

GUIDELINES FOR CLIENTS:

HOW TO SELECT AND APPOINT A CONSULTING ENGINEER

August 2005

PREFACE

The role of Consulting Engineers and other professional service providers in Namibia is essential to the sustainability and success of any construction project, be it in the provision of basic services such as water, sanitation and electrification, infrastructure, housing, healthcare, and industrial development.

At the core of any successful project involving a Consulting Engineer is a sound Client/Consulting Engineer relationship based on a spirit of mutual trust and confidence.

The Association of Consulting Engineers of Namibia is committed to excellence and the maintenance of appropriate quality of the professional services provided, with due attention to suitability of purpose, quality, sustainability, cost effectiveness, and integrity.

The purpose of this document is to contribute towards the process of engendering a successful Client/Consulting Engineer relationship throughout the selection process as well as the project execution.

ACEN employs a part time, independent Executive Officer who is a professional engineer, with 25 years professional experience to assist and advise Clients and potential Clients with the following services:

- Advise and assist with the selection of a Consulting Engineer for projects.
- Advise on procedures and acceptable practices when calling for proposals for engineering services.
- Assist with the drawing up of Professional Tenders and the adjudication thereof (a fee will be payable for this service).
- Distribute tender advertisements to all Member Firms.
- Advise and assist Clients in case of a dispute with a Member Firm of ACEN.
- Assist Clients with interpretation of the Model Forms and Fee Scales.

Clients should please note that the Executive Officer can not give a ruling or opinion on technical or legal matters in a specific contract. He can however, provide a list of individuals who are qualified and willing to act as arbitrators, mediators or adjudicators.

TABLE OF CONTENTS

| 1. | INTRODUCTION | 4 |
|-----|--|----|
| 1.1 | BACKGROUND | 4 |
| 1.2 | PURPOSE | 5 |
| 1.3 | IMPORTANCE OF PROPER CONSULTANT SELECTION | 5 |
| 2. | FACTORS TO KEEP IN MIND WHEN SELECTING A CONSULTANT | 6 |
| 2.1 | TRANSPARENCY | 6 |
| 2.2 | FAIR COMPETITION | 6 |
| 2.3 | FRAUD AND CORRUPTION | 6 |
| 3. | ACCEPTABLE SELECTION METHODS | 7 |
| 4. | HOW TO DECIDE ON THE MOST APPROPRIATE SELECTION PROC | |
| 4.1 | INTRODUCTION | |
| 4.2 | USING THE NATURE OF THE PROJECT AS BASIS | |
| 4.3 | USING THE ESTIMATED FEES OF THE PROJECT AS BASIS | 8 |
| 5. | DETAIL PROCEDURES FOR THE FOUR SELECTION PROCESSES | 9 |
| 5.1 | DIRECT APPOINTMENT | 9 |
| 5.2 | PANEL | 9 |
| 5.3 | QUALITY BASED SELECTION | 10 |
| 5.4 | QUALITY - COST BASED SELECTION | 19 |

1. INTRODUCTION

1.1 BACKGROUND

The engineering profession in the Republic of Namibia, including the ACEN, is controlled and regulated by the Engineering Professions Act of 1986

The Association of Consulting Engineers of Namibia encourages an orderly system for the selection of Professional Consultants based on competitive evaluation of relevant criteria. The Consulting Engineer must have the ability, experience and integrity to provide the standard of service required by the Client. The best project results can only be achieved when there is full and mutual trust between the Client and his consulting engineer.

Consulting Engineers should generally be selected on the basis of the value they contribute to projects and the quality of the service they will render.

The services provided by a Consulting Engineer are a professional service and are by nature difficult to define exactly. Procurement of consulting engineering services based on price only will lead, in the best scenario, to an unsatisfactory final product and, in the worst case, to catastrophic disasters including loss of life, injury and loss of huge sums of money.

There are further points to consider when procuring consulting engineering services:

- While it is possible to write a performance specification for the physical aspects of the project itself, it is very difficult to write suitable specifications for how a consulting engineer should perform. Therefore, if the competition is based on price, different consulting engineers may anticipate providing very different levels of service.
- Successful consulting services depend on sufficient time spent by properly qualified people to provide the optimal solution. Thus the method of selection should not force fees down to the point where the consulting engineer cannot afford to assign properly qualified staff for a sufficient period of time. Inadequate fees lead to the reduction of the scope and quality of the service. Lower consulting fees give no assurance of lower total project costs, because inadequate engineering often leads to higher construction and subsequent maintenance costs.

1.2 PURPOSE

The purpose of these guidelines is to present the commonly used methods of consultant selection, to explain the respective procedures and to combine all in one compact document, as well as to emphasize and explain ACEN's policies on the subject.

The overriding concern of the ACEN is the maintenance of appropriate quality of the professional services provided, with due attention to suitability of purpose, economy and value, sustainability, efficiency, integrity, management of risks, public welfare, fair opportunity for all consulting firms and transparency of the process.

