

**STANDARD PROCEDURE  
FOR  
EVALUATION OF PROPOSALS  
FOR  
PROCUREMENT OF ENGINEERING SERVICES**

**(First Edition)**

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**PAKISTAN ENGINEERING COUNCIL  
ISLAMABAD**

## **ACKNOWLEDGMENT**

Pakistan Engineering Council extends deep appreciations and acknowledges the tremendous contribution in developing and finalizing this document by the following members of the Pakistan Engineering Council (PEC):-

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## **PREFACE**

Pakistan Engineering Council the Statutory Regulatory body, entrusted to regulate the engineering profession in Pakistan has undertaken, inter alia, the standardization of country specific documents to regulate and streamline the procurement of engineering consultancy services and procurement of works. Standard Procedure for “Evaluation of Proposals for Procurement of Engineering Services” is one such document prepared by a team of experts drawn from the Employers (Client formations), Constructors and Consultants Organization in Pakistan. The document has been drafted following the international practices such as those of the World Bank and the Asian Development Bank; the instructions and prevalent practices in one of the largest client formations having experience of using the services of consultants i.e. Pakistan Water and Power Development Authority, but conforming to the respective PEC Bye-Laws. It is expected that use of this document will provide an equitable and just basis for evaluation of Proposals for procurement of services in line with the international practices and relevant PEC Bye-Laws.

Pakistan Engineering Council wishes to place on record its deep appreciation for the tremendous work done by the Standards and Quality Committee and M/s National Development Consultants (NDC) in finalizing this document. Various engineering organizations and departments are requested to use this document for procurement of engineering services.

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## **1.0 INTRODUCTION**

### **1.1 General**

The basic and prime aim of this document is “good practice” in the employment of consultants. The document though titled as Procedure for Evaluation of Proposals for Procurement of Engineering Services, yet it includes procedure and instructions for all those activities which lead to the proposal evaluation activity. Accordingly it offers assistance to users of Consultants’ Services in the following areas, covered under separate sections. It includes:-

- Section 2. Defining Scope of Consultants’ Services and Drafting the Terms of Reference.
- Section 3. Estimation of Consultants’ Input and Costs
- Section 4. Letter of Invitation/Invitation Documentation
- Section 5. Evaluation of Proposals
- Section 6. Negotiation of Consultants’ Contract.

### **1.2 Scope of the Document**

This document contains procedure which appropriately fulfil the provision of open and fair competition as it does for maintaining the entire selection process transparent. The document also covers the aspect of fruitful utilization of the Client’s spare staff and resources, which encourages technology transfer and import practical experience through on-job-training to Client’s experience starved staff in the prevailing environment.

In the absence of pre-laid down rules/procedures for use of proportions of quality and cost factors, the staff associated with selection of consultants is likely to use the contents of this sub-para in a widely varied and at times irrational manner treating this procurement also as if it is bidding for goods or works and indulging even in haggling for price reductions. This document covers this aspect on the global lines; requires the client formations to lay down the details of criteria for selection, that is, weightages for Quality and Cost; minimum Quality qualifying threshold score and non-negotiation of the cost element, where it has already figured in the final ranking of the proposals/consulting firms. This aspect has been adequately covered in this document so that the selection is made in a transparent and equitable manner. It will also restrict the use of personal discretion by the selection committee/its members.

### **1.3 Factors For Evaluation**

In order to adequately cover the relevant factors for evaluation of the technical proposals and the detailed procedure for application of these factors, the relevant weightages to be assigned to these factors, shall inter alia include the following:

- (a) The consultants’ competence and experience relevant to the assignment;

- (b) Quality of approach and methodology to include understanding of project needs, methodology to implement/perform the activities/sub-activities, work plan, organization of the Team, time schedules, the consultants proposal for implementation of the assignment etc; and
- (c) Qualifications and experience of the proposed personnel.

It is required to provide and define how the selection committee constituted for evaluation of proposals will apply and use these factors for relative ranking of the qualifications of the firms submitting the proposals. Also different assignments have different requirements and so different importance is to be assigned to each of the three afore-given factors. Further break-ups of these three heads have also been not listed for consideration by the proposal evaluation committee. This document appropriately and adequately covers these aspects in detail and provides a system/process containing necessary guidance and options to the selection committee.

#### **1.4 Limitations During Negotiations**

These Procedure also list down the limitations of the relationship to be observed during negotiations of the consultants' contract.

#### **1.5 Applicability of Document**

As explained in the foregoing, this document is intended to provide a complete guidance for the departments in government, semi-autonomous, autonomous and private sector users of services, preparing to engage Engineering Consultants for all types of projects.



## **2.0 DEFINING SCOPE OF SERVICES AND DRAFTING THE TERMS OF REFERENCE (TOR)**

### **2.1 BACKGROUND**

Prior to proceeding with defining the scope of services for the Consultants and finalization of the Terms of Reference (TOR) an analysis and decision on the objectives and general scale of desired services is almost a necessity. The first and most important step for finalization of scope and drafting of the Terms of Reference is constitution of a committee which should have representation on the basis of its nominees having thorough familiarity with the project and its setting, adequate level of competence in the principal disciplines of the requisite services, previous experience in the actual direction or execution of similar services and a thorough knowledge of the PEC Bye-Laws. Accordingly the department may assign this basic but extremely important duty to professionals who are experienced, mature with similar exposure and representing the same or similar disciplines as those required for the consultant's team. These members should have, in addition to the afore-given, knowledge of the major problems to be tackled by the consultants, a realistic grasp of the project situation, an understanding of the staff disciplines, staff time and cost implications of the components of the services to be procured for the specific project. These committee members may also be capable to consider a range of options in study design with the overall framework of the service configuration, because there are likely to be alternatives available for packaging the services of consultants, of combining counterpart staff effort by the implementing agency with Consultants time inputs under a specific arrangement to obtain the most effective and economical service contract.

### **2.2 TERMS OF REFERENCE**

2.2.1 The TOR are the client's detailed description of services required for carrying out an assignment which is also necessary to enable the consultants prepare and submit their proposals for the assignment. Reference to some previous TOR used for a similar project is also helpful. However, in the light of contents of para 2.1 above, it should not be difficult to gather a team of professionals with capacity to conceive and deliver the requisite TOR, drawn specifically for the project. They should merely be able to carry out a mental simulation of the activities/events involved in the project and don the hat of the Team Leader of the consultant's team to visualize the requisites.

2.2.2 In case the Implementing Agency (IA) considers that it is short of expertise to draft and finalize the TOR and other portions of the Invitation Document, they may seek outside assistance. However the agency employed for such assistance will not be eligible to compete for securing the assignment because of the conflict of interest.

2.2.3 Careful, clear, concise and complete TOR preparation cannot be over emphasized because this document is valid and referable right from the inception to completion, final acceptance of services and, throughout the currency of the Consultants' Contract. The TOR is important because it is a tool for:-

- Forging an agreement between all partners in project implementation on the objectives and scope of Consultants' Services;
- Advising the short-listed consultants about the scope of work to finalize a meaningful proposal; and
- Defining "The Services" in the contract to be negotiated/finalized with the selected firm.

#### **2.2.4 OUTLINE OF THE TOR.**

The Terms of Reference necessarily cover the following:

##### **A. BACKGROUND**

This section should concisely describe the general background of the assignment attending to the following questions:

- ◆ Why this assignment?
- ◆ For whom this assignment required?
- ◆ Its role in the project.
- ◆ Project history and location.
- ◆ Project description/scope of work including its components stating their quantum/size.
- ◆ Implementation schedule/contract period.
- ◆ Types of activities to be completed.
- ◆ Identification of supervisors of Consultants' work.
- ◆ Issues to be resolved.
- ◆ Source of financing/Project cost/status of financing.

##### **B. OBJECTIVES**

This section should clearly define what results are expected from this assignment, so clear that even a layman should be able to follow and understand without any help or guidance. It could be:

- ◆ Determination of Project Feasibility.
- ◆ Preparation of development programmes.
- ◆ Design of structures and finalization of procurement documentation.
- ◆ Construction and completion of a project with definite benefits.
- ◆ Design of training program and providing training/technology transfer.

##### **C. SCOPE OF SERVICES**

This section shall cover the professional services required from the consultants including disciplines, quantum of inputs, methodology to achieve the aforementioned objectives. It is desirable that the IA may list the expected tasks forming part of the services but there should not be finality in the tasks listed to leave the options for the consultant open to decide their own course of

action to the best of their judgement to complete the assignment and achieve the listed objectives. Accordingly the scope of services should, inter-alia, briefly describe the following:-

- ◆ Tasks to be carried out.
- ◆ Phasing of tasks / assignments.
- ◆ Institutional arrangements and consultants' relationship with IA/ others.
- ◆ Detailed description of each task and in specific sequence which can include:
  - Collection of previous data/documentation.
  - Study, review and analysis of previous data.
  - Recommendations for additional surveys, investigations & data.
  - Environmental Impact Assessment (EIA) and socio-economic studies.
  - Survey and investigations.
  - Design of the project and project components / structures.
  - Procurement issues / award of contracts
  - Construction supervision and contract management.
  - Monitoring and evaluation.
  - Reporting requirements such as inception, periodic progress, and completion reports etc.
  - O & M manuals.
  - O & M performance contracts.
  - Any other requirement which may vary with various project types.
- ◆ Data and documentation already available with the client.

However the client may include only the tasks and its detailed description short of the methodology and procedures to be adopted by the consultants for implementation of the assignment. It is so because the client may have insight into the methodology but he may not be having access to latest techniques / technologies on the one hand, and may on the other hand deprive himself of the opportunity to judge the proficiency of consultants while consultants' proposal is evaluated on the basis of understanding of objectives and quality of methodology required to be proposed by them. Any differences in perceptions are discussed at the time of negotiation of consultants' contract.

#### **D. EXPERTISE REQUIREMENT**

The TOR should also lay down the requirements for the following:-

- ◆ Team responsibilities requirements.
- ◆ Approximate time durations for each function and position.
- ◆ Qualifications, skills and experience of the consultant's staff.
- ◆ Scoring weightages for elements of technical proposals.

- ◆ Association/Joint Venture arrangements issues coverage.
- ◆ Minimum technological or institutional experience.

**E. TRAINING AND SKILLS TRANSFER**

Training of the IA personnel or transfer of skill to counterpart staff of the client or the staff seconded/deputed to work with consultants as their line staff could form part of the consultants TOR if deemed necessary by the client. It must be properly stated because there is difference in its scope under specific arrangements such as, on the job training, training through institutes or universities or direct training as a specific assignment, where consultants shall be required to develop curricula and provide specialized trainer personnel along with training equipment.

**F. INSTITUTIONAL ARRANGEMENTS**

The TOR must clearly state the institutional arrangement and role(s) of client staff in the consultants' assignment. It may include the following elements:-

- ◆ The institutional set-up/Project Management Organization.
- ◆ Who will supervise consultants' work?
- ◆ Status/arrangement of client's staff deputed to work with consultants.
- ◆ Consultants' responsibility for successful completion of assignment.
- ◆ Arrangement for selection of staff and mode of handling unsuitable client staff.

**G. REPORTING/APPROVAL OF REPORTS**

This section should explicitly set out the time schedule of services, scope and frequency of reporting requirements and number of copies of each report, the purpose, distribution, procedures and schedules for review and approval of each report. Accordingly it is desirable that the total time for implementation of the project is specifically stated; phasing of the assignment is given in the form of activities schedule and depicted in bar charts and flow diagrams. Usually following types of reports are required from the consultants:-

- **Periodic Progress Reports:** These should include but may not be limited only to Monthly, Quarterly and Annual Reports. Time periods, formats, essential contents and problems plaguing the progress/ the bottlenecks, if any may form part of the reports.
- **Inception Report:** The consultants may be required to submit these reports on long term assignments after elapsing of an agreed period of six to sixteen weeks from the date of issuance of letter to proceed/mobilize, but preferably around 8-10 weeks. These reports normally list inconsistencies in the TOR, problems related to staffing, access to place of work and client's assistance, status of mobilization by the consultants and any major findings by the consultants during this phase. The inception reports also provide detailed work programmes for activities/sub-activities and the schedule of expected staff

mobilizations.

- **Interim Reports:** In case of a phased assignment, the consultants shall be required to submit reports for each phase such as feasibility, detailed design, tendering /award etc. These reports are necessarily reviewed by the client and cleared prior to its finalization and proceeding with the next phase.
- **Final Report:** The consultants are normally asked to provide a draft final completion report for review/clearance by the client for its final printing in an agreed number of copies. These reports are required to include detailed description of the project, project components, details of data, contracts, costs, organizational details of the participants, calculations, photographs, sketches, “as-built” drawings, computer diskettes and software programmes used/ generated during implementation of the project.

#### **H. CLIENT PROVIDED DATA, SERVICES, PERSONNEL AND FACILITIES.**

The consultants’ financial proposal is a function of client provided facilities and technical/non-technical staff. The TOR should list down the data/documentation for a realistic evaluation of the work and the status, number of technical, professional, sub-professionals and support staff to be provided by the client and status of their availability, their qualification requirements and conditions of employment to work with the consultants, their training requirements and time and budget allowance to be made for such staff and their training as well as the facilities which include office space/housing and furnishings, office equipment, transport, communication facilities, logistic support and other items complementary for setting up and maintaining the office and living accommodation.

### **3.0 ESTIMATE OF CONSULTANTS INPUT AND COST**

#### **3.1 General**

Estimate of consultants' inputs and costs for the assignment is a concurrent process with activities outlined under the section - "Defining Scope of Consultants Services and Drafting of the TOR" since a number of elements from there are utilized in the cost estimation process also. However it is emphasized once again that the teams involved in setting the budget and schedules/time frames for the services must be knowledgeable and have clear understanding of the overall process of how consulting firm(s) perform their services and what are their essential inputs to complete the assignment in an organized, systematic, effective and cost effective manner.

#### **3.2 Cost Elements**

Irrespective of all the differences in size, length, type and nature of consultants' assignments it is possible to prepare cost estimates by adopting a procedure which focusses on its elements/sub elements. For the sake of guidance, for a general engineering consultancy assignment, these can be listed as follows:

- Salary costs for Professional/Semi-professional staff employed on the assignment including social costs.
- Consultants' Overhead costs and Profit (Fee) on salary costs.
- Consultants' Direct (Non-salary) costs for the assignment.

#### **3.3 Salary Costs**

PEC Bye-Laws list down elements (reproduced as follows) forming part of the salary costs. In international practice, these elements form part of two separate categories of costs i.e. Basic Salary (including allowances) and Social Charges.

