the company (if any).

#### **Fee Component**

#### **Fee Score**

Tenderers shall quote for Fee proposals as specified in the tender documents, which could be either be by percentage of final construction cost (%), or by Lump Sum (\$).

Measures to reduce fee diving. To discourage firms from quoting excessively low fees, the formula below in Scenario B shall be employed for the calculation of Fee score where there are fees which are more than 20% below of the average quoted

(“perceived fee-diving”). Tenderers with fees which are more than 20% below the average shall be awarded no further advantage than the score awarded to the fee at 20% below the average ( $F_{average}$ ).

#### Fee score Calculation

Calculation of average Fee ( $F_{average}$ ): Outlier bids shall be excluded from the calculation of the average fee to prevent skewing of the average fee. Outlier bids are defined as bids that are more than 20% below (low outlier) or 50% above (high outlier) the average fee of all conforming bids. The steps to discard outlier bids in the calculation of  $F_{average}$  are as below:

- a) Exclude the outlier bid sequentially by first excluding any high outlier and computing the new average. After which, based on the new average, exclude any low outlier and compute the  $F_{average}$ .
- b) Check that the number of outlier bids is less than half of the qualified bids. Otherwise, agencies shall disregard para a) and consider all qualified bids in the calculation of  $F_{average}$ .

Apply Fee-score formula. The two fees formula to be adopted are as below:

a) Scenario A – Where the lowest fee quoted is higher than or equal to  $0.8F_{average}$

*Fee score (F-score) = (Lowest Proposed Fee / Tenderer's Proposed Fee) x Weightage*

b) Scenario B – Where there is perceived fee-diving i.e. the lowest fee quoted is lower than  $0.8F_{average}$

*Fee score (F-score) = (0.8F\_{average} / Tenderer's Proposed Fee) x Weightage*

$$\text{where, } F_{average} = \frac{\sum \text{Proposed Fees of all Conforming Bids}}{\text{No. of Conforming Bids}}$$

Any fee quoted lower than  $0.8F_{average}$  will get the maximum F-score.

#### Evaluating Collaborative Bidding

The evaluation methodology for the various attributes when evaluating collaborative bids by firms (i.e. a consortium of two or more PSPC firms of the same discipline) which wish to tender for higher value projects under Collaborative Bidding is shown in the table below:

QFM Components	QFM Attributes	Evaluation Methodology
Quality (Q)	Past performance i.e. CPAS scores	Take highest score amongst the firms within the consortium
	Firm's Track Record	
	Awards/Certifications	
	Expertise and experience of personnel	
	Design Proposal/Approach	
Fee (F)	Fee Proposal	Assessed as one consortium

For further information on the latest QFM framework (with effect from [1 December 2025](#)), please refer the BCA website. **The details include the various stages of QFM, collaborative bidding and the use of the Multi-disciplinary Team (MDT) Approach.**

## **3.8 Classification and Registration of Contractors, Suppliers and Consultants**

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### **3.8.1 Government Electronic Business (GeBIZ)**

GeBIZ is the Singapore government's one-stop e-procurement portal on which all public sector's invitations for quotations and tenders are posted. Contractors and suppliers can look out for public sector procurement opportunities, download tender documents, and submit their tenders online.

#### **Introduction**

Firms which intend to tender for the supply of goods and/or services to the public sector may be required to have valid Government Supplier Registration (GSR if stated in the tender documentation) as one of the evaluation criteria for the tender<sup>8</sup>.

#### **Supply Heads and Financial Grades**

The categories of Supply Heads under the Government Registration Authority (GRA supply heads) are shown on the GeBIZ website. Registration under each supply head may be for one of the financial grades as stipulated.

#### **Registration Criteria**

The Government has set forth the minimum evaluation guidelines and criteria to be met by applicants for consideration during the registration. At the time of application, the applicant's Net Tangible Asset (NTA) must be positive and must meet the minimum value of S\$5,000.00.

#### **Types of Government Supply Heads**

The applicants' products/services which they are supplying must fall within the Supply Head which they intend to register.