1.3 IMPORTANCE OF PROPER CONSULTANT SELECTION

Selecting the project consultant is one of the important decisions an owner or Client makes in the life of the project. The success of any project often depends upon obtaining the most able, experienced and dependable expertise available at an appropriate cost.

The paramount importance of the selection of the right consultant for each particular project is widely acknowledged. At recent public meetings, experienced senior officials of major multilateral development banks have stated "Clients should become better aware of the importance of consultant selection, and of the impact of the choice of the consultant on the overall quality of the completed project", and "Consultant selection is highly critical to the success of the entire project; to save a small percentage, perhaps 1% or less of project cost, is not worthwhile, considering the potential risks."

The best project results are achieved when there is a true professional relationship of absolute trust between the Client and the consultant. This is because the consultant must make sound, objective decisions and act in the best interest of the Client (and the owner where not the Client) as well as of the public. The method of selection should therefore seek to develop mutual confidence and trust.

A consulting engineering industry comprising consulting firms operating independently in a competitive market can make substantial contributions to sustainable development, by undertaking work that is performed less effectively by government entities, and by increasing the industry's maturity and effectiveness. These are other strong reasons for the adoption of proper consultant selection.

2. FACTORS TO KEEP IN MIND WHEN SELECTING A CONSULTANT

2.1 TRANSPARENCY

ACEN recommends, in the interests of all parties (stakeholders) in a project, that the maximum degree of transparency be maintained during any consultant selection, regardless of the method used and the source of the project financing.

To improve transparency, ACEN recommends that the scope of work for each assignment be clearly defined in advance, that the quality standards for all projects be clearly set forth and rigorously enforced, and that risk allocation is fair and clearly understood by all parties, rather than interpreted by individual consultants.

2.2 FAIR COMPETITION

ACEN recommends that, in the public interest, consulting firms compete with each other for providing consulting services on a transparent, "level playing field" basis.

Furthermore, whenever publicly funded bodies such as government parastatals, universities or similar, and not-for-profit organizations compete (upon acceptable reasoning) with independent consulting firms, selection should be made exclusively by QBS. Normally, these not-for-profit organizations will be best employed in a sub-consultant role.

2.3 FRAUD AND CORRUPTION

Corrupt practices, such as bribery, fraud, collusion or extortion are morally, socially and economically damaging, and illegal in most if not all countries. They jeopardize the procurement process, and are basically wrong because they undermine the values of society. It is more than stealing funds, it is stealing trust.

ACEN has taken a proactive role in joining the worldwide effort to combat corruption by supporting international anticorruption initiatives, and by promoting high ethical standards.

Consulting firms should only participate in private or public competitive bidding under the highest standards of corporate ethics and competitive practices, and with total integrity in its transactions. If this is done, then in the long term, the firm, the industry and the public will be the beneficiaries.

3. ACCEPTABLE SELECTION METHODS

The Association of Consulting Engineers accepts the need of Clients to be flexible in the method of selection of Consulting Engineers and accepts the often stated requirement to competitive procurement.

The nature of professional engineering services however makes it unsuitable and dangerous to use price as the only or main basis for the procurement of services.

Four internationally accepted methods of procurement of engineering services have been identified and the use of any of these methods is encouraged by ACEN. These methods are:

- <u>Direct Appointment:</u> A non-competitive method based on trust, past experience and technical expertise, but normally not suitable for government and Clients dealing with public funds.
- <u>Panel:</u> A non-competitive method sometimes suitable for use by government and public sector Clients.
- Quality Based Selection (QBS): A competitive procurement system where consultants are required to submit technical proposals only and standard fee scales are used to determine the fee payable.
- Quality-Cost Based Selection (QCBS): A highly competitive method normally used in larger projects and international funded projects. This method requires highly skilled inputs from Clients and is normally too expensive to use for smaller and standard projects.

Some practical guidelines are given in Section 4 of this document for Clients to select the most appropriate selection method.

4. HOW TO DECIDE ON THE MOST APPROPRIATE SELECTION PROCESS FOR A SPECIFIC PROJECT

4.1 **INTRODUCTION**

This section gives a practical guideline to Clients how to decide on the most appropriate selection process for a specific project.

Clients are welcome to contact the Executive Officer of ACEN to discuss the pro's and con's of the various selection methods.

4.2 USING THE NATURE OF THE PROJECT AS BASIS

Projects can, generally be categorized as follows:

• **Routine** - these are projects where the tasks are of a straightforward nature involving mainly standard technologies in terms of which inputs are relatively well known and outputs can be readily defined. Larger

projects may occasionally require the consulting engineer to have a greater capacity and resources to undertake the work.