- (i) Pay, Technical Pay, Charge pay or allowance.
- (ii) Pay during vacation/earned leave salary.
- (iii) Pay during holidays.
- (iv) Dearness allowances/local compensatory allowances.
- (v) Conveyance allowance or conveyance facility.
- (vi) House rent allowance or free house, furnished or un-furnished including telephone facility.
- (vii) House maintenance allowance, pay of "chowkidar", "mali", etc.
- (viii) Free electricity, gas & water.
- (ix) Entertainment allowance.
- (x) Medical expenses/allowance.
- (xi) Government levies e.g., old age benefit contribution, as payable to EOBI and Education Cess etc.

- (xii) Provident fund and gratuity (consulting engineer's contribution).
- (xiii) Group Insurance premia.
- (xiv) Leave fare assistance.
- (xv) Any other special allowances or benefits, actually paid or payable to an employee and mutually agreed between consulting engineer and the client and required as per any labour or other laws in force.

### **3.4 Social Charges**

However, all these costs are not payable to the professional staff. Some of these elements which are listed below are payable to or on behalf of the expert, in the light of the Government's legislation, social security and company rules which are called social costs/social charges. These elements are listed as follows:-

- (i) Pay during vacation/earned leave salary.
- (ii) Pay during holidays.
- (iii) Medical expenses/allowance.
- (iv) Government levies e.g., old age benefit contribution, as payable to Employees Old Age Benefit Institution (EOBI) and Education Cess etc.
- (v) Provident fund and gratuity (consulting engineer's contribution).
- (vi) Group Insurance premia.
- (vii) Leave fare assistance.
- (viii) Any other special allowances or benefits, actually paid or payable to an employee and mutually agreed between consulting engineer and the client and required as per any labour or other laws in force.

### **3.5 Overhead and Fee on Salary Costs**

3.5.1 The second cost item under the PEC Bye-laws is the overheads and fee chargeable on the salary costs i.e. salary plus social charges. The overhead costs are expenditures being incurred by the Consulting Firms for running their business but are not directly chargeable to any revenue earning assignment. PEC Bye-laws include these costs under the following heads which are reproduced below:-

- (i) Provisions for office space including light, heat, air-conditioning and similar items for working space, depreciation and amortization allowances or rental for furniture, drafting equipment and engineering instruments, office and drafting supplies and office transport including operation and maintenance, local phone calls, local transport and all such costs not identifiable to specific projects.
- (ii) Taxes and insurances other than those included as salary costs, including property tax on premises, social securities, group insurance, medical cover,

professional liability insurance cover, if any, in accordance with the relevant Bye-Laws.

- (iii) Library and periodical expenses, and other means of keeping abreast of advances in engineering, such as attendance at technical and professional meetings/seminars and staff training costs, membership costs of professional bodies and similar expenses.
- (iv) Executive, administrative, accounting, legal, stenographic and clerical salaries (unproductive non-technical salary costs) and expenses other than identifiable salaries included in Salary Costs and expenses included in reimbursable Non Salary Costs.
- (v) Salaries or imputed salaries of partners and principals, to the extent that they perform general executive and administrative services as distinguished from technical or advisory services directly applicable to particular projects. These services and expenses, essential to the conduct of the business, include preliminary arrangements for new projects or assignments.
- (vi) Bank interest (or profit payable on Islamic Banking System) on borrowed capital.
- (vii) Business development expenses, including salaries of principals and promotional and salary costs of employees so engaged; and any costs during pre-qualification and pre-agreement stages of the project.
- (viii) Entertainment expenses.
- (ix) Provision for loss of productive time of technical employees between assignments, and for the time of principal and employees on public interest assignments.
- (x) Non identifiable communication expenses.
- (xi) Staff recruiting and lay off costs.
- (xii) Any other items normally included as part of overhead costs according to generally accepted practices of consulting engineers.

3.5.2 The overheads are charged as a percentage of the salary costs. The percentage overhead figure is taken from the commercial auditor's report based on the expenditures during the previous year(s). This means that total non-chargeable cost for running the company is divided by the salary costs from all the assignments for the same year multiplied by 100. The overhead percentage based on PEC definition of salary usually should be between 60 to 100 percent. The items of cost included in the overheads is given under para 3.5.1.

3.5.3. The element of Fee, in the Time Based (Cost plus Fee) Contracts is the consultants gross profit before taxes (and any bonuses payable to the employees of the Firm) is a figure varying between 5 to 20 percent of the



salary cost plus overheads. In fact the costs chargeable by consultants from their clients for a specified time period, say a month, is called Billing Rate for the individual. The Billing Rates are computed as Follows:-

	<u>Items Description</u>	<u>Units</u>
a -	Salary cost (including Social costs) payable to or for the Individual.	100
b -	Overheads (say 90 % of 'a')	90
c -	Salary cost + Overhead cost	190
d -	Fee (say @ 12% of 'c')	22.80
e -	Billing rate (c+d)	212.80

The monthly billing rates for local consultants for Junior and specialist positions range between Rs. 35,000 and Rs. 150,000 respectively as prevalent in the year 2000. For the purpose of estimation, an average rate could be utilized which could be an average varying between Rs. 60-80 thousand per mansam for local consultants for various mix of consultants' Key Staff inputs i.e. higher rate where input of senior professionals (specialist positions) is higher with relation to the junior professionals.

### **3.6 Estimation of Staff Time Inputs**

#### **3.6.1 Activity Schedule**

Computation of cost estimate for the consultants' time inputs is a function of the total time required for the entire team (of the professional/semi-professional staff to complete the assignment in the envisioned manner) and the billing rates computed for each staff member. The computation of billing rate in itself is a function of salary plus allowances, consultants' overheads and the fee as explained under sub-para 3.3 through 3.5. The estimation of time for each staff member and the total time is a rather complex process requiring a mental simulation by the committee/committee members drafting the TOR after defining the scope of services. After that it would list down the activities/sub-activities forming part of the project implementation schedule; a realistic and reasonable time period for completion of each activity; relationship of each activity with other activities, if any and finally, finalization of an activity schedule in the form of a bar-chart. A typical example of an activity schedule in the form of a bar-chart for a composite irrigation and drainage project is given on the pages 13 and 14 . The project in this example requires the services of consultants for the listed activities which comprise of planning, design and construction of a new canal, distribution network of distributary, minor canals/water courses, a composite surface/ sub-surface drainage system and commissioning of the project.

### **3.6.2. Staff Schedule**

The second phase in the process is organization of a team of Specialists/Junior professionals to handle the activities listed above and their co-relation with each activity. A Staffing Schedule in the form of a bar-chart provided on pages 15 and 16 has been drawn and placed as an example. The consultants' total professional staff time inputs are computed accordingly. This may only be taken as an example since some supporting staff's services (such as Quantity Surveyors/Cost Estimators, Economists, Sociologist, Environmentalists, Administrative staff, Drafting staff etc.) are not included in the staffing schedule and may be included according to the specific requirements of the project.

### **Use of Client Staff**

The engineering departments of some of the client organizations maintain their own technical staff, some of which could be available for performing services on the roll of the consultants. This deployment of client staff on secondment/deputation is not only a cost saving measure but is also helpful in training of the client's staff in the finer, and modern aspects of project implementation which could be considered for utilization of their services especially for transfer of technology.

## **3.7 Direct (Non-Salary) Costs**

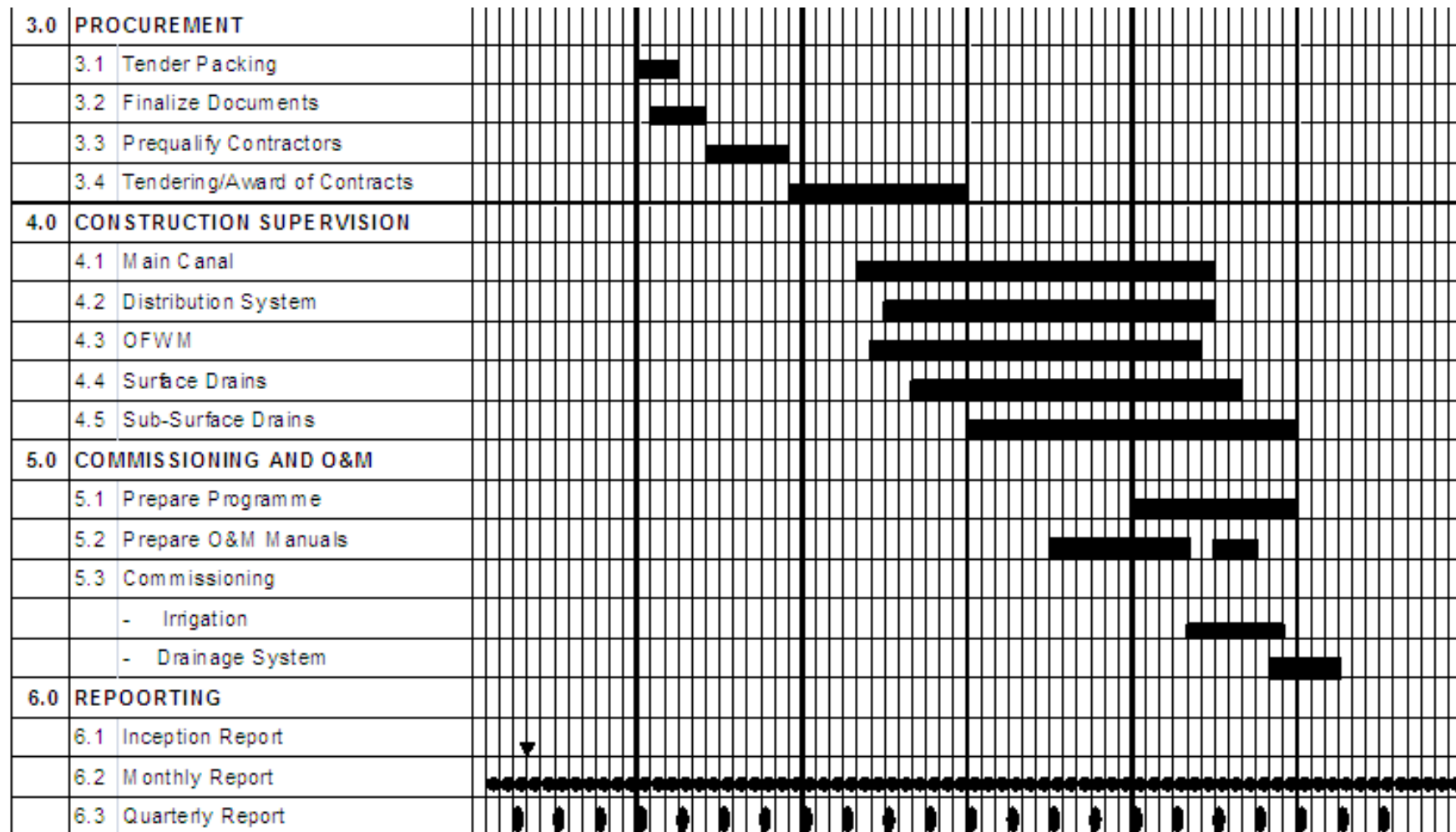
### **3.7.1 Cost Components**

The relevant PEC Bye-Laws list the heads of costs which are directly allocable to specific engagements and projects for performing the assignment. These are incurred under the following heads:-

- (i) Provisions for office, light, heat and similar items for working space, costs or rental for furniture, drafting equipment and engineering instruments and automobile expenses identifiable to specific projects for which special facilities other than head office of the firm are arranged.
- (ii) Provision for labour or work charge establishment.

IMPLEMENTATION OF A COMPOSITE IRRIGATION/DRAINAGE PROJECT																										
ACTIVITY SCHEDULE																										
		Assignment Period: 6 Years																								
		T	I	M	E				P				E				R				I	O				D
Sr.	Description	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				
No.	Q	U	A				R				T				E				R				S			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1.0	INCEPTION PHASE																									
	1.1	Mobilization	■																							
	1.2	Data/Documents Collection and Review	■	■																						
	1.3	Identification of Additional Survey/Investigative Work		■																						
	1.4	Prepare Development Strategy/Plans	■	■																						
	1.5	Finalize Inception Report		■																						
2.0	DESIGN PHASE																									
	2.1	Pre-design Surveys and Investigations		■	■	■																				
	2.2	Prepare Design Criteria and Standards		■	■																					
	2.3	Design of Main Canal				■	■	■	■																	
	2.4	Design of Distributaries/Minor Canal					■	■	■	■	■															
	2.5	Design of OFWM System					■	■	■	■	■															
	2.6	Surface Drains				■	■	■	■	■																
	2.7	Sub-Surface Drains				■	■	■	■	■																

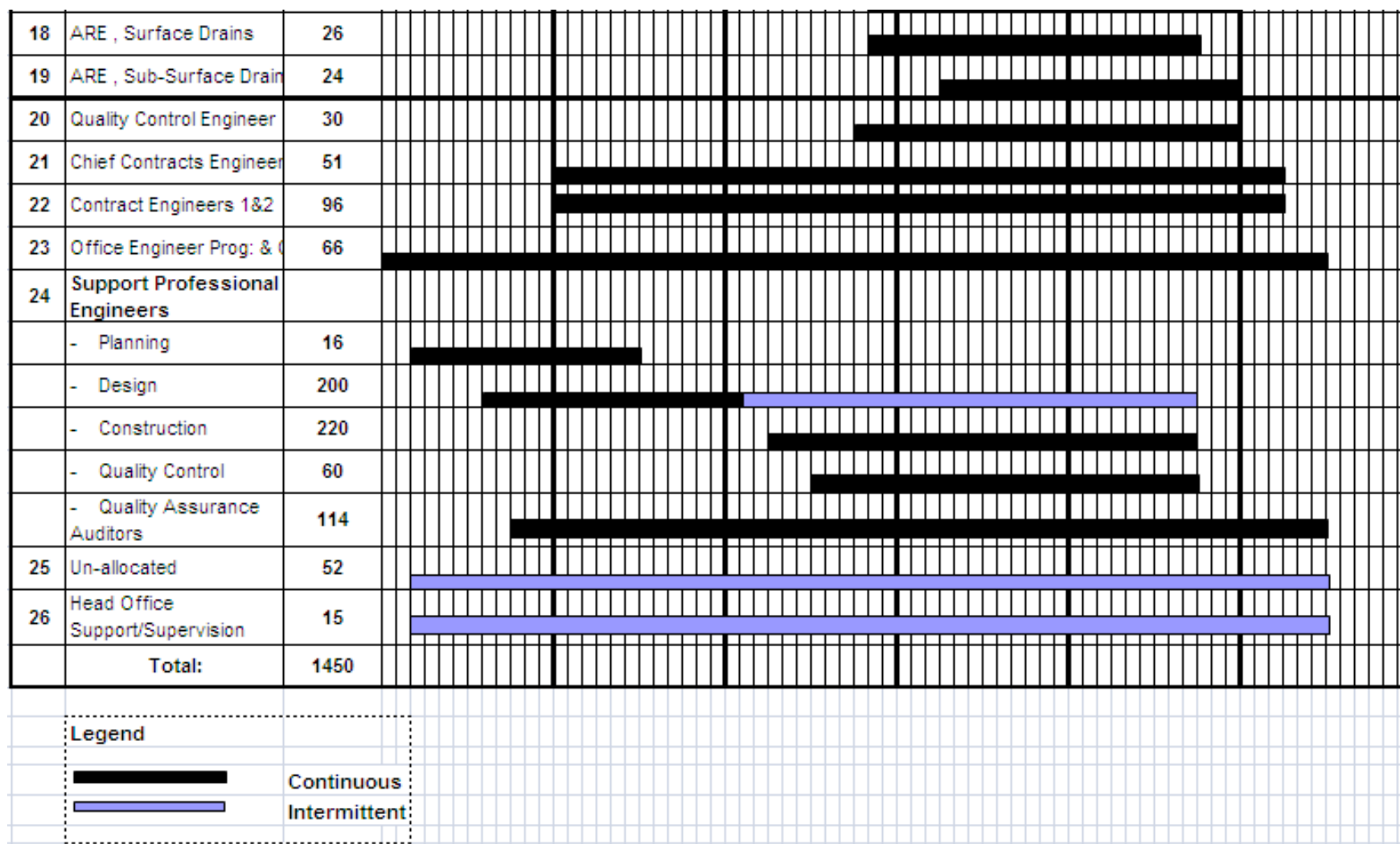
*Standard Procedure for Evaluation of Proposals for Procurement of Engineering Services*



