

**BEST PRACTICE: PROCUREMENT OF CONTRACTING AND  
ENGINEERING SERVICES**

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**PREAMBLE**

Mr. Chairman, President of Consulting Engineers South Africa (CESA), Eng Lynne Pretorius, Council Members of CESA, Fellow GAMA EXCO Members, Distinguished Participants, Ladies and Gentlemen,

I bring you felicitations from all GAMA members throughout Africa.

I thank you for inviting me to participate in this year's CESA Infrastructure Indaba in Durban. It is indeed homecoming for me as this is the second occasion I am participating in an Indaba in Durban.

My paper for this conference is on "***Best Practice: Procurement of Contracting and Engineering Services***"

In this presentation, I intend to speak on *Accepted International Standards in Procurement and the Ghanaian Experience*.

Distinguished Participants, the significant contributions the procurement function makes to organisations and national economies makes it imperative to put in place formal administrative and legal frameworks to ensure that due process is followed in the execution and implementation of procurement policies.

The Asian Development Bank/The Organization for Economic Cooperation and Development, ADB/OECD (2008) estimate that, public procurement accounts for about 20 per cent of government expenditure worldwide. Across Africa, government procurement averages around 10 per cent of GDP and can account for up to 70 percent of public expenditure, as in the case of Tanzania and Uganda (Woolcock, 2008). In Botswana, public procurement exceeded \$ 1 billion in 2003 (Lionjanga, 2003). In Ghana, about 43.8 per cent of the national budget is spent on public procurement, and a further 90 per cent of all development partners inflows are spent through procurement related activities (World Bank, 2003). Government expenditure on public procurement in South Africa accounts for 13 per cent of GDP or \$ 14 billion in 2003.

In developed economies, the procurement functions' contributions to GDP cannot be over-emphasised. In the European Union, public procurement accounts for 16 per cent of GDP (Mathew, 2010)

In Australia about 20 per cent of its GDP is spent on procurement.

## **1.0 ACCEPTED INTERNATIONAL STANDARDS IN PROCUREMENT**

The idea of procurement of services be it contracting and engineering using established procedures has been an accepted method in many countries. Owing to its importance in infrastructure development, FIDIC produced in year 2011 the first edition of **FIDIC PROCUREMENT PROCEDURES GUIDE**.

"The Guide covers the procurement of engineering and building works for projects of all sizes and complexities. It emphasises the importance of preliminary investigation and studies before a construction or other engineering project is undertaken, and the development of a realistic project strategy for its realisation. The document provides essential guidance on the underlying concepts and philosophy of procurement, and the planning necessary to form a sound basis for the forthcoming project. The Guide then explains how the project strategy should be developed, as this will govern all subsequent stages of the process. Detailed guidance is given on each step of the tendering process for every type of engineering project, and advice on the choice of the applicable FIDIC standard contract form. The Guide covers systematically all stages of procurement, from identification of the need for a project or facility up to the receipt of tenders and award of contracts for its implementation".

There are four well-documented procurement methods. These are:

- a) Open Tendering
- b) Selective Tendering
- c) Direct Contracting (Sole-sourcing)
- d) Small Contracts

### **1.1 PUBLIC PROCUREMENT METHODS**

#### **1.1.1 Open Tendering**

The objective of open tendering is to make use of competition for each individual contract in order to maximize economy and efficiency. In this regard, the preference to open tendering is indeed the recommended choice in procurement. The tendency towards favoritism is highly minimized when there is openness. Open tendering is generally synonymous to 'competitive bidding' which is the usage associated with the World Bank.

Even though open tendering is the preferred procurement method, there are a number of shortcomings that the procurement entity has to contend with.

These include the following:

- a) Length of time and effort taken for the exercise
- b) Strict adherence to set procedures
- c) Assumption that the procuring entity has the ability to produce a complete set of tender documents, including technical specifications
- d) Restriction of the purchasers discretion and
- e) Uncontrolled number of prospective tenderers

The key components in open tendering which ensure and maintain the competitive element are:

- Advertisement
- Objective qualification criteria
- Neutral technical specifications and standards and
- Clear and objective evaluation criteria

#### 1.1.2 *Selective Tendering*

Selective tendering is more or less open tendering with some amount of restriction. This method is normally accomplished by using pre-qualification for major, complex contracts. In this procedure, the procuring entity would place an advert requesting interested firms to submit documentation on a pre-qualification dossier. In completing the dossier, the tenderer must show evidence that they possess the necessary qualifications, experience and financial capacity to undertake the specified project.

#### 1.1.3 *Direct Contracting (Sole-sourcing)*

If the procuring entity finds itself in a situation where competition is absent or where conditions are such that it would be impractical to try and organize a competitive bid, direct contracting is normally resorted to. Guidelines shaping that decision are:

- a) Absence of tenders in response to an advert
- b) Situations where competition is absent for technical reasons, such as patent or other exclusive rights
- c) Cases of extreme urgency
- d) Additional deliveries by the original supplier where addition is small and the original contract was won under competition
- e) Additional construction works on conditions similar to above and
- f) Some other unique situation

Direct contracting option should be used as a last resort to eliminate favoritism and ensure efficiency and value for money projects.

#### ***1.1.4 Small Contracts***

When contract value is low, small contracts procurement method, i.e. request for quotations procedure is recommended. This is because the business of organizing full-fledged tendering or other competitive bidding procedure is time consuming and costly exercise, normally out of proportion to the cost of the project. The threshold amount which should not be exceeded for this method to be used should be set by the procuring entity.