- **Complex** complex projects may also be small or large but are of such a nature that they require a higher level of technical skills and greater resources. Both inputs and outputs may not be readily identifiable or known. These projects may require skills other than normal engineering, such as management, policy and social development, strategic planning and research. The consulting engineer must be able to present a high level of technical skills and resource for the particular application.
- Specialist specialist assignments may also be large or small and require a very high degree of specialist skills or knowledge in a specific field. The work will be technically complex and will call for considerable innovation, creativity, expertise and/or skills. The need for specialist advice may often only be identified by the already appointed consulting engineer once a project has commenced and a Client should respect his consulting engineer's advice in this regard. Some examples of specialist assignments are certain geo-technical investigations, forensic engineering, mediations, etc.

The following table has been drawn up as a guideline to determine which selection process to use:

| Client Body | Routine | Complex | Specialist |
|---------------------------|---------|---------|------------|
| Government ministries and | Panel | Panel | Direct |
| Department | | QBS | QBS |
| Regional Councils | Panel | Panel | Direct |
| | | QBS | QBS |
| Municipalities | Panel | Panel | Direct |
| | QBS | QBS | QBS |
| | | QCBS | |
| Parastatals | Panel | Panel | Direct |
| | QBS | QBS | QBS |
| | | QCBS | |
| Private clients | Panel | Direct | Direct |
| | Direct | QCBS | QBS |

4.3 USING THE ESTIMATED FEES OF THE PROJECT AS BASIS

In many cases, specifically in Routine Projects, the estimated Value of Fees for the project might give Clients a fairly good idea of the most appropriate selection method.

The following table has been drawn up as a guideline:

| Estimated value of Fees excluding | Classification | Recommended |
|-----------------------------------|-----------------------|------------------|
| disbursements& VAT | | selection method |
| Less than N\$ 500 000 | Routine (small) | Panel |
| N\$ 500 000 to N\$ 1 000 000 | Routine (large) | Panel/QBS/Direct |
| Over N\$ 1 000 000 | Complex due to size | Panel/QBS/QCBS |
| Any value | Complex due to nature | Panel/QBS |
| Any value | Specialist | Direct/QBS |

Notes:

- 1. Recommended selection method as per table for client type
- 2. QCBS only recommended for projects with fee value over N\$ 1 000 000
- 3. QCBS not recommended for routine, complex by nature or specialist projects.

5. DETAIL PROCEDURES FOR THE FOUR SELECTION PROCESSES

5.1 **DIRECT APPOINTMENT**

Selection by **direct appointment** or **referral**, where a Client selects a consulting engineer on the basis of a previous successful relationship with a firm or by referral from a third party, is usually the best method of selection because it presupposes a spirit of mutual trust and confidence. Under certain circumstances, however, particularly in the case of public sector Clients, this method may result in favouritism and unfair preference being given to certain firms at the expense of others.

The ACEN Model Form for Engineering Services is normally used as basis for appointment of the Consultant.

5.2 **PANEL**

The **panel** system of selection is often used by public sector Clients. The panel method ensures that work is automatically rotated among the firms on the panel, using a number of specific selection criteria, such as:

- position on panel
- size of firm
- fields of competence
- locality of offices/s
- performance in the past
- empowerment criteria.

A panel system should ensure the fair distribution of projects among consulting engineers but it is mechanistic and does not encourage the spirit of free enterprise and competition between firms, it cannot always ensure that the most appropriate firm is selected.

An open system with maximum transparency is necessary from the Client's side to prevent any favourism.

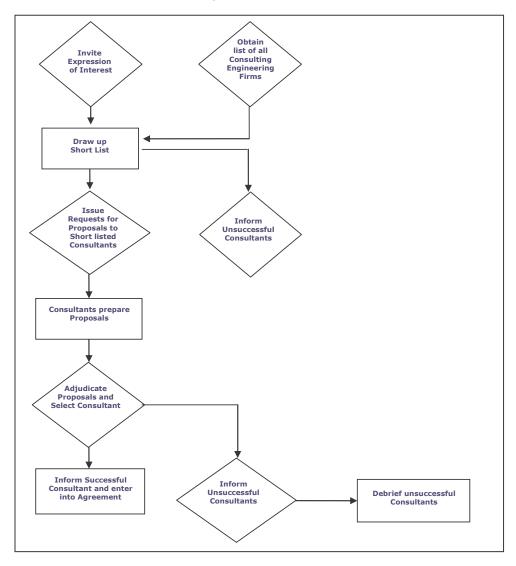
The ACEN Model Form for Engineering Services is normally used as basis for appointment of the Consultant.

5.3 QUALITY BASED SELECTION

5.3.1 Introduction

In the Quality Based Selection (QBS) method the Client selects the consulting firm on the basis of professional competence and experience, managerial ability, availability of resources. The Client prepares the Terms of Reference. Consultants submit technical proposals. The technical proposals are evaluated and used for the selection and the Model Form of Engineering Services is used as basis for payment.