*Standard Procedure for Evaluation of Proposals for Procurement of Engineering Services*

IMPLEMENTATION OF A COMPOSITE IRRIGATION/DRAINAGE PROJECT																																
STAFFING SCHEDULE																																
		Assignment Period: 6 Years																														
Sr. No.	STAFF EXPERTS POSITION	T MAN- MONTHS	I M E P E R I O D																													
			Year 1				Year 2				Year 3				Year 4				Year 5				Year 6									
			Q	U	A	R	T	E	R	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Project Team Leader	30																														
2	Deputy Team Leader	65																														
3	Quality Assurance Manager	21																														
4	Planning Engineer	16																														
5	Chief Design Engineer	26																														
6	Design Engineers Irrigation 1&2	27																														
7	Design Engineer, Surface Drains	20																														
8	Design Engineer, Sub-Surface Drains	20																														
9	Design Engineer Structures	20																														
10	Geo-Hydrologist	9																														
11	Geo Technical Engineer	9																														
12	Survey Engineers 1&2	78																														
13	Chief Construction Engineer	33																														
14	Resident Engineer, Irrigation	25																														
15	AREs Irrigation	25																														
16	ARE OFWM	27																														
17	Resident Engineer Drainage	29																														

## *Standard Procedure for Evaluation of Proposals for Procurement of Engineering Services*



- (iii) Daily and travelling allowances/expenses of employees, partners and principals when away from home office on business connected with the project.
- (iv) Identifiable communication expenses, such as long distance telephone, telegraph, cable, telex, express charges, and postage other than general correspondence.
- (v) Services directly applicable to the project, such as special legal and accounting expenses, computer rental and programming costs, special consultants, borings, laboratory charges, perspectives, renderings, photos, model costs, commercial printing and binding and similar cost which are not applicable to the overhead costs, professional liability insurance cover.
- (vi) Identifiable drafting supplies and office supplies and expenses charged to the employer's work, as distinguished from such supplies and expenses applicable to several projects.
- (vii) Identifiable reproduction costs applicable to the work such as blue printing, photostating, mimeographing, printing, binding etc.

These expenses which seldom can be determined in advance with any degree of accuracy, are reimbursed by the employer at actual invoice cost, plus a service charge.

### **3.7.2 Contingencies**

Computation of costs under the afore-given heads is a process involving the known yardsticks as experienced in the past and there is always chances of it to vary with the actual costs incurred over the period of the consultants assignment. However, reference to the latest similar contract could give a good yardstick with appropriate additions under the head physical and price contingencies. The physical contingencies may vary to the extent of 10 to 15 percent of the estimated cost depending upon the uncertainties of the estimates and the rates of inflation. However, in estimating costs for assignments lasting less than one year, no allowance should normally be made for price escalation during its implementation to be provided under the sub-head "price contingencies".

## **4.0 LETTER OF INVITATION-INVITATION DOCUMENTATION**

### **4.1 Letter of Invitation**

The Client, after publicly notifying the scope of work of a project and completing the prequalification (short-listing) process from the eligible consulting firms (registered with PEC), will invite proposals from these short-listed firms through formally issuing them a Letter of Invitation (LOI) including the Data Sheet also called a “Request for Proposal (RFP) alongwith its attachments, which are listed as follows:-

- ◆ Terms of Reference/Background Information
- ◆ Sample formats for:-
  - Technical Proposal
  - Financial Proposal
- ◆ Draft Form of Contract

### **4.2 Information To Consultants**

Background information which is also termed as “Information to Consultants” (ITC) is a document which provides information/instructions necessary for the consultants to prepare their proposals in an informed and responsive manner and forms part of the LOI Data Sheet. It includes information which is not entirely covered under the TOR. It includes also the documents and other material necessary for preparation of a proposal. A sample format for the Letter of Invitation and Appendix-I comprising Forms 1 to 9 and Appendix-II comprising 1 to 6 Forms is provided on pages 32 to 40 and pages 42 to 50 respectively which should serve as a guide for the consultants selection committee to finalize the RFP.

### **4.3 Changes in LOI**

It may please be noted that except for filling in the blanks, the client’s staff is not required to change anything in the “Sample Letter of Invitation”. Any changes/amendments, if it is essential, has to be made through the Data Sheet.



**SAMPLE LETTER OF INVITATION (LOI)**

Dear [ name of Consultants)

Re: Proposal for Consulting Services, Letter of Invitation

**1. INTRODUCTION**

- 1.1 You are hereby invited to submit a technical and a financial proposal for consulting services required for the Assignment named in the attached LOI Data Sheet (referred to as “Data Sheet” hereafter) annexed with this letter. Your proposal could form the basis for future negotiations and ultimately a contract between your firm and the Client named in the Data Sheet.
- 1.2 A brief description of the Assignment and its objectives are given in the Data Sheet. Details are provided in the attached TOR.
- 1.3 The Assignment shall be implemented in accordance with the phasing indicated in the Data Sheet. (When the Assignment includes several phases, continuation of services for the next phase shall be subject to satisfactory performance of the previous phase, as determined by the Client).
- 1.4 The Client (provide name of the organization) has been entrusted the duty to implement the Project as Executing Agency by the *(name the respective government i.e. GOP, GO Province etc.)* and funds for the project for the phase have been approved and provided in the budget *(to be specified as the case may be)* for utilization towards the cost of the Assignment, and the Client intends to apply part of the funds to eligible payments under the contract for which this LOI is issued.
- 1.5 To obtain first-hand information on the Assignment and on the local conditions, you are encouraged to pay a visit to the Client before submitting a proposal and attend a pre-proposal conference if specified in the Data Sheet. Your representative shall meet the officials named in the Data Sheet. Please ensure that these officials are advised of the visit in advance to allow adequate time for them to make appropriate arrangements. You must fully inform yourself of local conditions and take them into account in preparing your proposal.
- 1.6 The Client shall provide the inputs specified in the Data Sheet, assist the Consultants in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 1.7 Please note that:
  - i) The cost of preparing the proposal and of negotiating the contract, including a visit to the Client, are not reimbursable as a direct cost of the Assignment; and
  - ii) The Client is not bound to accept any of the proposals submitted.
- 1.8 An invitation to submit proposals has been sent to the firms as listed/stated in the Data Sheet.

1.9 We wish to remind you that in order to avoid conflicts of interest:

- i) Any firm providing goods, works, or services with which you are affiliated or associated is not eligible to participate in bidding for any goods, works, or services (other than the Services and any continuation thereof) resulting from or associated with the project of which this Assignment forms a part; and
- ii) Any previous or ongoing participation in relation with the project by your firm, its professional staff, its affiliates or associates under a contract may result in rejection of your proposal. You should clarify your situation in that respect with the Client before preparing the proposal.

## **2. DOCUMENTS**

- 2.1 To prepare a proposal, please use the attached Forms/Documents listed in the Data Sheet.
- 2.2 Consultants requiring a clarification of the Documents must notify the Client, in writing, not later than Twenty one (21) days before the proposal submission date. Any request for clarification in writing, or by cable, telex or telefax shall be sent to the Client's address indicated in the Data Sheet. The Client shall respond by cable, telex or telefax to such requests and copies of the response shall be sent to all invited Consultants.
- 2.3 At any time before the submission of proposals, the Client may, for any reason, whether at its own initiative or in response to a clarification requested by an invited consulting firm, modify the Documents by amendment. The amendment shall be sent in writing or by cable, telex or telefax to all invited consulting firms and will be binding on them. The Client may at its discretion extend the deadline for the submission of proposals.

## **3. PREPARATION OF PROPOSAL**

- 3.1 You are requested to submit a technical and a financial proposal. Your proposal shall be written in English language.

### **Technical Proposal**

- 3.2 In preparing the technical proposal, you are expected to examine all terms and instructions included in the Documents. Failure to provide all requested information shall be at your own risk and may result in rejection of your proposal.
- 3.3 During preparation of the technical proposal, you must give particular attention to the following:
  - i) If you consider that your firm does not have all the expertise for the Assignment you may obtain a full range of expertise by associating with other firms or entities. You may also utilize the services of expatriate experts but only to the extent for which the requisite expertise is not available in any

Pakistani Firm. You may not associate with the other firms invited for this Assignment unless specified in the Data Sheet.

ii) Subcontracting part of the Assignment to other consultants if considered desirable; the same sub-consultant may be included in several proposals, subject to limitations in the Data Sheet.

iii) The estimated number of key professional staff-months required for the Assignment is stated in the Data Sheet. Your proposal should be based on a number of key professional staff-months substantially in accordance with the above number. However you may propose changes in the light of your experience through your comments on the TOR.

iv) The key professional staff proposed shall be permanent employees of the firm unless otherwise indicated in the Data Sheet.

v) Proposed staff should have experience preferably under conditions similar to those prevailing in the area of the Assignment. The minimum required experience of proposed key staff shall be as listed in the Data Sheet.

vi) No alternative to key professional staff may be proposed, and only one curriculum vitae (CV) may be submitted for each position.

vii) Study reports must be in the English Language. Working knowledge of the national language by the firm's personnel is recommended. The knowledge of the regional language where the Assignment is located will be considered additional qualification.

3.4 Your technical proposal shall provide the following and any additional information, using the formats attached in Appendix 1:

- |          |   |
|----------|---|
| I-Form-1 | A brief description of the Consultant's organization and an outline of recent (not older than Ten years) experience on assignments of a similar nature. For each assignment, the outline should indicate, inter alia, the profiles of the staff provided, duration, contract amount and firm's involvement. |
| I-Form-2 | A list of projects presently being under taken by the Firm and expertise-wise total number and number of staff deployed on the projects being presently under-taken.  |
| I-Form-3 | Consultants' understanding of the objectives of the project, their approach towards the assignment and a description of methodology that the consultants propose to perform on the activities and completion of the assignment.   |

- I-Form-4 Any comments or suggestions on the TOR;  
The Consultant's comments, if any, on the data, services and facilities to be provided by the Client and indicated in the TOR.
  - I-Form-5 CVs recently signed by the proposed key professional staff or an authorized manager in the consultants head office. Key information should include number of years with the firm, and degree of responsibility held in various assignments especially during the last ten (10) years.
  - I-Form-6 A monthly work plan, illustrated with a bar chart of activities and graphics of the critical path method (CPM) or Project Evaluation Review Techniques (PERT) type.
  - I-Form-7 A schedule for compilation and submission of various types of reports.
  - I-Form-8 A work plan and time schedule for the key personnel also showing the total number of person-months by each key person.
  - I-Form-9 The composition of the proposed staff team, the tasks which would be assigned to each staff members and their positions.
  - 10. If the Data Sheet specifies training as a major component of the Assignment, a detailed description of the proposed methodology, staffing, budget and monitoring.
  - 11. Any additional information as requested in the Data Sheet.
- 3.5 The technical proposal shall not include any financial information. The Consultant's comments, if any, on the data, services and facilities to be provided by the Client and indicated in the TOR shall be included in the technical proposal.

### **Financial Proposal**

- 3.6 The financial proposal should list the costs associated with the Assignment. These normally cover remuneration for staff in the field and at headquarters, per diem, housing, transportation for mobilization and demobilization, services and equipment (vehicles, office equipment furniture and supplies), printing of documents, surveys and investigations. These costs should be broken into foreign (if applicable) and local costs. Your financial proposal should be prepared using the formats attached as Appendix 2 i.e. Form Nos. 1 through 6.
- 3.7 The financial proposal shall also take into account the professional liability as provided under the relevant PEC Bye-Laws and cost of insurances specified in the Data Sheet.
- 3.8 Costs may be expressed in currency(ies) listed in the Data Sheet

#### **4. SUBMISSION OF PROPOSALS**

- 4.1 You shall submit one original technical proposal and one original financial proposal and the number of copies of each indicated in the Data Sheet. Each proposal shall be in a separate envelope indicating original or copy, as appropriate. All technical proposals shall be placed in an envelope clearly marked “Technical Proposal” and the financial proposals in the one marked “Financial Proposal”. These two envelopes, in turn, shall be sealed in an outer envelope bearing the address and information indicated in the Data Sheet. The envelope shall be clearly marked, “DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE.”
- 4.2 In the event of any discrepancy between the copies of the proposal, the original shall govern. The original and each copy of the technical and financial proposals shall be prepared in indelible ink and shall be signed by the authorized Consultant’s representative. The representative’s authorization shall be confirmed by a written power of attorney accompanying the proposals. All pages of the technical and financial proposals shall be initialed by the person or persons signing the proposal.
- 4.3 The proposal shall contain no interlineation or overwriting except as necessary to correct errors made by the Consultants themselves. Any such corrections shall be initialed by the person or persons signing the proposal.
- 4.4 The completed technical and financial proposals shall be delivered on or before the time and date stated in the Data Sheet.
- 4.5 The proposals shall be valid for the number of days stated in the Data Sheet from the date of its submission. During this period, you shall keep available the professional staff proposed for the assignment. The Client shall make its best effort to complete negotiations at the location stated in the Data Sheet within this period.