The main category of Supply Heads for events and for facilities management is the Supply Heads for goods/services (excluding medical supplies/equipment and

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<sup>8</sup> GeBIZ website, retrieved from: <http://www.gebiz.gov.sg>

services). Some common Supply Heads which are related to **events** include work descriptions like:

- Exhibition/Event Management Services (event management, booths, stage, backdrop and lighting, etc.)
- Public Relations and Counselling Services
- Survey Services (especially for post-event evaluation)
- Advertising and Graphics Services
- Transportation and Towing Services
- Food and Beverages
- Audio Visual, Photographic and Optical Products and Audio Visual Production Services
- Rental of Premises and Hiring of Miscellaneous items (e.g. rental of premises for warehousing, training, recreation, hotels, housing, and lodging services, etc.)
- Hiring of office equipment, furniture, temporary shelter, tables and chairs, etc.

Some common Supply Heads which are related to **facilities management** (FM) include work descriptions like:

- Management Services (including management of carparks, food-courts, kiosks and real estate management, etc.)
- Consultancy Services (Professional services, e.g. accounting, auditing, architectural, legal, insurance, engineering services, etc.)
- Security Services
- Cleaning Services (All forms of cleaning, e.g. toilet cleaning and maintenance of aquariums and fish ponds, etc. This however excludes laundry service, cleaning and maintenance of building which comes under BCA.)

### **Financial Grades and Evaluation Criteria**

- There are **different** financial grades which vary according to the tendering capacity.
- The NTA and the Turnover/Sales/Revenue are the two evaluation criteria. Hence, the audited financial statements (for companies) and the profit and loss accounts and balance sheet for businesses (e.g. sole proprietors, partnership, etc.) are the key documents required to be submitted for evaluation.

### 3.8.2 BCA Contractors Registration System

#### Introduction

The Contractors Registration System (CRS) was established to register contractors and suppliers who provide construction-related goods and services to the public sector. It is administered by the Building and Construction Authority (BCA) to serve only the procurement needs of government departments, statutory bodies and other public sector organisations<sup>9</sup>.

#### Classification of Contractors

Contractors registered with BCA under the CRS are classified into a total of 65 workheads under the following five major groups of registration, depending on the scope and type of work that they are involved in:

1. Construction Workheads (CW)
2. Construction Related Workheads (CR)
3. Mechanical & Electrical Workheads (ME)
4. Trade Heads (TR)
5. Regulatory Workheads (RW) – e.g. window contractors and lift contractors

Each registration head is financially graded. The financial grade also sets the tendering limit for the various categories of contractors and suppliers except for the Tradeheads (TR) Workhead which requires a minimum paid-up capital of \$50,000. The financial grade for the main categories also sets the tendering limit for the various categories of contractors and suppliers.

Registration status shall be accorded only to firms which BCA considers as having sufficient resources, experience and technical expertise to undertake contracts of a nature and size as defined by the Registration Head and the grade allocated.

#### Registration Requirements

Contractors are required to meet the following basic registration requirements if they intend to apply for any of the registration heads:

1. Track record and Performance - Valid projects with documentation proof, endorsed and assessed by clients.
2. Financial Capacity - Sufficient financial resources to meet the financial commitments for the respective work heads and grades. Evidence will come from valid audited accounts, paid-up capital, net worth, etc.

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<sup>9</sup>*Building & Construction Authority Website: Electronic Builders Licensing And Contractors Registration Systems, retrieved from: <http://https://www.bca.gov.sg/eBACS/>*

3. Management certifications - SAC Accredited ISO9001, ISO14001, OHSAS 18001, etc.
4. Relevant technical personnel - Full-time employed, recognised professional, technical qualification, valid licenses, etc.
5. Builder license for various categories and workheads including CW01, CW02, CR08, CR10, CR12 and CR15.

BCA will only approve and accord the registration status to companies that meet the requirements. All registrations are valid for 3 years.

### 3.8.3 BCA Public Sector Panels of Consultants

The Public Sector Panels of Consultants (PSPC) is established by BCA that provides a list of companies that offer consultancy services for public sector building and construction projects and categorised by different disciplines and different project cost ranges. The five disciplines include architectural, civil and structural, mechanical and electrical, quantity surveying and project management services. Firms which have met the criteria for listing and are successful in their application to the PSPC will be published in this list<sup>10</sup>.