PROPOSED FLOW DIAGRAM FOR QBS:



5.3.2 **Short listing**

The Client (or a consultant adviser) should examine the expressions of interest submitted by eligible consultants, and prepare a short list. Consideration of firms other than those which have expressed interest in accordance with the Client's imputation is not recommended. Short lists should comprise three to five firms; normally three or four for complex projects, and four or five for straightforward projects. As applicable, the Client should bear in mind the following factors during short-listing, ensuring that it is done in accordance with instructions given when requesting expressions of interest:

- general and relevant experience technical competency;
- capacity to complete the work resources within the firm;
- access to support resources and established associations;
- availability of key personnel;
- managerial capacity to perform;
- financial capability to perform (if applicable);
- past performance on Client contracts
- location of the firm's office in relation to the work;
- details of staff, but limited to all relevant staff who will be available.

ACEN recommends that the Client has access to appropriately experienced and knowledgeable people when forming the short list. Where the resources are not available in-house, ACEN can assist with this task.

5.3.3 Request for proposals (RFP)

The Client formally writes to each of the firms on the short list and invites proposals. The Client should normally inform the firms which expressed interest but were not invited, that they have not been retained on the short list. The RFP should contain the following:

- a Letter of invitation
- b Terms of Reference (TOR)
- c Information to Consultants (ITC)
- d The proposed agreement
- e The basis for selection to be utilized and the weightings to be applied

a Letter of Invitation

The letter of invitation should state the intention of the Client to enter into an agreement for the provision of consulting services, the source of funds, and the date, time and address for the submission of proposals.

b Terms of Reference (TOR)

The Client is responsible for drafting the TOR for selection, which should include an assessment of the physical magnitude and resource requirements of the project. The TOR should be prepared by the Client, or by an independent consultant(s) retained by the Client and specialized in the area of the assignment. The brief or scope of the services described in the TOR should be compatible with the available budget. The TOR should define clearly the objectives, goals and scope of the assignment, and provide background information (including a list of existing studies and basic data) to facilitate the consultants' preparation of their proposals. If the transfer of know-how or technical training will be an objective, it should be specifically outlined along with details of the number of staff to be trained, and so forth, to enable the consultants to estimate the required resources. The TOR should list the services and surveys necessary to carry out the assignment and the expected outputs (reports, data, designs, tender documents, maps, surveys, etc.). However, the TOR should not be too detailed and inflexible, and should be such that competing consultants may propose their own methodology and staffing. The Client and consultant responsibilities should be clearly defined in the TOR. The firms should be encouraged to comment on the TOR in their proposals.

The minimum information required in the TOR is summarized below:

- scope of services compatible with available budget;
- objectives, goals of the project;
- background information (listing of existing studies, data, etc.);
- transfer of know-how terms (if applicable);
- training requirements (if applicable);
- list of services, surveys necessary;
- expected deliverables (reports, designs, tender documents, maps, etc.);
- a time schedule and phasing of the assignment, duration of commission;
- regional factors such as geographic location, language, logistics, allowances, and duration of commission;
- the expected input of key professional staff (staff time) required of the consulting firm with indications of minimum experience, academic degrees, and so forth (consultants should be left free to prepare their own staff time necessary to carry out the assignment);

• respective responsibilities of the Client and the consulting firm.

c Information to Consultants (ITC)

The ITC should contain all necessary information that would help the consulting firms prepare responsive proposals and, without being limited to the following list, should include adequate information on the following aspects of the assignment:

- a short statement of the assignment;
- the contact person(s) of the Client whom the consultants should apply/refer to, when and if necessary;
- the list of invited firms together with clarification about whether or not the short-listed firms can collaborate to submit a proposal;
- formalities in preparing and submitting the proposal, such as (and when applicable): language, number of copies, maximum page number, size format or other limitations on the submissions; standard formats to be used in the proposals (for joint-venture agreement, presentation of past experience, CVs, etc. these should not be unduly prescriptive); envelopes or the like to be used and their labeling or other identification, and in particular, if a separate financial proposal should be prepared and submitted for purposes of subsequent price negotiation; latest date and time for submission; address for submission; method or means of submission; requirement for numbering of the pages to be submitted;
- the form of agreement which will apply;
- details of the evaluation and selection procedures to be followed, including a listing of the technical evaluation criteria and the weight given to each criterion;
- the minimum passing score (threshold) for quality (if applicable; care needs to be taken with this approach to avoid misuse and abuse of process);
- the date for submission and details of the proposal opening procedure;
- a clear statement of the information required from the consulting firm.
 This would normally include details such as:
 - past experience with projects of a similar nature;
 - details of organization;
 - project control;
 - financial control;
 - size and responsibilities of staff;
 - type of organisation and managerial method proposed for executing the work;
 - Quality Management System;
 - knowledge of local conditions;
 - project methodology, availability of resources;

- the alternatives to be considered (invitation for innovation);
- o approach and commitment to transfer of know-how;
- level of participation and roles of National Consulting Firms;
- compliance with the desired time schedule.