#### **5. PROPOSAL EVALUATION**

- 5.1 A two-envelope procedure shall be adopted in ranking of the proposals. The technical evaluation shall be carried out first, followed by the financial evaluation. Firms shall be ranked using a combined technical/financial score,<sup>1</sup> as indicated below:

##### **Technical Proposal**

- 5.2 The evaluation committee appointed by the Client shall carry out its evaluation, applying the evaluation criteria and point system specified in the Data Sheet. Each responsive proposal shall be attributed a technical score (St). Firms scoring less than seventy (70) percent points shall be rejected and their financial proposals returned unopened.

---

<sup>1</sup>:[Note: The client has to decide, based upon the complexity of the project, what weightages are to be assigned to technical and financial components for evaluation/ranking of proposals which may vary between 80:20 to 100:0 for the technical and financial proposals respectively. When zero weightage is given to financial proposals, it will be termed only quality based selection. In case where any weightage is assigned to financial proposals it is known as Quality cum Cost Based Selection ( QCBS).]

## **Financial Proposal**

### **Option-A: For Quality cum Cost Based Selection**

- 5.3 The financial proposals of the three top-ranking qualifying consulting firms on the basis of evaluation of technical proposals shall be opened in the presence of the representatives of these firms, who shall be invited for the occasion and who care to attend. The Client shall inform the date, time and address for opening of financial proposals as indicated in the data Sheet. The total cost and major components of each proposal shall be publicly announced to the attending representatives of the firms.
- 5.4 The evaluation committee shall determine whether the financial proposals are complete and without computational errors. The lowest financial proposal ( $F_m$ ) among the three shall be given a financial score ( $S_f$ ) of 100 points. The financial scores of the proposals shall be computed as follows:

$$S_f = \frac{100 \times F_m}{F}$$

( $F$  = amount of specific financial proposal)

- 5.5 Proposals, in the quality cum cost based selection shall finally be ranked according to their combined technical ( $S_t$ ) and financial ( $S_f$ ) scores using the weights ( $T$ - the weight given to the technical proposal,  $P$  = the weight given to the financial proposal; and  $T+P=1$ ) indicated in the Data Sheet:

$$S = S_t \times T \% + S_f \times P \%$$

### **Option-B: For Quality Based Selection**

(when financial proposal is assigned zero percent weightage)

- 5.6 After evaluation/raking of technical proposals, only the top-ranking, qualifying firm shall be invited for opening in presence of representatives formally authorized to negotiate its financial proposal/contract. These negotiations will focus firstly on the terms of reference and proposed facilities etc. to be provided by the client. After agreement on these issues, the cost elements will be discussed and finalized.

In case of failure of these negotiations with the top ranked firm, the second ranked qualifying firm on the basis of technical proposals will be invited to open and negotiate its financial proposal/contract. The process shall continue until negotiations with a qualifying consulting firm is completed successfully.

## **6. NEGOTIATION**

- 6.1 Prior to the expiration of proposal validity, the Client shall notify the successful Consultant that submitted the highest ranking proposal in writing, by registered letter, cable telex or facsimile and invite it to negotiate the Contract.

- 6.2 Negotiations normally take from two to five days. The aim is to reach agreement on all points and initial a draft contract by the conclusion of negotiations.
- 6.3 Negotiations shall commence with a discussion of your technical proposal. The proposed methodology, work plan, staffing and any suggestions you may have made to improve the TOR. Agreement shall then be reached on the final TOR, the staffing, and the bar charts, which shall indicate activities, staff, periods in the field and in the home office, staff months, logistics and reporting.
- 6.4 Changes agreed upon shall then be reflected in the financial proposal, using proposed unit rates (no negotiation of the staff month rates).
- 6.5 Having selected Consultants on the basis of, among other things, an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the staff named in the proposal. Prior to contract negotiations, the Client shall require assurances that the staff members will be actually available. The Client shall not consider substitutions of key staff except in cases of un-expected delays in the starting date or incapacity of key professional staff for reasons of health.
- 6.6 The negotiations shall be concluded with a review of the draft form of the contract. The Client and the Consultants shall finalize the contract to conclude negotiations. If negotiations fail, the Client shall invite the Consultants that received the second highest score in ranking to Contract negotiations. The procedure will continue with the third in case the negotiation process is not successful with the second ranked consultants.

## **7. AWARD OF CONTRACT**

- 7.1 The contract shall be awarded after successful negotiations with the selected Consultants and approved by the competent authority. Upon successful completion of negotiations/initialling of the draft contract, the Client shall promptly inform the other Consultants that their proposals have not been selected.
- 7.2 The selected Consultant is expected to commence the Assignment on the date and at the location specified in the Data Sheet.

## **8. CONFIRMATION OF RECEIPT**

- 8.1 Please inform the Client by telex/facsimile courier or any other means:
  - i) that you received the letter of invitation;
  - ii) whether you will submit a proposal; and
  - iii) if you plan to submit a proposal, when and how you will transmit it.

**LETTER OF INVITATION (LOI)**

**DATA SHEET**

**LOI**

**Clause #** \_\_\_\_\_

1.1 The name of the Assignment is : \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

The name of the Client is : \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

1.2 The description and the objectives of the Assignment are : \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

1.3 Phasing of the Assignment (if any): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

1.5 Pre-Proposal Conference: Yes \_\_\_\_\_ No \_\_\_\_\_

if yes, indicate date, time and venue.

The name(s) and address (es) of the Official (s) is (are): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

1.6 The Client shall provide the following inputs: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

1.8 The Invited firms are: \_\_\_\_\_



---

2.1 The Documents are: {TOR/Background information, Draft Form of Contract, Sample formats/Appendices etc.}: \_\_\_\_\_

---

2.2 The address for seeking clarification is: \_\_\_\_\_

---

3.3 (i) A short-listed firm may associate with another short-listed firm.  
Yes \_\_\_ No \_\_\_

(ii) The same sub-consultant may participate in several proposals  
Yes \_\_\_ No \_\_\_

(iii) The estimated number of key professional staff months is: \_\_\_\_\_

iv) Proposed key staff shall be permanent employees who are employed with the consultants at least six months prior to submission of Proposal.  
Yes \_\_\_ No \_\_\_

(v) The minimum required experience of proposed Key staff is [ Position; minimum academic qualification, special training etc., number of years of professional experience, number of years/minimum number of similar projects for specific expertise]:

3.4 (vi) Training is an important feature of this Assignment:.  
Yes \_\_\_ No \_\_\_

(vi) Additional information in the technical proposal includes: \_\_\_\_\_

---

3.7 Professional liability, insurances (description or reference to appropriate documentation): \_\_\_\_\_

4.1 The number of copies of the Proposal required is: One original and (number) copies.

4.2 The address for writing on the proposal is : \_\_\_\_\_

Telephone: \_\_\_\_\_

Cable: \_\_\_\_\_

Telex: \_\_\_\_\_

Facsimile: \_\_\_\_\_

4.3 The date and time of proposal submission are: \_\_\_\_\_

4.4 Validity period of the proposal is (days, date): \_\_\_\_\_

The location for submission of proposals is: \_\_\_\_\_

5.2 The points given to each category of evaluation criteria are:

<b><u>Description/Items</u></b>	<b><u>Points</u> *</b>
i) Specific experience of the consultants related to the Assignment	[5-10]
ii) Adequacy of the proposed Work Plan and Methodology in responding to the TOR	[10-30]
iii) Qualification and competence of the Key Staff for the Assignment	[30-60]
(iv) Suitability for the transfer of knowledge Programme (training)	[0-5]
<b>Total Points:</b>	<b>100</b>

- The points earmarked for evaluation sub-criteria for suitability of Key staff are:-

	<b><u>Points**</u></b>
(i) Academic and General qualifications	[20-30]

- |       |   |         |
|-------|---|---------|
| (ii)  | Professional experience related to the Project        | [50-60] |
| (iii) | Knowledge of language(s)                              | [5-10]  |
| (iv)  | Status with the firm (Permanent & duration with Firm) | [0-5]   |

**Total Points: 100**

- The minimum qualifying technical score [Number] Points.

5.3 The date, time and address of the financial proposal opening are:-

\_\_\_\_\_

\_\_\_\_\_

5.5 The weights given to the Technical and Financial Proposals are:-

Technical: (Between 0.8 and 1.0)

Financial : (Between 0.0 and 0.2)

7.2 The Assignment is expected to commence on:-

Date: \_\_\_\_\_

Location: \_\_\_\_\_

\_\_\_\_\_

Sincerely,

[Name of Client]

## **Enclosures**

- Terms of Reference/background Information
- Sample Forms for:-
  - Technical Proposal
  - Financial Proposal
- Draft Form of Contract

---

## **\* Evaluation Criteria**

*The points recommended to be earmarked for each of the four heads under para 5.2, as may be noted varies between two limits. The LOI to be issued will, however contain only one figure out of a total of one hundred. These limits are to be fixed by the LOI/Invitation Documents Finalization Committee which shall vary for various kinds of consultants' assignments.*

*For the sake of citing an example five types of assignments are listed as follows:*

*Standard Procedure for Evaluation of Proposals for Procurement of Engineering Services*

**Total Points= 100**

<b>Type of Assignment</b>	<b>Specific Experience of the Firm</b>	<b>Work Plan/ Methodology</b>	<b>Competence of Key-Personnel</b>	<b>Suitability for Training (when Training is part of Assignment)</b>
1. Pre-investment	10	30	55	5
2. Preparation Design, Tender Documents, Pre-qualification, Tendering Award	35	30	30	5
3. Supervision of Construction etc.	5	20	70	5
4. Training	10	10	80	-
All Four Phases Listed above part of Assignment	10	25	60	5

*The different values for the four items reflect varying degrees of importance that the Firms' experience and the proposed personnel have for assignment where, say the Firm's accumulated experience counts (as in civil engineering design), as opposed to, say, training, where success will depend principally on the actual Trainers. Experience of the Firm is normally assigned less weightage than the other two categories, because the Client has already taken into consideration this aspect at the time of selection for pre-qualification/short listing of the Firms for issuance of Requests for Proposals*

**\*\* Evaluation Criteria of Key Staff**

*In the case of evaluation of suitability of the proposed staff, the recommended points mention ranges and the RFP committee has to fix specific number of points for each expert according to the requirements of the expert's assignment. This aspect will be discussed in further detail under the section "Evaluation of Proposals".*

## **STANDARD FORMS**

## **APPENDIX-I**

### **TECHNICAL PROPOSAL FORMS**

**Form 1**

**FIRM'S REFERENCE**

**Relevant Services Carried Out in the Last Ten Years  
Which Best Illustrate Qualifications**

Using in the format below, provide information on each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was largely contracted.

Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm:
Name of Client:		No of Staff:
Address:		No of Staff Months:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current USD/Rs.)
Name of Associated Firm (s), if any:		No. of Months of Professional Staff Provided by Associated Firm(s)
Name of Senior Staff (Project Director/Co-ordinator, Team Leader) involved and functions performed:		
Narrative Description of Project		
Description of Actual Services Provided by Your Staff		

Consultants' Name: \_\_\_\_\_

**Form 2**

**PRESENT STAFF DEPLOYMENT**

(As of \_\_\_\_\_)

**Major Project(s) Presently Undertaken**

**Project Name Location Associates(s)**

<b>Field of Expertise</b>	<b>Total Number of Permanent Staff</b>	<b>Staff Assigned to Above Projects</b>



**Form 3**

**APPROACH PAPER ON METHODOLOGY PROPOSED  
FOR PERFORMING THE ASSIGNMENT**

**Form 4**

**COMMENTS/SUGGESTIONS OF CONSULTANT**

On the Terms of Reference (TOR)

1.

2.

3.

4.

5.

6.

Etc.

On the data, services and facilities to be provided by the Client indicated in the TOR:-

1.

2.

3.

4.

5.

Etc.

**FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY STAFF**

1. Proposed Position: \_\_\_\_\_
2. Name of Firm: \_\_\_\_\_
3. Name of Staff: \_\_\_\_\_
4. Profession: \_\_\_\_\_
5. Date of Birth: \_\_\_\_\_
6. Years with Firm: \_\_\_\_\_
7. Nationality: \_\_\_\_\_
8. Membership in Professional Societies: \_\_\_\_\_  
(Membership of PEC is Mandatory)
9. Detailed Tasks Assigned on the Project: \_\_\_\_\_  
\_\_\_\_\_

10. Key Qualifications:

[Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use up to one page].

11. Education:

[ Summarize college/university and other specialized education of staff member, giving names of institutions, dates attended and degrees obtained.]

12. Employment Record:

[ Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, title of positions held and location of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate.

13. Languages:-

[Indicate proficiency in speaking, reading and writing of each language: excellent, good, fair, or poor].

14. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these bio-data correctly describe myself, my qualifications and my experience.

\_\_\_\_\_  
Signature of Staff Member

Date: \_\_\_\_\_  
Day/Month/Year

or:

\_\_\_\_\_  
Authorized official from the firm

**Form 6**

**WORK PLAN/ACTIVITY SCHEDULE**

Items of Work/Activities	Monthly Programme from date of assignment (in the form of a Bar Chart)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

**Form 7**

**Completion and Submission of Reports**

Reports	Date
1. Inception Report	
2. Interim Progress Report(s) <div>- Monthly</div> <div>- Quarterly</div> <div>- Yearly</div>	
3. Draft Completion Report	
4. Final Completion Report	

**Form 8**

**WORK PLAN AND TIME SCHEDULE FOR KEY PERSONNEL**

Name	Position	Months (in the form of a Bar Chart)															Number of Months
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

Full Time: \_\_\_\_\_

Part Time: \_\_\_\_\_

Activities Duration \_\_\_\_\_

Yours faithfully,

Signature \_\_\_\_\_  
(Authorized Representative)

Full Name \_\_\_\_\_  
Designation \_\_\_\_\_  
Address \_\_\_\_\_

**COMPOSITION OF THE TEAM PERSONNEL AND THE TASKS TO  
BE ASSIGNED TO EACH TEAM MEMBER**

**1. Technical/Managerial Staff**

<b>Name</b>	<b>Position</b>	<b>Task Assignment</b>

**2. Support Staff**

<b>Name</b>	<b>Position</b>	<b>Task Assignment</b>

**APPENDIX-II**

**FINANCIAL PROPOSAL FORMS**



**Form 1**

**BREAKDOWN OF RATES FOR CONSULTANCY CONTRACT**

Project: \_\_\_\_\_ Firm: \_\_\_\_\_

Name	Position	Basic Salary per Cal. Month	Social Charges (%age of 1)	Overhead (%age of 1+2)	Sub-Total (1+2+3)	Fee (%age of 4)	Rate per Month for project Office	Field Allow. (%age of 1)	Rate per Month for Field Work
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

**Notes:**

- Item No. 1 Basic salary shall include actual gross salary before deduction of taxes. Payroll sheet for each proposed personnel should be submitted at the time of negotiations.
- Item No. 2 Social charges shall include Client's contribution to social security, paid vacation, average sick leave and other standard benefits paid by the company to the employee. Breakdown of proposed percentage charges should be submitted and supported (see Form 2).
- Item No. 3 Overhead shall include general administration cost, rent, clerical and junior professional staff and business getting expenses, etc. Breakdown of proposed percentage charges for overhead should be submitted and supported (see Form 3).
- Item No. 5 Fee shall include company profit and share of salary of partners and directors (if not billed individually for the project) or indicated in overhead costs of the Company.
- Item No. 7 Normally payable only in case of field work under hard and arduous conditions.