The PSPC also show the tendering limits (set under 4 different panels) for various disciplines and the short-listing methods under the QFM.

## 1.9 Learning and Reflection Activities

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1. In what ways does the BCA's Price-Quality Method (PQM) of tender evaluation differ from the Hong Kong Housing Authority's Three-envelope System?
2. For each of the following cases, carry out the following tasks:
  - (a) Recommend a suitable tendering method for the project and justify the choice your choice of selection.
  - (b) Describe its procedures, justify the choice your choice of selection.
  - (c) Highlight the advantages and disadvantages of the method that you have recommended.

### Case 1

Company A is an international chain of full-service hotels and resorts and owns a hotel in a prime district in Singapore. It has acquired the adjoining site for an extension which is estimated to cost some \$56 million. The board of Directors

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<sup>10</sup> Building and Construction Authority Website: Public Sector Panel of Consultants; retrieved from: <https://www1.bca.gov.sg/procurement/pre-tender-stage/public-sector-panels-of-consultants-pspc>

would like the project to be carried out by a particular contractor who has completed some work to their satisfaction before. But the Board has maintained that it will not insist on this if some other contractors are found to be more suitable and that the price must be right. A decision is made to place an advertisement in the local press to call for pre-qualification of potential contractors for the project.

### Case 2

The Ministry of Education (MOE) is calling for tenders for the upgrading of a primary school at Hillcrest Road. The contract value is estimated to be S\$13.8 million and the contract period is 18 months. When completed, the project will yield a total gross floor area of about 28,000 square metres.

3. In Case 1 of Question 2, justify the need for this pre-qualification notice.
4. You are required to evaluate the tenders and submit a tender report to your client, MOE in Case 2 of Question 2.
  - (a) Briefly explain how you will carry out the tender evaluation and describe the most important items that you will include in your tender report.
  - (b) MOE intends to adopt the Building and Construction Authority (BCA)'s guidelines of the Price-Quality Method (PQM) to evaluate the tenders. Advise the client on how the quality scores, the price scores and the combined scores are derived.
5. 'Some Government agencies are prepared to adopt a set of evaluation criteria for tenders submitted that is not based solely on the tender price.'

Carry out Internet research (or by other means) on the evaluation criteria used for the following contracts to support the above statement.

- (a) **The revised tender evaluation process and criteria for commercial child care centres in Housing and Development Board premises.**
- (b) **The tender evaluation criteria for the Public Private Partnership (PPP) contract of the Singapore Sports Hub project.**

## **1.10 Summary**

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- The principles of good tendering practice are often adopted when appointing contractors or suppliers in competition and they should include: clear procedures to ensure fair and transparent competition; the ability to obtain feedback and competitive tenders; discouraging tenderers attaching qualifying conditions for tender submissions; limiting the number of qualified contractors based on suitable criteria; consistent tender conditions for all bidders; respecting all parties' confidentiality; allowing sufficient time

for preparing and evaluating tenders; providing sufficient information to enable the preparation of tenders; assessing and accepting tenders based on quality and price; taking measures to prevent collusion; making sure tender prices remain unchanged on an unaltered scope of works; using standard contracts and forms where available; and fostering commitment to teamwork from all parties.

- The prequalification process can help to reduce the number of bidders on the list to the most qualified to tender for the project. Proper tender procedures should be followed with regards to the tender documentation, opening of tenders, examining of tender documents and evaluating the tender.
- The fundamental factors to be considered in the selection of a suitable contractor during the tender exercise include the analysing the price, method of pricing, the contractor's previous relevant experience with this type and scale of work, performance record, current workload, financial strength, reputation, relationships with the client, and his management and design expertise.
- Open tendering, selective tendering and negotiated tenders are the three basic methods of tendering. The other alternative methods include the two-stage tendering and the use of Request for Proposals, the latter being commonly used for the procurement of event services.
- Tenders should be assessed based on both criterion of quality and price. Current practices in Singapore include the Price Quality Method (PQM), a framework based on **price, quality and productivity** attributes for the purpose of evaluating of construction tenders; and the Quality-Fee Selection Method (QFM), for the evaluation of building and construction consultancy tenders in the public sector **based on fee, productivity and quality attributes**.
- A list of registered contractors, suppliers and even consultants is compiled for use by the BCA Contractors Registration Systems and the BCA Public Sector Panels of Consultants. GeBIZ is the Singapore government's one-stop e-procurement portal where all the public sector's invitations for quotations and tenders are posted. Contractors and suppliers can also search for government procurement opportunities, download tender documents, and submit their bids online.