Note: this Statement of Information required from the consultant should clearly align with the technical evaluation criteria for selection.

- location where the work will be performed;
- the total budget (if a given amount should not be exceeded);
- details and status of any external financing;
- information on negotiation of the agreement; (financial and other evidence that may be required of the selected firm);
- any bonuses or penalties which may be applied as a function of the performance of the consultants;
- reference to any laws of the Client's country that may be relevant to the proposed agreement, including tax laws;
- brief explanation of conditions of professional liability insurance required under the agreement (if applicable);
- limitation of liability
- a request for the receipt of the RFP and notification of the Client whether or not the short-listed (invited) firm will be submitting a proposal;
- the period for which the consultants' proposals should be held valid (normally 60 – 90 days) and during which the consultants should undertake to maintain, without change, the proposed key staff; and, in case of a later request for the extension of the validity of the proposal, a statement confirming the right of the consultants not to maintain their proposal;
- any conditions for subcontracting part of the assignment (if applicable);
- the expected date of commencement of the assignment;
- likelihood of follow-up assignments or possible downstream work;
- the procedures for handling clarifications about the information given in the RFP;
- any relevant copyright or intellectual property issues;
- a statement of encouragement to visit the site and meet the Client, in order to better evaluate the scope of work, and the conditions for such visits:
- request for comments on the TOR (this will normally be related to the evaluation criteria);

- a requirement for a brief statement of the methodology proposed, in order to give an indication of the consultant's understanding of the project;
- page number, size, format or other limitations on the submissions (if required). ACEN recommends that Clients should sensibly limit the length of proposal to about 10 to 20 pages plus attachments.

d The proposed agreement

The ACEN Model Form for Engineering Services or the FIDIC's Client-Consultant Agreement is recommended as an instrument which establishes a fair, sound and tested agreement between the Client and the consulting firm, with properly and carefully filled in appendices. In any event, the short-listed tenderers must be provided with a full copy of the agreement which is to apply to the commission.

e The basis for selection to be utilized and the weightings to be applied

The Client should make available to the Consultants the criteria and weightings to be applied in the evaluation of proposals.

5.3.4 **Preparation and submission of proposals**

The Client should allow enough time for the firms to prepare proposals. The time allowed should depend on the assignment, but normally should not be less than four weeks or more than three months. During this time, firms may request, in writing, clarification about the information provided in the RFP. The Client should provide this clarification in writing, and copy it to all firms on the short list. It is advantageous for Clients and consultants to make arrangements for site visits as stated in the ITC, and for providing additional information on the project, as applicable, well before the last day for submission of proposals. All consultants invited to submit proposals must be given fair and equal possibility to participate and to obtain information. A 'pre-proposal' conference convened by the Client and attended by the representatives of all short-listed bidders is considered an advantage, although cost is a factor. The proposals should be prepared according to the requirements set out in the RFP. They must be accurate, complete and duly signed by (an) authorized official(s) of the consulting firm and, in the case of CVs, by the individuals proposed.

5.3.5 **Receipt and opening of proposals**

The proposals submitted should be registered by the officer-in-charge at the time they are submitted. They should be kept safe until they are to be opened. Any proposal received after the announced closing time for submission of proposals should be returned unopened, unless otherwise required by law.

Only where there is good reason, should the Client extend the deadline for the submission of proposals. No amendments should be given and/or accepted after the agreed deadline. When the deadline has passed, the proposals submitted should be opened without delay. The consultants invited to submit proposals should be invited to attend the opening of proposals. Minutes should be prepared and signed by the legal representatives of both the Client and the consultants, at the times of the openings.

5.3.6 **Evaluation of proposals**

The Client should systematically evaluate and rank each proposal against the basis for selection outlined in the RFP. This process helps to maintain the integrity of the selection process, and can involve:

- formation of a selection committee (ACEN recommends balanced interagency evaluation teams with appropriate competence and commitment to integrity and independent decision making);
- a weighting or score for each criteria, as set down in the ITC;
- independent evaluation of firms by each member of the selection committee;
- individual score sheets being collated and a documented record of the selection process retained. Clients may be assisted in this evaluation process by an independent consultant or ACEN.