Full Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Form 2

BREAKDOWN OF SOCIAL CHARGES

S.No.	Detailed Description	As a %age of Basic Salary

**Form 3**

**BREAKDOWN OF OVERHEAD COSTS**

S.No.	Detailed Description	As a %age of Basic Salary and Social Charges

**ESTIMATED LOCAL CURRENCY SALARY COSTS/REMUNERATION**

<b>S.No.</b>	<b>Name</b>	<b>Position</b>	<b>Staff-Months</b>	<b>Monthly Billing Rate</b>	<b>Total Estimated Amount (Rs.)</b>
I.	Professional Staff				
		<b>Sub-Total:</b>			

**ESTIMATED LOCAL CURRENCY SALARY COSTS/REMUNERATION**

<b>S.No.</b>	<b>Name</b>	<b>Position</b>	<b>Staff-Months</b>	<b>Monthly Billing Rate</b>	<b>Total Estimated Amount (Rs.)</b>
II	Non-Technical Staff				
		<b>Sub-Total:</b>			

**DIRECT (NON-SALARY) COSTS**

S.No.	Nomenclature	Unit	Quantity	Unit Price	Total Amount
1.	Rent for Office Accommodation				
2.	Office Utilities Costs				
3.	Cost/rental of Furniture/Furnishings				
4.	Cost of Office/Other Equipment  i) Computers and accessories ii) Photo copy machines iii) Communication equipment iv) Drafting/Engineering equipment v) Surveying instruments vi) Cost of Laboratory equipment vii) Transport Vehicles/Rentals viii) .....				
5.	Cost of non-technical support staff not covered under remuneration charges				
6.	Travelling Costs				

<b>S.No.</b>	<b>Nomenclature</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Total Amount</b>
7.	Communication expenses				
8.	Cost for Survey/Investigations				
9.	Cost for Model Studies				
10.	Cost for O&M of Labs/Testing of Material				
11.	Legal/Accounting/Software/Special Consultants and other similar Costs				
12.	Drafting/Reproduction of Reports				
13.	Professional liability cost				
14.	Office/Drafting Supplies				
15.	Similar other costs not covered under other Heads				
<b>Total:</b>					

**Form 6**

**SUMMARY OF COST OF CONSULTANT**

S.No.	Description	Amount (Rs.)
1.	Salary Cost/Remuneration	
2.	Direct (Non-salary) Cost	
3.	Contingencies	
4.	Grand Total	



## **5.0 EVALUATION OF PROPOSALS**

### **5.1 Principles for Selection**

5.1.1 The importance of using an equitable and transparent selection procedure that can stand up to any scrutiny cannot be over emphasized. These principles can be summarized as follows:-

- Transparent, clear and unambiguous.
- Neutral to all consultants, public or private sector firms.
- Appropriate to the assignment.
- As detailed in the Letter of Invitation (LOI).
- Acceptable to the final approving authority.
- In conformity with the relevant provisions in the PEC Bye-Laws.

5.2.2 The most important aim in the evaluation of proposals should always remain as the selection of the most suitable proposal on the basis of the laid down criteria to perform and deliver. Of the various factors, the primary emphasis should be given to the personnel assigned to the work for which proposals have been invited.

### **5.2 Evaluation Criteria**

5.2.1 Selection of consulting firms require the (short-listed) firms to prepare and submit technical proposals on a competitive basis as out-lined in the sample Letter of Invitation provided in the Section-4 of this document. The technical proposals received have to be evaluated in accordance with the criteria approved by the approving authority and listed in the LOI.

5.2.2 There are three factors which should be considered for assigning weightage to the technical proposal and the price quoted by the firms for overall ranking, which are:-

- Technical complexity of the assignment.
- Impact of the assignment on future implementation process.
- Comparability of proposals viz-a-viz the respective output.

The extent to which price is to be considered largely depends upon these aforelisted three factors i.e. the price factor consideration is inversely proportional to the complexity, impact and quality of out-put of the consultants. For simple/type assignments the weightage assigned to price could be as high as 20 percent and for complex assignments it should not exceed 10 percent but it could also be fixed as low as zero percent. However it is upto the clients to judge if weightage for the price factor should be fixed at zero.

5.2.3 In the light of the afore-given the respective weightage ranges for Technical and Financial aspects of the proposals where price is to be taken into consideration are as follows:-

- a. Technical 80-100 percent
- b. Financial 0-20 percent
- c. Technical+Financial = 100

5.2.4 It is extremely important that the selection process should never lose sight of the quality of services which should remain a paramount concern. Therefore the evaluation criteria is divided into the following categories:-

- a) Qualification and experience of consultants to cover capacity, proficiency and specific experience.
- b) Approach and Methodology proposed by the consultants to carry out the assignment.
- c) Qualifications, experience and quality of proposed Key Staff.

For evaluation of proposals for a particular type of assignment, importance of each factor is taken into consideration for allocation of a specific weightage to each factor.

### **5.3 How to Proceed**

5.3.1 As stated earlier, preferably the same committee which was assigned to formulate and finalize the LOI/TOR/Invitation Documents should be assigned the mandate to open the Technical proposals at a designated time and also to carry out the evaluation of the proposals. The chairman/convenor of the committee should be a reasonably highly placed person in the hierarchy of the department to command credibility and respect. Alternatively there should be a Review Committee of not less than THREE and more than FIVE senior executives who may review the evaluation report prepared by the proposal evaluation committee individually and hold a meeting within a specified time period to finalize its recommendations. They may also have the option to ask the convenor of the evaluation committee to arrange a presentation during this meeting and offer explanations to any of the Review Committee observations for finalization of their views to save their precious time. It is re-iterated that prior to the date of submission of proposals the evaluation/review committees should already be in place so that they may proceed with evaluation forthwith.

### 5.3.2 Detailed Evaluation Criteria

Prior to receipt of proposals and to initiate the formulation of detailed evaluation criteria, the committee should consider the project, its components, the project implementation requirements and importance of each factor in the overall concept. After familiarization with these issues the committee should proceed with finalization of detailed evaluation criteria and drafting of the supplementary evaluation sheets on the basis of criteria provided in the LOI Data Sheet. These sheets should essentially cover the detailed sub-criteria for qualification/experience of firms, the Approach/Methodology/Work Programme and for each of the position for the Key personnel whose CVs are to be evaluated. It may be re-stated that the Key-Personnel are those permanent staff who are employed with the Consultants for at least six months prior to submission of proposal and have been nominated in the Data Sheet by the client and whose Academic/General experience and qualifications have been specified. It is recommended for sake of neutrality that these sub-criteria and supplementary evaluation sheets should be finalized before any of the member goes through the proposals submitted by the short-listed firms.

### 5.3.3 The committee members should then carefully peruse the Technical Proposals within a pre-agreed period before a meeting of the evaluation committee is convened to discuss the following:-

- Status of proposals received viz-a-viz the short-listed firms.
- Status of transmittal of clarifications to all short-listed firms on equal basis.
- Does any technical proposal contain priced financial terms ?
- If yes, then decision on its acceptance or rejection.
- Reservations/statements expressed in any proposal requiring special attention.
- Responsiveness of the proposals; decision on incomplete proposals.
- The evaluation criteria in LOI/sub-criteria, its re-appraisal.
- Briefing of the committee members about award of rating and the point system and distribution of the detailed evaluation sheets.
- Committee Members' status in respect of the conflict of interest, if any and decision for the replacement of the member.

### 5.3.4 The Percentage Rating

It is important that members should agree also about the percentage rating of various types of entries for the sake of uniformity. A typical sample rating

guide containing description of the ranges recommended for use are as follows:-

<b><u>Percent Rating</u></b>	<b><u>Quality</u></b>
40-59	Not acceptable
60-69	Marginally acceptable
70-79	Good
80-89	Very good
90-100	Outstanding

- 5.3.5 The evaluation committee should avoid inconsistencies and bias in applying the ratings. The members must keep the fact in mind that when price is also a selection factor it has fixed a cut-off point threshold. Any firm scoring below that threshold is going to be rejected whose financial envelope shall be returned un-opened. A threshold of 70 percent is considered appropriate because setting a higher threshold increases the risk of rejection of all or most of the proposals. The lowest reasonable rating is accordingly considered as 40 percent. Accordingly, to avoid rejection of a proposal, no rating below this number should be utilized. This view is recommended because a score lower than the threshold of one of the criteria may deny the client the option to negotiate a weak point of otherwise an outstanding proposal.

#### **5.4 Qualification/Experience of Firms**

- 5.4.1 Capacity and specific experience of Consultants is usually sub-divided into the following sub-factors:-

- Experience on similar projects
- Experience in similar conditions and areas.
- Capacity of the consultants to carry out the assignment.

Un-necessary strict conditions such as length of operations of a firm, weightage to the largest number of projects for 100 percent credit, total value of contracts over a specified time period for 100 percent credit, un-necessarily long list of home office support elements of men and material for awarding the 100 percent credit should not be imposed.

- 5.4.2 No two projects are exactly alike which would always be a hurdle in decision making for considering the previous experience as similar project experience. However, the proposal evaluation committees can take into consideration the experience of each similar/comparable component/or sub-component in the previous experience of the firm(s) and number of activities performed on the previous projects after assigning rational weightage to each component of a project as well as to each activity to be performed by the selected firm.

### **Components of a Project**

For the sake of example the components of an Irrigation and Drainage Project can be listed as follows:-

#### **A. Irrigation Component**

- a) Diversion Structures
- b) Main Canals (Lined/Unlined)
- c) Distribution System (Distys and Minor Canals)
- d) On Farm Water Management

#### **B. Drainage Component**

- a) Surface Drains
  - i) Main Drains
  - ii) Secondary/Tertiary Drains
  - iii) On Farm Drains
- b) Sub-surface Drains
  - i) Interceptor Drains
  - ii) Horizontal (Tile) Drains
  - iii) Vertical Drains (Tubewells)

### **Activities on a Project**

In the same manner the duties of the consultants i.e activities on the project could include:-

- a) Survey and Investigations
- b) Design of Project/Project Components/Tender Documents
- c) Procurement:
  - i) Pre-qualification of Contractors
  - ii) Tendering/Evaluation/Award of Contracts
  - iii) Contract Management
- d) Construction Supervision
- e) Quality Control
- f) O&M of Completed Project
- g) Project Monitoring and Benefit Evaluation
- h) Social Surveys/Environmental Impact Assessment
- i) Etc. Etc.

- 5.4.3 Each of the project component forming part of the project has its own significance and importance which can be assigned a weightage so that when any Firm's previous experience on a specific project shows experience only for that specific component, it could be considered for award of proportional

credit. In this manner no experience of a Firm will go un-noticed/unrewarded and the Firm will be awarded credit for that previous experience.

Similarly, a Firm on a specific project may only have carried out feasibility studies with surveys, investigations, feasibility level design, economic studies, social assessment and Environmental Impact Assessment (EIA) studies, while it has also carried out on another project the detailed/Tender design and finalized the Tender documents. On still another project it may have provided services on procurement, construction drawings and construction supervision with Quality control duties. Similarly it may have provided services only for O&M of an irrigation project. In case we have accorded a weightage to each activity for their significance, then the firm will be able to get credit in a better and equitable manner than comparing the previous experience with present requirement on a lump-sum basis which always has the chances of arbitrary credit assignment by the evaluation committee members, some times with large variations on the basis of their own perceptions.

For the sake of explanation a Sample Form containing this detailed sub-criteria is provided on the pages 57 as Form 5.1.

**(TITLE OF THE PROJECT)**  
**EVALUATION OF TECHNICAL PROPOSALS**

Sample Form 5.1

**I. QUALIFICATION/EXPERIENCE OF FIRM: MAXIMUM POINTS 1000**

Name of the Firm: \_\_\_\_\_

Sr. No.	Project Components	Weightage		A C T I V I T I E S					
		Percentage	Points	Survey/ Investigation/ Planning	Design of Project	Procurement	Construction Supervision	O&M	Points
				10%	30%	20%	30%	10%	
<b>A.</b>	Experience on Similar Project of matching magnitude/ complexity	80 % of 100	80	8	24	16	24	8	
<b>(a)</b>	<b>SPECIFIC</b>	75% of 80	60						
	i) Diversion Structures	30%	18						
	ii) Canal (Lined/Unlined)	30%	18						
	iii) Distribution System	20%	12						
	iv) OFWM	20%	12						
	<b>Sub-Total (a):-</b>		<b>60</b>						
<b>(b)</b>	<b>GENERAL</b>								
	Experience on Projects which are not similar but are important to judge capacity of the Firm (maximum credit for 3-5 Projects)	25% of 80%	20						
	<b>Sub-Total (b):-</b>	<b>100%</b>	<b>20</b>						
<b>B.</b>	Experience in similar conditions/regions	<b>10% of 100</b>	<b>10</b>						
<b>C.</b>	<b>OTHER FACTORS</b>	<b>10% of 100</b>	<b>10</b>						
	<b>a.</b> Home Ofice Support	<b>50</b>	<b>5</b>						
	<b>b.</b> Back-up Facilities	<b>50</b>	<b>5</b>						
	<b>Sub-Total (c):-</b>	<b>100%</b>	<b>10</b>						
	<b>Total Points Under-I</b>								

## **5.5 Approach and Methodology**

5.5.1 For evaluation of this aspect of a firm's capability, Approach and Methodology proposed by the firm to carry out the assignment is usually sub-divided into several areas which can include the following heads:

- a. Understanding of Objectives
- b. Quality of methodology  
(The methodology should cover all phases of the Project, all components of the project and all activities of the project individually).
- c. Innovativeness:  
The consultants have proposed to carry out surveys, design or quality control etc, adoption of latest concepts for Quality Assurance which would help produce quality out-put, be economical and employs state-of-the-art technology.
- d. Work Programme
  - i) Activity Schedule(s)
  - ii) Team Organization
    - Bar Chart
    - CPM Schedules
  - iii) Staff duty Matrix
  - iv) Staffing Schedule
  - v) Estimate of Staff Months
- e. Facilities Proposed for the Assignment
  - i) Support Staff
  - ii) Office accommodation/furnishings
  - iii) Living accommodation
  - iv) Equipment
  - v) Transport
  - vi) Any other facilities
- f. Transfer of technology
- g. Conciseness, clarity and completeness in proposal presentation

5.5.2 The afore listed areas under which the quality of proposals can be judged may be assigned weightages from within the total weightage assigned to this factor which has been explained under Section-4. The weighting is allotted, again, according to the relative significance of each area enumerated under para 5.5.1. However, the two most important areas are quality of methodology and the work programme which would share maximum weightage between themselves.