#### REFERENCES:



1. Allen, J. (2002). *The Business of Event Planning: Behind-the-scenes Secrets of Successful Special Events*, Ontario: John Wiley & Sons.
2. Ashworth, A. & Hogg, K. & Higgs, C. (2013). *Willis's Practice & Procedure for the Quantity Surveyor*, 13th ed., Oxford: Blackwell Science Ltd.
3. Baily, P., Farmer, D., Crocker, B., Jessop, D. & Jones, D. (2015). *Procurement Principles and Management*, 11<sup>th</sup> ed., Edinburgh Gate, Harlow, Essex: Pearson Education Limited.
4. Hackett, M., Robinson, I. & Statham, M. (2016). *The Aqua Group Guide to Procurement, Tendering & Contract Administration*, Oxford: Blackwell Publishing.

5. Ramus, J.W. (1989). *Contract Practice for Quantity Surveyors*, 2<sup>nd</sup> ed., London: Butterworth-Heinemann Ltd.
6. Turner, A. (1997). *Building Procurement*, 2<sup>nd</sup> ed., London: MacMillan Press Ltd.

**INTERNET:**

7. Building & Construction Authority Website: *Contractors Registration System (CRS)*. Retrieved from: <https://www1.bca.gov.sg/procurement/pre-tender-stage/contractors-registration-system-crs>
8. Building & Construction Authority Website: *Price-Quality Method (PQM) in Tender Evaluation, with effect from 1 November 2024*. Retrieved from: from: [https://www1.bca.gov.sg/docs/default-source/docs-corp-procurement/pqm-framework-\(for-public\)-with-effect-from-1-nov-2024\\_final.pdf?sfvrsn=c959718d\\_5](https://www1.bca.gov.sg/docs/default-source/docs-corp-procurement/pqm-framework-(for-public)-with-effect-from-1-nov-2024_final.pdf?sfvrsn=c959718d_5)
9. Building and Construction Authority Website: *Public Sector Panel of Consultants*. Retrieved from: <https://www1.bca.gov.sg/procurement/pre-tender-stage/public-sector-panels-of-consultants-pspc>
10. Building & Construction Authority Website: *Quality-Fee Method (PQM) in Tender Evaluation, with effect from 1 December 2025*, Retrieved from: from: <https://www1.bca.gov.sg/docs/default-source/docs-corp-procurement/qfm---with-effect-from-1-december-2025.pdf>
11. Chartered Institution of Civil Engineering Surveyors, Hong Kong website, retrieved from: <http://www.cices.org.hk/home.php?lang=tc&page=event&page2=&eventid=85&showoldevent=1>
12. Fung, Ada JP. Seminar on Research and Development Work: Innovation Management in Infrastructure Development 31 May 2010; by Deputy Director of Housing and Development, Hong Kong Housing Authority; retrieved from: from: [http://www.civil.hku.hk/cicid/3\\_events/95/95\\_ppt\\_1.pdf](http://www.civil.hku.hk/cicid/3_events/95/95_ppt_1.pdf)
13. GeBIZ website, retrieved from: <http://www.gebiz.gov.sg>
14. Ling Han (2016). "The Problem with PPPs in Singapore", *The Diplomat*, 26 September 2016, Retrieved from: <https://thediplomat.com/2016/09/the-problem-with-ppps-in-singapore/>
15. Ministry of Finance website: Government Procurement, retrieved from:
16. <https://www.mof.gov.sg/policies/government-procurement/overview/>