If the project size and complexity warrant it, the Client can include in the evaluations: interviews of key consultant team members; a visit to the consultants' premises; discussions with the consultant's past Clients and project end users; and inspections of past projects. These activities can be carried out by teams of experts including Client representatives and individual consultants. Care must be taken to ensure that such measures are carried out in a perfectly fair and equitable manner, with appropriate transparency. The following steps should be taken during evaluation:

- The Client (or the Client's selection committee) should evaluate each technical proposal, taking into account several criteria, as set out in the RFP:
 - a the consulting firm's relevant experience for the assignment;
 - b the quality of the methodology proposed;
 - c the qualifications of the key staff proposed;
 - d training or transfer of know-how provisions (if applicable);

- e the extent and quality of participation by National Consulting Firms in the assignment (in internationally financed projects);
- f the support facilities (if applicable) of the consultant; and
- g overall quality of the presentation.
- Each criterion should be marked on a scale of 1 to 100. Then the marks should be weighted to become scores. The proposed weights should be disclosed in the RFP. The weightings should also be based on "benchmark" rather than comparisons between bidders.
- These criteria are normally divided into sub-criteria. For example, sub-criteria under methodology might be innovation and level of detail. However, the number of sub-criteria should be kept to the essential only. The use of excessively detailed lists of sub-criteria may render the evaluation a mechanical exercise more than a professional assessment of the proposals. The weight given to general experience can be at the lower end of the range, since this criterion has already been taken into account when short-listing the consulting firm. More weight should be given to the methodology in the case of more complex assignments.
- For short-listing purposes, all relevant available staff should be considered, but for final selection, evaluation of only the key personnel is recommended. Since the key personnel ultimately determine the quality of performance, more weight should be assigned to this criterion if the proposed assignment is complex. The Client should review the qualifications and experience of proposed key personnel in their CVs. When the assignment depends critically on the performance of key staff, such as a project manager in a large team of specified individuals, it may be desirable to conduct interviews. The individuals should typically be rated under the following three sub-criteria, as relevant to the task:
 - a general qualifications (general education and training; length of experience; positions held; time employed with the consulting firm; experience in developing countries; and so forth);
 - b adequacy for the assignment (education, training, and experience in the specific sector, field, subject, and so forth, relevant to the particular assignment; and
 - c experience in the region (as applicable); knowledge of the local language, culture, administrative system, government organization, and so forth.

- The Client should evaluate each proposal on the basis of its responsiveness to the TOR. A proposal should be considered unsuitable, and should be rejected at this stage if it does not respond to important aspects of the TOR or if it fails to achieve a minimum technical score (threshold) specified in the RFP. It is also very important that the Client should accurately follow the steps described in the RFP to evaluate proposals, and not create other measurement methods to those stated in the RFP.
- At the end of the process, the Client should prepare an evaluation report of the 'quality' of the proposals. The report should substantiate the results of the evaluation and describe the relative strengths and weaknesses of the proposals. All records relating to evaluation, such as individual marking sheets, should be retained until the completion of the project and its audit.

5.3.7 **Selection of the consulting firm and negotiations**

The top ranked firm (the firm with the highest overall technical score) is invited to negotiate after mutually agreeing upon changes in the details of the TOR as they would be retained in the contract. If agreement cannot be reached with the top ranked firm, the negotiations are terminated and begun with the second ranked firm, and so on down the list until agreement is reached. Once a firm has been rejected, it should not be recalled for further negotiations.

5.3.8 **Agreement**

The recommended form of agreement is the ACEN Model Form for Engineering Services, or the FIDIC Client-Consultant Agreement, with appendices filled in as appropriate, reflecting the scope of the work. The final TOR and the agreed methodology should be incorporated in the scope of work. The selected firm should not be allowed to change the key staff or any major items included in its proposal, unless both parties agree that undue delay in the selection has made it necessary.

5.3.9 **Notification**

When the agreement has been signed, all those firms which have submitted proposals should be informed by the Client within a reasonable time that they were not successful. All Tenderers should receive the following:

- a Name of the successful consultant and its overall score; and
- b Number of proposals received.

In order to maintain transparency (and to promote competition), the Client should provide the interested parties with the evaluation results by publishing them in national and international newspapers, technical magazines and/or on its web site, as appropriate.

5.3.10 **Debriefing**

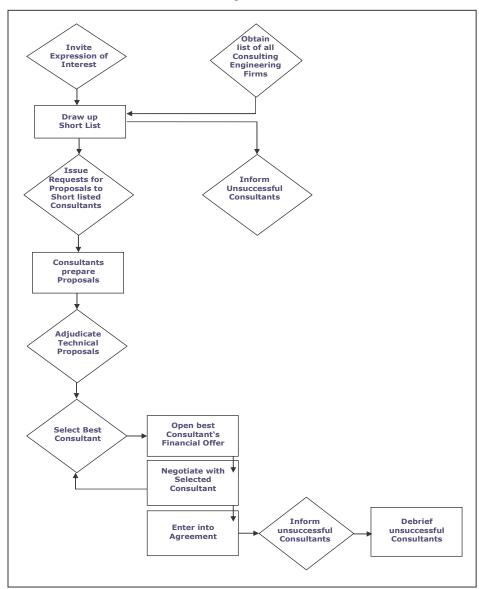
If, after notification of award, a consulting firm wishes to ascertain the grounds on which its proposal was not selected, it should address its request to the Client within a reasonable time and the Client should then invite the firm without delay to discuss the issues. In this discussion, only the merits or otherwise of the consulting firm's own proposal should be discussed and not those of competitors. Further detail should then be provided on that consultant's technical scores, as well as where the firm was ranked in the evaluation.