As a general guide, a general distribution of weightage for these areas is as suggested in the Sample Form 5.2 on page 59.



**Sample Form 5.2**

**Maximum Points: 250\***

ITEM DESCRIPTION	WEIGHTAGE	
	% AGE	POINTS
a. Understanding of objectives	10% of 250	25
b. Quality of Methodology	30% of 250	75
i) Survey & Investigations	10	
ii) Design	25	
iii) Procurement	15	
iv) Construction Supervision	30	
v) O&M	10	
vi) Other Items	10	
c. Innovativeness	10% of 250	25
i) Survey & Investigations		
ii) Design		
iii) Implementation Management		
iv) Training		
<b>Sub-Total (c):</b>		
d. Work Programme	30% of 250	75
- Activity Schedule	35	
- Team Organization	20	
- Staff Duty Matrix	10	
- Staffing Schedule	25	
- Estimate of Staff Months	10	
<b>Sub-Total (d):</b>	<b>100</b>	<b>75</b>
e. Facilities Proposed	10% of 250	25
f. Transfer of Technology	5% of 250	12.5
g. Proposal Presentation	5% of 250	12.5
- Conciseness	30	
- Clarity	30	
- Completeness	40	
<b>Sub-Total (g):</b>	<b>100</b>	<b>12.5</b>
<b>Total Approach &amp; Methodology</b>	<b>100%</b>	<b>250</b>

\* The figure of 250 is a multiple of 25 and 10 to make the figure larger so that points remain in whole numbers and point system is excluded (as much as possible).

## **5.6 Evaluation of Key Staff**

5.6.1 In most of the engineering assignments, the professional staff is the key element for ensuring the quality of out-put. The key staff accordingly is assigned major share of the points as stated in the Section-4 and consequently focused upon more closely by the evaluators of the technical proposals. Evaluation for quality of the Key staff is made on the basis of the following elements which are also listed in the LOI Data Sheet in Section-4.

- Academic and General Qualifications
- Professional experience related to the assignment
- Knowledge of languages
- Status with the firm (Permanent Staff Member)
- Training experience (if applicable i.e. on job training of client staff)

These sub-criteria should be applied to the team leader and other key professional staff proposed by the consultants. The weightage to each position is assigned according to the importance of that expert's role in effecting quality and providing qualitative services. Prior to starting evaluation, the following major issues must be resolved and agreed upon by the evaluation committee:

- a) Weightage for Each Group/Expertise
  - i) Weightage to Team Leader & Deputy Team Leader (if required)
  - ii) What are the key disciplines
  - iii) Weightage for each discipline
  - iv) Key personnel in each discipline
  - v) Weightage for each key person if more than one expert is to be evaluated.
- b) Weightage for each qualification element.
  - i) Educational
  - ii) General qualifications/training.
  - iii) Professional experience related to project
  - iv) Knowledge of languages
  - v) Status with the firm i.e permanent staff member/stable working relationship with the firm or contracted for the assignment.
  - vi) Training experience if on job training is a requirement in the assignment

5.6.2 Additional essential points to be taken into consideration prior to starting the evaluation of Key personnel are that the committee is clear about the Key Person/Groups who are going to have a bearing on the project implementation and quality of output in addition to the position of the Team Leader. The likely groups for implementation of an engineering project including services for O&M, as an example could be:-

- a) Project Manager/Team Leader
  - i) Team Leader
  - ii) Deputy Team Leader (if deemed necessary)
- b) Quality Assurance Group
- c) Survey and Investigation Group
- d) Design Group
- e) Procurement Group
- f) Construction Supervision Group
- g) Quality Control Group
- h) O&M Group

Team Leader is normally given large importance because his role is pivotal and since he effectively contributes towards the success of the assignment. The weightage to other groups is assigned in the light of their relative importance within the consultants' entire project implementation team. A sample guide for the evaluators of technical proposals for an engineering project is provided as follows:-

<b>Maximum Points: 600</b>		
<b>ITEM DESCRIPTION</b>	<b>WEIGHTAGE</b>	
	<b>% AGE</b>	<b>POINTS</b>
a. Team Leader	25	150
b. Quality Assurance	5	30
c. Survey/Investigations	5	30
d. Design	20	120
e. Procurement	10	60
f. Construction Supervision	20	120
g. Quality Control	10	60
h. O&M Group	5	30

- 5.6.3 The evaluation committee, after a decision about the weightage to each discipline/group will consider whether only the top specialist in the group or how many individuals are to be evaluated which however shall be as given in the RFP. If more than one person is to be evaluated then weightage to each individual within the group may also have to be decided before proceeding with the formulation of the detailed evaluation criteria and drafting of the supplementary evaluation sheets for each position. The detailed criteria formulation is a complex exercise and so requires the evaluation committee members to use their previous experience to decide about weightages for each element to be considered for evaluation of Key-Personnel listed in the LOI Data Sheet which are as follows:-

	<b><u>Eelements</u></b>	<b><u>Percentage Points</u></b>
i)	Academic and General Qualifications	20-30
ii)	Professional experience related to the Project	60-70
iii)	Knowledge of Languages	0-5
iv)	Status with the firm	0-5
	<b>Total Points</b>	<b>100</b>

#### **5.6.4 Academic/General Qualifications**

- 5.6.4.1 These refer to formal education, training courses related to the assignment, training which is considered an asset for successful performance against the assigned position and other professional attainments like recognition by the Government or some professional papers printed in local or international journals. This is taken into consideration to assess the level of advancement of the individual in his profession. However, it must be remembered that value of a person's previous university education diminishes with age. For persons beyond, say about ten years experience more attention should focus on his career experience, attainments, level of position in the firm and responsibility assigned to the post. Undue emphasis on university degrees earned should be discouraged. Infact length of experience and exposure to appropriate assignments/positions is more significant.
- 5.6.4.2 The points under this sub-head may be sub-divided in the light of the afore-given discussion. The minimum engineering degree i.e. a Bachelor's degree should be assigned the threshold percentage and remaining should be divided into the additional higher qualifications relevant to the position and other training/attainments in the form of medals/professional papers. For the position of a design engineer higher degree may be more relevant than for a construction management engineer where experience of working on a similar assignment provides exposure and confidence to the expert. Similarly a management degree may be relevant to a Team Leader as would be a Law degree to a Procurement (contracts) Specialist. Accordingly the requirements for any position may not be tailored as to exclude the engineers with Bachelor's degrees because there is no substitute to experience. However, the higher degree requirement could be demanded and stated as: "An M.Sc. or Ph. D. degree in the related aspect of his assignment will be considered a weighted qualification" and credit may be awarded for the higher degree accordingly.

- 5.6.4.3. It is desirable that weightage assignable to Academic and General Qualifications may be fixed as follows:-

<b>Field of Experts</b>	<b>Weightage for Academic/ General Qualification</b>
Team Leader	25 Percent
Design Engineers	30 Percent
Construction Engineers/ Contract Specialists	20 Percent
Planning Specialists/ Quality Control Specialists	25 Percent

- 5.6.4.4 The total weightage of 20-30 percent assigned to the sub-head Academic and General Qualifications is then further sub-divided into the elements which are relevant to the position/assignment which for the Chiefs of Design, Construction and the Team Leader for an engineering project, as an example, could be as follows:-

<b>Percent Weightage</b>			
<b>Academic/General Qualifications</b>	<b>Team Leader</b>	<b>Head Design</b>	<b>Head Construction</b>
B.Sc. Engg. (Related Field)	60-70	60-70	70-80
M.Sc. Engg. (Relevant Field)	10-20	10-20	10-20
Ph.D Engg.	0-5	5-10	-
MBA/Training in Management	5-10	0-5	0-5
Research/Technical Papers/Recognition by the Government	5-10	5-10	5-10
<b>Total for Academic/General Qualifications</b>	<b>100</b>	<b>100</b>	<b>100</b>

#### **5.6.5 Experience Related to Assignment**

- 5.6.5.1 This is the most important element and is normally assigned 50-60 percent of the total weightage for the position/group. This weightage is further subdivided into the elements relevant to the assignment which could include:-

- Experience in similar position for a minimum time period as rational.
- Experience in the specific project component in Senior Position.
- Experience in specific project aspect/component in Junior Positions.
- General experience considered useful for the project.

*Standard Procedure for Evaluation of Proposals for Procurement of Engineering Services*

- 5.6.5.2 The experience in similar position is normally a requirement for the top positions i.e. Team Leader, Head Design, Head Construction, Head Contracts or Head Quality Control Positions to ensure success because the person has already handled assignments in similar positions and has successfully led teams of experts/professional engineers. The specified requirement could be for number of years or number of projects or a combination of the two which should be a rational and practicable specification. The weightage assignable to this aspect is a factor of the importance of the leadership aspect. For the position of a team leader it could be as high as even 40 percent and for design/construction team leaders it could be in the range of 10 to 25 percent i.e. it could be higher for design/construction and lower for contract management and quality control disciplines.
- 5.6.5.3 Experience in similar position on a project of similar complexity and magnitude is an ideal experience which however may always not be available. The committee should therefore focus on assessment of the person's exposure to similar project assignments and adequacy of his experience to carry out the assigned duties successfully. This aspect should be assigned maximum weightage which could be 40 to 50 percent of the total weightage assigned to experience related to the assignment.
- 5.6.5.4 Experience in Junior Positions on a similar project with similar components is also an important asset because that exposure goes a long way in providing a real insight into the working and functions of an expert in performance of his duties in his future life. This experience should also be considered and adequately weighted which is recommended to be in the range of 20 to 30 percent of the total weightage assigned to professional experience.
- 5.6.5.5 Experience which is not specifically on a similar project as the one under implementation but is considered generally useful, could also be considered for awarding some credit/weightage for evaluation of the expert e.g. a person who designed projects not related to water resources/hydraulic structures but has worked on design of other types of reinforced concrete/brick structures may not be overlooked in its entirety and some credit may be assigned to that under the sub-head the "general experience". Similarly experience on construction of ware-houses, industrial and residential buildings may not be the same as construction of structures on an irrigation and drainage system but the construction experience is there and it may be acknowledged by awarding credit for this as the general experience.
- 5.6.5.6 In the light of discussion under the sub-paras heretofore , the weightages assignable under the "Experience Related to Assignment" could be summarized as follows:-

*Standard Procedure for Evaluation of Proposals for Procurement of Engineering Services*

**Percent Weightage**

<b>Description</b>	<b>Team Leader</b>	<b>Design</b>	<b>Construction</b>
i) Experience in Lead Position	20-40	10-25	10-25
ii) Experience on Similar Projects in Senior Position	20-40	40-50	40-50
iii) Experience on Similar Projects in Junior Position	10-20	20-30	20-30
iv) General Useful Experience	10-20	10-20	20-25
<b>Total for Experience Related to Project</b>	<b>100</b>	<b>100</b>	<b>100</b>

**5.6.6 Knowledge of Languages**

This element is more valid when some expatriate professionals are also part of the team nominated by a firm especially when the entire expertise requirements cannot be mustered from within the local firms or when the services are procured under some foreign assistance etc. Since medium of education in Pakistan for higher studies beyond intermediate level is in English language and Urdu is the National language which is a compulsory subject for first twelve years of education in Pakistan hence almost all graduate engineers or allied professionals are generally qualified to secure a similar ranking on this qualification. This kind of situation does not warrant that any credit be reserved for proficiency in languages except when for a certain position there is likely interaction with common people, requiring a person to know the regional language for first hand exchange of views or issuing instructions directly to the field staff. Accordingly proficiency in regional language could be an added asset for the evaluation committee to earmark 0-5 percent points under this head. This situation is more valid for professionals related to social/environmental aspects and sometimes construction supervision duties in the field.

**5.6.7 Status with the Firm**

The “status” for this purpose is defined as the expert’s position viz-a-viz the firm i.e. is he a permanent employee of the firm. The real intention of this element is only ensuring the availability of the person if the firm is selected on the basis of its overall merit. The consultants may be required to provide a certificate that the key staff will be on the rolls of the Consulting Engineer and the services of nominated expert will be available upto the end of the validity period of the consultant’s proposals.

- 5.6.8 In the light of the above discussion, the evaluation committee may consider various pros and cons of the project and the expertise requirements from the consultants and finalize a sub-criteria for evaluation of the Key-Personnel for each and every position. Summary evaluation sheets may accordingly be drafted for use of the individual committee members. Examples of these summary sheets are provided as Sample Form 5.3 on pages 67 & 68.

## **5.7 Evaluation**

- 5.7.1 After discussing the evaluation related issues and finalization of the detailed criteria for evaluation/drafting of detailed evaluation sheets the committee members should start their individual evaluation. As a first step each proposal should be closely reviewed; its relevant and significant features should be marked and noted for comparison. After this an actual evaluation with comparison to the other proposals should be carried out for each of the three/four main criteria by taking into consideration the individual elements of the sub-criteria. The results should be recorded on the detailed work sheets for main criteria and sub-criteria as well as for each of the Key staff selected/earmarked for evaluation by the committee.
- 5.7.2 It has been experienced that ratings given to criteria fluctuate during the actual evaluation process. The variations in credit award occur because rating accorded during the initial evaluation of the first proposal may be either too low or too high compared with the credit rating accorded to proposals evaluated later. This happens because the experience/qualifications of firms/individuals may be considered better than adequate and awarded high rating. However, when the other proposals are reviewed the evaluator may find that the qualifications/experience of the previous proposal was only adequate if compared to the other proposals. This kind of situation would have to be adjusted to reflect the difference in quality as found in the comparison of proposals with each other.
- 5.7.3 In the light of the foregoing, it is essential that when all the main and sub-evaluation criteria have been rated and the scores have been computed, each proposal should be re-read in its entirety. Another very practical solution is that all proposals should be reviewed and marked before exercise for award of \*credit is initiated. The evaluators should then compare the qualifications of the firms by going through the single element/item in each proposal and concurrently award the credit rating by placing the data in one's mind to be at the same plane all the time viz-a-viz all the proposals. Another problem normally encountered is that some evaluators are consistently generous and some are consistently harsh in their judgements and awarding ratings. This disparity would be acceptable provided each evaluator is individually consistent with all the proposals to arrive at a final rating which is just, realistic and the final scores still reflect appropriate difference in the quality of the proposals.