5.4 QUALITY - COST BASED SELECTION

Quality and Cost Based Selection (QCBS) uses a competitive process among short-listed firms that takes into account both the technical quality and the cost of the services proposed in the selection of the consulting firm. The most commonly used method of QCBS is the two envelope system, in which selection is based both on the quality and the cost of the proposed consulting services to be provided. The relative weight to be given to quality and cost should be determined for each case depending on the nature of the assignment. ACEN recommends that, when cost is an element in the selection process, it should normally be kept between zero and twenty percent; with 40 percent being the absolute maximum weight.

The weight of technical capability in no case should be less than 60 percent. In addition, the Client usually announces a threshold value for technical points, under which the proposals would be returned to the relevant consultant, with financial proposals unopened, and the consulting firm is disqualified during the evaluation phase. Under certain circumstances (where the overall scope cannot be well defined), the Client may elect to use a modified QCBS system based on unit rates. In this case, the Client estimates the level of effort that might be required, and publishes these by staff category. This level of effort is then utilised by the consultant to apply unit rates to obtain an estimated cost that is used in the comparative evaluation. All other procedures stated below for this system are the same. The procedures for this selection process are explained under the following items. Apart from the price component, the procedures are the same as for QBS, and should be applied with equal vigour.

PROPOSED FLOW DIAGRAM FOR QCBS:



5.4.1 **Expression of Interest**

In the case of large or complex projects, international of international-financed projects, it might be appropriate or required, to call for Expression of Interests and to use the submissions received as the basis for short-listing.

Alternatively, ACEN can provide Clients with a List of all Member Firms and their fields of expertise, staffing etc, to enable the Client to draw up a shortlist.

5.4.2 **Short listing**

Procedures are the same as for Quality Based Selection.

5.4.3 **Request for Proposals (RPF)**

Procedures are generally the same as for Quality Based Selection.

a Letter of information

Procedures are the same as the same as for Quality Based Selection.

b Terms of Reference (TOR)

Procedures are the same as the same as for Quality Based Selection.

c Information to Consultants (ITC)

The ITC should contain the same information as for QBS, with the following additional requirements relating to price:

- the minimum passing score (threshold) for quality (when applicable);
- standard formats for the financial proposals (the cost of staff time should be estimated on a realistic basis for both National and Foreign or Locally Based Foreign Consulting Firms, separately for each);
- necessary information about the proposal submission procedure, including the requirement that the technical proposals and financial proposals be sealed and submitted separately in a manner that should ensure that the technical evaluation will not be influenced by price;
- details of the two-stage evaluation process, a listing of the technical evaluation criteria and weights given to each criterion, the details of the financial evaluation, the relative weights for quality and cost;
- the procedure for the announcement of the technical scores together with the public opening of the financial proposals;
- the formula by which the financial scores should be calculated;
- whether or not a threshold should be applied to the financial proposals, and the cost below a certain percent of the Client's preestimated cost for consulting services should be announced as nonconforming and should not be evaluated;
- currency(ies) in which the costs of services should be expressed, compared and paid;
- the period for which the consultants' proposals should be held valid (normally 60 to 90 days) and during which the consultants should undertake to maintain, without change, the proposed key staff and

should hold to both the rates and total price proposed, in case of an extension of the proposal validity period, the right of the consultants not to maintain their proposal. This validity period is particularly important where a price has been tendered.

d The proposed agreement

Procedures are the same as for Quality Based Selection.

5.4.4 **Preparation and submission of proposals**

Procedures are the same as for Quality Based Selection except the last paragraph, which should be deleted and replaced with:

"Both technical and financial proposals should be submitted in separate, sealed and correspondingly marked envelopes, with both envelopes put together in one outer envelope."

5.4.5 **Receipt and opening of proposals**

Procedures are the same as for Quality Based Selection.

5.4.6 **Evaluation of proposals**

The evaluation of the proposals should be carried out in three stages:

- a evaluation of the technical proposals (quality)
- b evaluation of the financial proposals (cost)
- c combined technical and financial evaluation.