**(TITLE OF THE PROJECT)**  
**EVALUATION OF TECHNICAL PROPOSALS**

**EVALUATION OF KEY PERSONNEL**

**Maximum Points:**

**Name of the Firm** : \_\_\_\_\_

**Position** : \_\_\_\_\_

**Name of Nominated Staff** : \_\_\_\_\_

Sr. No.	Description	Maximum Weightage	Points	Status	Points Awarded
		Percentage			
<b>A.</b>	<b>ACADEMIC AND GENERAL QUALIFICATION</b>	<b>20 to 30%</b>			
	a) B.Sc. Engg. (Specified Discipline)	60-80			
	b) M.Sc.Engg. (Specified Specialization)	10-20			
	c) Ph.D. Engg	0-10			
	iv) Management (Degree/Diploma/Training)	0-10			
	v) Professional Papers, Recognition by the Govt/Professional Institutions	5-10			
	<b>Sub-Total (A):-</b>	<b>100</b>			
<b>B.</b>	<b>PROFESSIONAL EXPERIENCE RELATED TO ASSIGNMENT</b>	<b>50-60</b>			
	a) <b>Experience in Lead Position (specified Requirement)</b>	<b>10-40</b>			
	b) <b>Experience as Senior Professional</b>	<b>20-30</b>			
	(i) <b>Irrigation Component</b>				
	- Diversion Structure				
	- Main Canal				
	- OFWM				

	- Structures				
	<b>(ii) Drainage Component</b> - Surface Drains - Sub-Surface Drains - Tubewells - Tile Drains - Inceptor Drains <b>c) Experience as Junior Professional</b> <b>(i) Irrigation Component</b> - Diversion Structure - Main Canal - OFWM - Structures <b>(ii) Drainage Component</b> - Surface Drains - Sub-Surface Drains - Tubewells - Tile Drains - Inceptor Drains	<b>20-30</b>			
	<b>Sub-Total (B):-</b>	<b>100</b>			
<b>C.</b>	<b>KNOWLEDGE OF LANGUAGES</b>	<b>0-5</b>			
	i) English ii) Urdu iii) Regional Language (Sindhi, Balochi, Pushto, Punjabi)	60% 20% 20%			
	<b>Sub-Total (C):-</b>	<b>100</b>			
<b>D.</b>	<b>STATUS WITH THE FIRM</b>	<b>0-5</b>			
	Permanent Employee	<b>100%</b>			
	<b>Sub-Total (D):-</b>	<b>100</b>			
	<b>Total (A+B+C+D):-</b>	<b>100</b>			

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- 5.7.4 It has also been experienced that the consultants try to hide their deficiencies viz-a viz the requirements of the Terms of Reference (TOR) by making vague statements. It should be the policy of the evaluators that vague statements and lack of clarity in proposals on specific issues relating to the evaluation criteria and the TOR should be reasons for downgrading the ratings. This is very important because the consultants were invited to submit proposals clearly defining their experience; their understanding of the assignment, approach, methodology and work plan and nominate the staff which is the best suited to carry out the assignment.
- 5.7.5 It may be kept in view that approach and methodology proposed by consultants is not only meaningful but also reflects a clear understanding of the objectives. The work plan is also a definite Key to judge the understanding of consultants of this aspect. The Activity Schedule and the staffing schedules should be reconciled and may be judged for their adequacy and appropriateness for the project. Sometime consultants provide only simple re-statements of the scope of services and the TOR, stating that they will carry out these duties which should not be acceptable because it does not reflect the adequacy of their understanding of the project or their approach and methodology.
- 5.7.6 The evaluation of Key staff CV's should demand extra care; the experience of a permanent employee of firm can be cross-checked with the experience of the firm to locate any discrepancies. The age of the person, the data about education, the previous positions held by him and his place in the consultant's team should be critically appreciated for assessment of the person to judge if he acquired the professional level and experience to carry out the services assigned to him during the currency of the present project for which services are being procured.
- 5.7.7 Comments on the TOR normally reflect the consultants level of understanding of the key issues which often serves as an important guide for grading the consultants work plan and approach. Any comments or even criticism of the TOR by the consultants should not be rejected nor it should be noted for their penalization before it is carefully reviewed. If these are realistic and reflect their maturity to carry out the assignment it should be noted for awarding credit and later discussion during contract negotiations. It has actually been experienced that consultants' proposals based on their previous experience and containing adverse remarks on the TOR were actually helpful in improving the TOR and the implementation schedules for the project.

## **5.8 Review by Committee and Selection**

- 5.8.1 After the members of the evaluation committee have completed their individual evaluations, the convenor should convene the committee meeting. The committee would then jointly consider the individual evaluations and the scores, discuss the merits of each view point and choose the best proposal after assigning a technical ranking to each of the proposals. It is extremely important that all proposals are

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accorded its realistic position in ranking because it not only will help assess the best techno-financial ranking on the one hand and in case financial negotiations fail with the top ranked firm one may have to negotiate with the second ranked firm on the other hand.

5.8.2 The committee may proceed with the review in an organized manner by adoption of a formal agenda which could include the following items:-

- i) Discussion and revision of individual evaluations, if so warranted.
- ii) Finalization of technical ranking of proposals on the basis of arithmetic averages of the scores awarded by each member.
- iii) Finalization of comments on the ranked proposals which crossed the minimum quality threshold because it would be clarified during negotiations.
- iv) Elements from all proposals which are considered to be useful for rendering improvement in the methodology to carry out the assignment.
- v) Finalization of the “Evaluation Report” for submission to appropriate forum for its approval before financial proposals are opened.

## **5.9 Evaluation of Price and Final Ranking of Proposals**

5.9.1 After obtaining clearance of the ranking of Technical Proposals by the competent authority the financial proposals of the top ranked three firms which crossed the technical quality threshold should be opened in the presence of the consultants’ representatives who care to attend. The financial proposals should be verified and adjusted to correct any mathematical errors after checking that proposals cover all the items of expenditure required under the sample/standard forms. Adjustments shall also be made for cost of any quantifiable non-material deviations or reservations or for any particular advantages enjoyed by any of the firms. However, price adjustment provisions that may apply to the contract price during implementation of the project shall not be taken into account. If there is requirement of foreign currency component (FCC) by the firm(s) then the FCC may be converted to the local Pak Rs. by using the selling rate(s) for the currency(ies) as quoted by the State Bank of Pakistan or other relevant source such as inter bank rates for similar transactions on the date of opening of the financial proposals. After adjustment of prices, scores are computed using the following formula:-

$$L_p/P \times 100$$

Where

- $L_p$  is the lowest price from among all the proposals received.
- $P$  is the price of proposal whose price score is to be computed.

However, the cost element for the sub-contracted services required for the assignment such as surveys, drilling etc. for geo-technical investigations should not be included in the price. These costs should be negotiated separately.

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- 5.9.2 The recommended evaluation procedure for arriving at a joint score is given as an example for the first three firms having technical ranking and the costs proposed by them as given in the following table.

<u>Consultants</u>	<u>Technical Score</u>	<u>Price (Pak Rs, millions)</u>
A	87	5.8
B	83	5.2
C	80	4.2

The final ranking of these firms for a varying price weightage of 80,85 and 90 percent for technical quality and 20,15 and 10 percent for financial cost shall be as given in the following Sample Form 5.4.

**Sample Form 5.4**

**EVALUATION OF PROPOSALS WITH VARYING TECHNICAL PRICE RATIOS**

Consultants	Technical Score	X 80%	X 85%	X 90%	Price Pak Rs. in Million	LPx100 P Score	X 20%	X 15%	X 10%	Weightage		
										80/20	85/15	90/10
A	87	69.6	74.0	78.3	6.2	67.7	13.5	10.2	6.8	83.1	84.2	85.1*
B	83	66.4	70.6	74.7	4.5	93.3	18.7	14.0	9.3	85.1*	84.6*	84.0
C	80	64.0	68.0	72.0	4.2	100.0	20.0	15.0	10.0	84.0	83.0	82.0

\* = Winning  
Proposal  
X= Weightage

It may be noted from the above example that where price difference is not excessive, a high technical price ratio ensures that the best technical proposal will become a winning proposal. However, with low technical price ratio the 2nd ranked technical proposal becomes the winning proposal. It is desirable that on technically complex projects technical price ratio should be kept rather high.

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tech.3.xls

## **6.0 NEGOTIATION OF CONSULTANTS' CONTRACT**

### **6.1 Introduction**

Pakistan Engineering Council's relevant Bye-Laws have laid down the basis for computation of professional charges and modes of payment of professional fees for consulting services rendered by the engineering firms. A summary of these basis for computing the cost of services and payment to consultants include the following:-

- 6.1.1 **Per Diem:** Recommended for individual consultants whose services are utilized on an intermittent basis. Payment to the consultants is made for time actually devoted to work (including travel time) and all the direct costs actually incurred. The procedure for computing the rates is based on the monthly salary payable divided by agreed number of workdays per month.
- 6.1.2 **Retainer:** Employment on as and when required basis with token periodic payment for assuring availability because services are not required on full time basis. Services of Consulting Engineer are used on short and limited assignments and payment is made either on fixed monthly sum or on other mutually agreed basis i.e Per Diem or Hourly rates (in addition to the retainer token amount) for the time required to perform the services. This system normally is helpful in eliminating delays in short-listing/selection of consultants.
- 6.1.3 **Cost Plus Fixed Fee:** The payment is made as reimbursement of all salary/non-salary costs plus a fixed fee on projects where exact scope of work is not appropriately defined at the time of appointment of consultants. In this situation the consultant is paid a fixed fee defined by PEC as interest on invested capital, readiness to serve and profit (prior to taxes). The PEC's adoption of this mode of calculation of consultant's remuneration and having a contract on this basis carries certain draw backs. This mode shall be discussed later in further detail.
- 6.1.4 **Hourly Rates:** This mode of payment or the rates so computed are applicable even for Per Diem, Retainer or Cost Plus Fixed Fee Contracts when services are utilized for less than one month/part of a day. In this situation the rate, the PEC recommends, should be determined by dividing the monthly salary of the expert by agreed number of working hours per month and enhancing this rate by an agreed multiplier to account for the overheads and the fee. The direct non-salary costs are however, reimbursed as per actuals.
- 6.1.5 **Fixed Man-Month Rates or Fixed Hourly Rates:** Only a variation of cost plus fixed fee where all elements of the billing rate i.e salary, overheads and fee are fixed which are merged into a fixed person-month or person- hour rates. Direct non-salary costs are however, still payable as per actuals.



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**6.1.6 Fixed Lump-sum Payment:** Lump-sum payments are agreed for consultants' services where scope of work is fairly estimated and well defined. However, the costs are still estimated on the basis of person-month costs and direct non-salary costs. PEC has finalized a Standard Form of contract based on this mode of compensation to the consultants. Accordingly this type of contract shall be discussed in further detail later.

**6.1.7 Percentage of Construction Cost:** This method is applicable to both; the Design Phase and the Construction Supervision Phase. The cost of services includes the man-month costs as well as the non-salary costs chargeable as a fixed percentage of the construction cost. This method is suitable when exact size and scope of services for the engineering phase is not fully established at the time of engagement. For construction phase a fixed fee as percentage of cost is agreed with clearly defined limitations in respect of duration of contract, man-month requirements and categories of supervisory staff. The construction cost for such contracts deems to include cost of project on prevailing market rates at the end of the design phase. The total construction cost which is used for computing the cost of services shall not include client's admin. costs, consultant's services costs, interest during construction and cost of land/way leaves.

In this type of contract the disadvantage lies in lack of incentive for the consultants to make any special effort for the project. The consultant is actually rewarded rather than penalized if the actual construction cost increases. If a ceiling is placed on the cost of services this type is automatically converted to a lump-sum type of contract. This is the type of contract which should preferably be avoided.

**6.1.8 Time Over Runs:** This is a situation when the project implementation gets delayed and the consultants were being paid on the basis of fixed percentage of construction cost. The consultants are compensated under an agreed provision in the contract for services beyond the specified contract period using the same basis to compute compensation as used for initial fixation of the percentage costs etc.

**6.1.9 Repetitive Structures:** This is a situation when design/drawings/cost estimation and Tender Documents of one set is exactly applicable to similar later units of a project (not repetition of elements within the same structure). The cost of services for such assignments is appropriately reduced because the quantum of services shall remain identical as for the first unit. However, cost of supervision of construction and related services will not get reduced because there will be no reduction in quantum of input by the consultants for this phase of the assignment.

## **6.2 Standard Forms For Consultants' Contract**

The PEC has however, prepared only two main types of contracts for which standard forms have been finalized. A third standard form is also available but it is only for smaller projects. The three standard forms are:-

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- a) Standard Form of Contract for Engineering Consulting Services (For Large Projects) - Time-Based Assignments.
- b) Standard Form of Contract for Engineering Consulting Services (For Large Projects) - Lump-Sum Assignments.
- c) Standard Form of Contract for Engineering Consultancy Services (For Smaller Projects).

**6.3 Time Based /Cost Plus (Fixed Fee) Contracts**

6.3.1 This type of contract is usually adopted for projects involving design and construction of industrial plant and provides for the consultants to be paid a fee, usually covering know-how, plus time based rates for design and management of construction of the plant. It may also include a guarantee that the plant will perform according to the agreed specifications. This type of contract is also used for Research and Development Work where the degree of input cannot be estimated nor the output predicted and specified with any degree of confidence. In spite of establishing a ceiling in cost of services or even placing an incentive in the fee structures the client is the one who bears the cost risk.

6.3.2 Fixed Fee is defined as interest on invested capital, readiness to serve and the element of profit. It is further stated that this fixed payment varies with the scope of consulting engineering services involved and may vary with factors like:-

- Project size and its construction cost;
- Complexity of work;
- Risks involved in cost ceiling imposition;
- Uncertainty of scope of the project;
- Difficulty in re-defining scope of the project/cost ceilings; and
- Other factors which are not a function of size of the project, and include:-
  - Duration of services performed;
  - Number of persons employed; and
  - Their composition.

All the factors enumerated above are likely to form the basis of negotiation of Fixed Fee with the client.

6.3.3 This type of contract however, is not in vogue in procurement of services for most of the engineering projects where Time-Based Contracts are usually adopted. In this type of contract composite rates are agreed per person-hour, per person-day, per person-week or per person-month which are payable in accordance with the time the consultants actually spend on the assignment. The components of the person-month rate are salary (including social charges) costs, a percentage of salary costs as overhead costs and a percentage of the total of salary plus overhead costs as Fee; all summed together the billing rate per person month. The other rates are calculated from this by dividing this rate by the agreed number of hours set to

be worked in a month, agreed number of days set to be worked in a month or agreed number of weeks set to be worked in an year. All other costs are payable as direct/out of pocket expenses and payable as per actuals. This type of contract has major advantage for the client that he pays only the actual costs incurred by the consultants to address the assigned tasks.

The clients adopting this type of contract or even fixed fee contracts must be cautious that sometimes excessive or too little services may be provided than what is warranted. These person-months must be realistic and both the client as well as the consultants must carefully monitor the utilization of person-months in comparison with the progress achieved towards completion of the assignment. The other point is that this type of contract provides for payment to consultants for their inputs rather than their out-put, which warrants that monitoring must be made for input-output schedules. The experience has shown that client generally did not look into this aspect and so was not aware of who should be on the job and what or when individual's task would be starting or completing. Accordingly it is warranted that some key mile stones should be fixed for consultants performances where ever feasible and possible. Additionally the fielding of the consultants' key and other experts should be allowed according to the actual progress on project implementation rather than the initial schedules.

#### **6.4 Lump-sum Fee Contracts**

- 6.4.1 For lump-sum contracts the client and consultant negotiate and agree upon a fixed price for a specified output where the consultants assignment can be pretty well defined and quantified . This type of contract is simple to administer because payments are made for output rather than input. Payments are agreed to be released at either the stated intervals or as specified completion stages of the assignment and submittals. These contracts also are however, based on a person-month type of computations to arrive at the total price of the consultants' services. Accordingly its negotiation is usually almost a replica of the Time Based Cost plus Fee contracts.

Sometimes the prices are also computed on the basis of traditional percentage formula which has to be fixed by some Engineering institutions. Leading Lending Agencies and some other international institutions have fixed percentages on the basis of cost of the project and sometimes adopted by some clients oblivious of the fact that while project costs in USA could be lower due to cheaper materials than in Pakistan for projects with similar specifications but the services cost would be higher due to substantially higher person-month rates in USA. The World Bank percentages are copied here only for the sake of comparison of cost ratios for various stages of project implementation. These relationship between the cost of engineering assignments and total project costs are as follows:-

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<b><u>Sector</u></b>	<b><u>Assignment</u></b>	<b><u>Cost as Percentage of Estimated Project Cost</u></b>
Infrastructure -	Feasibility Study	0.5-2
	- Detailed Design	3-6
	- Supervision of Construction Works	5-8
Architecture	- Architectural Design	2-3
	- Contract Administration	1-2
Industry	- Feasibility Study	1-2
	- Outline Design	1-3
	- Detailed Design, Procurement And Supervision	8-12
Procurement Services	- Procurement Services	1-5 (of cost of goods)

6.4.2 It is reiterated that these indicators are copied here only for informal reference. International practice recommends that these percentages should only be used to estimate the order of magnitude for preliminary costs of consultant's services for general budgeting purposes. These should not be adopted in a vacuum but with great caution i.e. either in conjunction with the per-month time-based calculations or having more of an insight into the cost elements ratios during and for different stages of project assignments. It must be remembered that actual cost of services greatly depends on the size and complexity of the design of the project and its components.

6.4.3 For the client there is an attraction for this type of contract i.e he has transferred the price risk and any risk of additional work actually required as compared to that anticipated at the time of negotiation of contract to the consultants. However, that is a double edged weapon because on the very outset the consultant would like to provide some kind of cushion or contingency in his price to meet such an eventuality making the cost figures higher than realistic. The other serious disadvantage is that consultants will try to complete the assignment with as little inputs as possible and with staff which is as less costly as possibly feasible. If these aspects are not to be monitored then even quality could be the first casualty in this type of contract. If a lump-sum contract is adopted for a period exceeding one year an allowance for price escalation and additional services required by the client should be included under the head contingencies in the total price of the lump-sum contract.

## **6.5 Preparing for Negotiations**

6.5.1 After approval of the ranking of the firms the client should issue an invitation in writing to the top-ranked firm. This invitation should preferably include, inter-alia, the following:-

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- i) The list of any additional information required from the consultants which they should bring to negotiation meeting.
- ii) Mention any weakness of the consultant's proposal especially about key staff who did not obtain the minimum threshold scores and their replacement is required.
- iii) Points about their comments on TOR and any reservations about the consultants' proposed work plan etc.
- iv) Any intentions for discussion and rendering any changes in the information provided in the LOI/Invitation Documents.
- v) Most important, a written formal authorization for negotiation of contract by their representative(s).

6.5.2 When the price has been considered for ranking of consultants proposals, in principle the cost of services should not be negotiated i.e. the consultants should not be asked to reduce the cost except for adjustments where consultants submittals do not conform with each other such as Activity-Staffing Schedules or percentages of Overheads. However, it is presently a common practice in many provincial departments to force the top-ranked firm to provide services at the lowest price quoted by any of the proposing firms which is a highly misplaced action. This is un-ethical and very un-fair because the element of price can not be considered in seclusion of the contents of the technical proposals and quality. Similarly to ask the consultants submitting a lower cost proposal to perform services as submitted in a superior technical proposal while maintaining the low cost is also unethical and unfair. It must be remembered that enforcing unrealistic costs endangers the quality of services which is a major loss of the client and should never be enforced. The OBJECTIVE OF NEGOTIATIONS is to arrive at a mutually advantageous, clearly defined contractual relationship. There is a clear difference in haggling and negotiations; the first i.e. haggling is the adversary approach where reduction at any cost i.e. quality and outcome of assignment is enforced by the clients and the second i.e. later negotiation means distribution of benefits. It is strongly recommended that the negotiation committees should adopt and maintain realistic approach and try to attain the best quality possible at realistic and equitable costs.

6.5.3 The client in the meantime should appoint a negotiation committee which should also contain some of the evaluation committee members. The chairman of the committee must have sufficient authority to decide about issues that may occur so as to take negotiations to a satisfactory conclusion as early as possible. Since the negotiations cover three basic components which include technical services, financial terms and legal contract, hence the committee should be appropriately represented upon by experts with requisite expertise in all the three disciplines.

The negotiation committee members should be well prepared who should be

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intimately familiar with the LOI, the appendices of the LOI and the contents of the winning proposal(s). The committee should decide about the type of financial information it would seek from the consultants. It should also have information about the top ranked firm's latest prevailing unit person-month rates for the categories of staff nominated for the project as well as the rates of the elements forming part of the billing rates. In addition to the foregoing the committee members should be provided with relevant information compiled earlier as stated under the sub-paras 5.8.2 (iii) and (iv).

### 6.5.4 Agenda for Negotiation

The negotiation committee should also finalize an agenda for an organized discussion in a specific sequence and order which is extremely important. The sample agenda items include:-

#### **i) Opening Remarks**

A brief welcome to consultants team by the leader/chairman of client's team and introduction of his team members. The consultants' authorised Team Leader to respond. The consultants may also try to bring the Assignment Team Leader to the negotiations, if possible.

#### **ii) Submission of Formal Authorizations**

Consultants' representative(s) to present the authority to negotiate and conclude a contract.

#### **iii) Terms of Reference**

Review and discuss the objective and scope of the assignment, reconcile any differences between the consultants' understanding of proposed modifications and position of the client. Since this finally agreed TOR shall form part of the final contract, it should be agreed and finalized with due care.

#### **iv) The Methodology, Work Plan and Activity/Staffing Schedules**

It shall include:-

- Phasing of inputs.
- personnel to be assigned and matching of the Activity-Staffing schedules with each other.
- Discussion of new ideas developed on the basis of ideas from various competing proposals.

**v) Consultant's Personnel**

- Availability of staff (especially if the validity period of the proposals has expired)
- Quality of staff (if some staff is below the required level of proficiency).

**vi) Counterpart Staff and Facilities**

The extent and timing of requirements and provisions of these elements. A mechanism may be agreed to resolve a situation when any difference between consultants requirements and client's ability to provide happens during the currency of consultants' contract.

**vii) Equipment**

What and how many are to be provided and how to be arranged i.e by the consultants or by the client.

**viii) The Conditions of Contract**

Discussion of all conditions which can have impact on the price of the assignment to ensure that both parties are on the same grid and appreciate the implications of these conditions. Modification to special conditions should be agreed if deemed necessary. The salient aspects which should be jointly reviewed include, but are not limited to the following:-

- a) Services Definition.
- b) Staffing.
- c) Payment Procedures including Advance Payment or revolving Fund Arrangement.
- d) Bank Guarantees for Advance Payments.
- e) Retention Monies.
- f) Price Adjustment.
- g) Liability Provisions/Insurances.
- h) Disputes Resolution.

**ix) Financial Terms**

It is extremely important that financial terms should not be discussed prior to discussing and reaching agreement on the agenda items. Negotiation or more appropriately, the rationalization of monthly rates is admissible only when exorbitantly high rates have been proposed. However in case of QCBS System Salaries of Staff, since it has already been given weightage in the ranking process, will not be negotiated any further.

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- x) Draft Agreed Minutes and signing of the MOU/Draft Contract.

### **6.5.5 Billing Rates**

The rates for members of the team of experts/other staff proposed by the consultants can be jointly reviewed so as to ascertain that:

- i) The salary items conform to the elements as defined in PEC Bye-Laws.
- ii) The rates are based on actually paid salaries of the particular staff member over past one year. However limited/genuine raise in his salary if awarded by the consultants in line with the company rules is admissible.
- iii) The salary increases are in line with the company rules.
- iv) The overhead percentages used for computing the billing rates have been certified by an independent firm of auditors. Elements of overheads conform to the elements defined in the PEC Bye-Laws.
- v) The overhead percentage figure is either for the latest year for which Audit Report is available or an average of the figures as computed for the past 3 years.
- vi) There is no double counting of any elements i.e. some items are part of salary costs and also of overhead costs or the non-salary costs.
- vii) The Fee expressed as a percentage of sum of salary cost and overheads is within acceptable limits which should usually range between 10 to 20 percent (depending on the risks perceived by the consultants).

### **6.5.6 Payment Provisions**

- 6.5.6.1 Payment provisions are different for Time Based/Cost Plus Fee Type of Contracts and the Lump-Sum Contracts. However, these provisions should be agreed and procedures streamlined so as to ensure a steady cash flow to the consultants. In case of the Time-Based Contracts the salary related cost should be based on billing rates for consultant's time actually worked for the Project as well as direct/non-salary costs should be agreed to be payable against monthly invoices as long as the services are rendered according to the agreed activity schedule. Alternatively the consultants could be paid on the basis of payment schedules drafted viz-a-viz the consultants scheduled inputs with adjustments every three months to ensure regular cash flow to the consultants. Another mode of payment is placing a revolving fund to cover about 3 months costs in the consultants account to be re-furbished after two months to make payments for agreed items/heads and rates. The profit on this fund is payable to the client. An interest free advance may normally be paid to the consultants which may later be deducted from the agreed number of monthly payments during the contract period. However advances are payable strictly against bank guarantees to be furnished to the client by the consultants.



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Physical and price contingencies are estimates, and expenditure out of these should be governed by certain basic conditions which may include:

- i) Prior approval of the client.
- ii) An order for extra work signed and formally issued by the client.
- iii) Documentary proof that goods or services have gone costlier in price and agreement is sought before proceeding.
- iv) Exchange rate variations incase the expenditure is also agreed to be incurred in foreign exchange.

6.5.6.2 Payment schedules for Lump-Sum contracts are made either on the basis of time periods associated with completion of the assignment or on the basis of out-put of the consultants. The following two examples are given for reference:

<b><u>Example A</u></b>	<b><u>Payment Percentage</u></b>
- Contract Signature (Advance)	15
- Assignment 25% complete (Progress Report 1)	15
- Assignment 50% complete (Progress Report 2)	15
- Assignment 75% complete (Progress Report 3)	15
- Presentation of Report	30
- Final Payment (After Acceptance of Report)	10
<b>TOTAL:</b>	<b>100</b>

<b><u>Example B</u></b>	<b><u>Payment Percentage</u></b>
- Contract signature (Advance)	20
- Draft Inception Report	30
- Final Inception Report	10
- Draft Final Report	30
- Final Report	10
<b>TOTAL:</b>	<b>100</b>

### **6.5.7 Some Points about Negotiation**

Negotiation of the consultants' contract and finalization of the financial terms is a serious issue which requires similar attitude and effort. Some advisory suggestions are made to bring this stage to a meaningful and logical/fruitful end which could include:-

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- i) The atmosphere during the negotiation must remain calm and attitudes of the negotiators professional.
- ii) Mutual respect must remain the corner-stone of the basic negotiation policy.
- iii) In the event of any team member getting excited, it should be tactfully ignored because any similar response can hinder the productivity of the negotiation meeting.
- iv) Personal references must be avoided; the focus should continue to remain on the policy issues and aspects.
- v) Any modifications proposed by any party should be appropriately and adequately explained for its review, proper appreciation, discussion and adoption for benefit of the project.
- vi) When negotiators are unable to resolve some dead locks it would be better to pass on to the subsequent issue and give time to the parties for further consideration and discussion later/the next day.
- vii) As explained earlier, discussion and agreements about finalization of the technical, material, facilities and personnel issues is likely to create dead-locks. It is very necessary that the proposed agenda must be followed to resolve such issues in their order of sequence as listed under sub-para 6.5.4.
- viii) The negotiation teams should always remain flexible for arriving at a mutually beneficial contractual arrangement. The client's adherence to fixed standards or official billing rates is only going to affect the quality of the services.
- ix) The consultants should try to provide the client with adequate information and explanations about cost structures including actual salaries paid to the staff.
- x) The client should not try to impose additional work load upon the consultants which was not part of the LOI issued to the consultants without due consideration of its additional cost or try to add to the services after completion of the negotiations.
- xi) The Final word of advice; One of the client's nominated representative should carefully record the minutes with specific reference to the agreements by the parties. All the recorded agreed points should be initialed by the negotiation team leaders at the end of the session/day. Similarly the final agreements by the parties should be initialed in the form of an MOU/Draft Contract which is subject to clearance, ratification by the competent authorities. It is advisable that in-formal approvals are obtained from the competent authority before signing of the MOU/Draft contracts.