Evaluators of technical proposals should not have access to the financial proposals until the technical evaluation, including any clarification, Client reviews and/or approvals required is accomplished. Financial proposals should only be opened publicly, following completion of the technical evaluation. Both evaluations should be carried out in full conformity with the provisions of the RFP.

a Evaluation of the technical proposals

The technical proposals should be evaluated exactly as set down for QBS.

b Evaluation of financial proposals

After the evaluation of the technical proposals is completed, the Client should notify as soon as possible, those consultants whose proposals did not meet the minimum passing score, or were considered non-conforming with the RFP and TOR, indicating that their financial proposals will be returned unopened after the completion of the selection process. The Client should simultaneously notify the consultants who have secured the minimum passing score, and indicate the date and time set, for publicly disclosing the technical scores and opening the financial proposals. The

opening date should be as soon as appropriate after the notification date, allowing consultants sufficient time for making travel arrangements, etc., as necessary. The financial proposals should be opened publicly in the presence of representatives of the consulting firms which choose to attend. The names of the consulting firms, their technical scores and the proposed prices should be read aloud and recorded when the financial proposals are opened. The Client should then review the financial proposals. If there are any arithmetical errors, they should be corrected in front of the competitors. For the purpose of comparing proposals, the costs should be converted to a single currency as selected by the Client (local currency or fully convertible foreign currency) and stated in the RFP.

The RFP should specify the source of the exchange rate to be used, and the date of that exchange rate, provided that the date should not be earlier then four weeks prior to the deadline for submission of proposals, nor later than the original deadline for submission of the proposals. For the purpose of evaluation, 'cost' should exclude local taxes, but should include other reimbursable expenses, such as travel, translation, report printing or secretarial expenses. ACEN strongly recommends that proposals with unrealistically low prices should be discarded by the Client. The proposal with the lowest cost will be given a financial score of 100, and the other proposals given scores that are inversely proportional to their prices, i.e., if the lowest conforming price is A, then the score for price B is (A/B) x 100%. Alternatively, a direct proportion, average cost model or other methodology may be used in allocating the marks for the cost component. The methodology to be used for financial scoring should be described in the RFP.

c Combined technical and financial evaluation

The total score should be obtained by weighting the technical and financial scores and adding them. The respective weightings for quality and cost should be specified in the RFP. The weighting for the 'cost' should be chosen, taking into account the complexity of the assignment and relative importance of quality. As has been explained above, ACEN recommends that the weighting for price should normally be in the range of 0 to 20 points, but in no case should exceed 40 points out of a total score of 100 points. If the scores for quality and cost as percentages are Q and C and the weighting for cost is W (e,g., if the weighting is 10%, '0.1' is used in the formula for W) then the combined score becomes:

Score = (1 - W)Q + WC

5.4.7 **Selection of the consulting firm and negotiations**

The consulting firm which obtains the highest total score (weighted technical plus weighted financial score) should be invited for negotiations. Negotiations should include discussions of the TOR, the methodology, staffing, Client's inputs and any special conditions of the agreement. Only minor changes should be made, if necessary. Financial negotiations should include clarification of the consulting firm's (or each partner firm's) tax liability in the country of the investment, and how this tax liability has been or would be reflected in the agreement. Proposed unit rates for staff time and reimbursables should not be negotiated, since these have already been a factor of selection in the cost component of the proposal.

If the negotiations fail to result in an acceptable agreement, the Client should terminate the negotiations and invite the consulting firm with the next highest total score. The first invited firm should be informed of the reasons for this termination and the Client should not reopen negotiations with the same firm. Negotiations should be conducted in an atmosphere of cooperation. This should strengthen and build the confidence and trust which are absolutely essential to a healthy Client – consultant relationship.

5.4.8 **Agreement**

Procedures are the same as for Quality Based Selection.

5.4.9 **Notification**

Procedures are the same as for Quality Based Selection.

5.4.10 **Debriefing**

Procedures are the same as for Quality Based Selection.

5.4.11 **Alternative Procedure**

If a Client is not in a position to tender the full works (feasibility, planning, design, and construction) as a result of insufficient funding, and will execute the project in phases over time, sometimes with more than a year delay between phases, the procedure should be:

- 1. The initial appointment is done using QCBS.
- 2. In the instructions to Tenderers it is made clear that the appointment although initially for Phase 1 only will be considered for the follow up work (Phases 2 to x).
- 3. If Phases 2 to x are to be done the Client negotiates continuation with the successful Consultant of Phase 1. This is done only if the Consultant has performed satisfactorily in the previous phase and makes a fair and reasonable Financial Offer based on a sound

- Technical Offer. Negotiations on the Offer should only take place once.
- 4. If an agreement is not reached or the successful Consultant has not performed satisfactorily during the previous phase and has been notified accordingly, the Client invites other Consultants to tender following the procedures as outlined in these guidelines.

This procedure has obvious advantages for all involved especially when it comes to liability, minimizing risk, in-depth knowledge obtained during previous phases that a new Consultant first has to acquire. Also the trust built between Client and Consultant as well as with the rural communities to benefit from the project, is important. If a Consultant knows beforehand that the appointment is longer term, the Technical Offers are of much higher standard as the costs invested to prepare the Offer is much more favorable with the anticipated rate of return when winning the bid. Also work performed during Phase 1, that is also needed in subsequent phases, is done more accurately and comprehensively first time resulting in saving costs and time at a later stage.