### **1.2 THE PROCUREMENT PROCESS-THE PREPARATION STAGE**

Generally, public procurement involves the acquisition of goods and services. The services may be either contracting or engineering services for major plants and major construction works among others. The ultimate aim in this process is to attract maximum competition for the purchaser. In undertaking this process the source of financing needs to be identified. The procurement entity has an obligation to follow the procurement regulations of the particular funding agency.

#### ***1.2.1 Procurement Planning and Budgeting***

In planning the procurement process, it is noted that whilst large contracts may attract the interest of tenderers on the international markets, they reduce the scope of competition from domestic operators. To satisfy the varied interests, the procuring entity has a responsibility to translate their needs into suitable packages so as to ensure that budgetary overruns are avoided. It is also important that situations which would encourage sole-sourcing are minimized at the planning stage of procurement process.

#### ***1.2.2 Notices***

Procurement notices are published in bulletins such as the UN Development Business.

### **1.3 THE PROCUREMENT PROCESS-COMMON FEATURES**

#### ***1.3.1 Technical Specification***

Technical specifications provide adequate description of the object to be procured. The specification may be design oriented or performance oriented. Whilst design oriented specification provide a great deal of detail about the object to be procured, such as detail drawings, material specifications, etc, performance oriented specifications focus on the purpose of the object to be procured, with the

understanding that each tenderer may propose his or her own design as long as required functions of the object will be met.

Technical specifications must elicit responsive tenders, be non-restrictive and use internationally recognized standards.

### **1.3.2 Evaluating Criteria Of Tenders**

The exercise in procurement should ensure that the selected tender conforms to the purchaser's requirements and he/she gets value for money. The criteria for evaluation should at the end obtain a ranking between tenders that reflects the purchaser's priorities.

The procurement process must be transparent and fair to all tenderers. Towards this end, extreme care must be taken to ensure that the evaluation criteria are clearly defined in the tender documents and that all specific data on which the evaluation is based are included.

### **1.3.3 Criteria For Qualifying Tenderers**

In procuring services, it is very important that the procuring entity establish for itself whether the tenderer is qualified to perform the contract if awarded. The process of ensuring this could be achieved through either a **pre-qualification** exercise or a **post-qualification** exercise. Some of the issues for consideration in a qualification dossier are:

- a) General and specific experience
- b) Personnel capabilities
- c) Equipment capabilities
- d) Financial position and
- e) Litigation history

The results of a qualification exercise should indicate a pass or a fail verdict for the tenderer.

The advantages of a pre-qualification exercise are that the procuring entity could know in advance the number of qualified tenderers and also spare an unqualified tenderer the time and cost of preparing and submitting a tender. Since it takes time to organize a pre-qualification exercise, it is advisable to undertake that exercise mostly for large or complex contracts and for specialized services.

#### **1.3.4 *Tendering***

Procuring entities preparing tender documents should ensure that they furnish all the information needed by prospective tenderer in order for him to accurately prepare the tender. As such the tender documents should be clear and unambiguous and should inform the tenderers about:

- a) Rules applicable to the tendering process
- b) Precise requirements for the works, or services to be procured
- c) Criteria to be applied in the evaluation
- d) Terms and conditions of the contract that the winning tenderer will be required to enter into.

#### **1.3.5 *Receipt And Opening Of Tenders***

In the spirit of openness and fairness, procuring entities should give tenderers clear instructions about procedures governing the submission and opening of tenders. The procedures must include the following:

- a) Instructions about the place and the latest (deadline) for the tender submission and the proper marking of the tender (envelope)
- b) Registration of tenders as they are submitted in a diary with records of date and time, stamped and safely stored unopened. As much as possible, receipts be issued to tenderers on submission
- c) Tenders to be opened in public with representatives of tenderers being present

#### **1.3.6 *Examination and Evaluation Of Tenders***

Tenders are evaluated in stages. Firstly there is an examination to check the correctness and whether the submitted tender is substantially responsive. This involves checking whether the tenders *(i) meet any eligibility requirements and have been properly signed; (ii) are accompanied by the required securities; (iii) have no material errors in the computation; (iv) are complete; (v) are substantially responsive to the tender documents; (vi) are otherwise generally in order*. A tender that is not properly signed or not accompanied by the required security must be rejected.

Only tenders that pass the responsiveness test are evaluated further to determine by ranking which of the responsive tenders is the most advantageous (lowest evaluated cost). There should be a post-qualification if a pre-qualification exercise was not done before the call for tenders. If pre-qualification exercise was conducted, it may be necessary to check whether any condition of the tenderer has changed since the pre-qualification took place.

In the evaluation of tenders, only those factors specified in the tender documents ought to be considered and only against the criteria specified in the tender documents. Also, the criteria set in the instructions to tenders should as much as possible be measurable objectively to ensure fairness to tenderers.

### **1.3.7 Contract Award**

Generally, the tenderer whose tender has been evaluated as the most favorable is recommended for the award. However, in practice there is sometimes a need to make some minor amendments to the tender before an acceptance can be given. The amendments could be of a technical nature or some clarifications during the evaluation of the tenders. The changes so agreed in the pre-contract negotiation are included in the contact document as the "minutes of negotiations"

## **1.4 PROCUREMENT OF ENGINEERING SERVICES**

### **1.4.1 Procedure for Selecting Consultants**

The procedures for procuring engineering services are either Quality Based Selection (QBS) or Quality and Cost Based Selection (QCBS).

In the QBS procurement procedure, the main elements involved are:

- a) Advertisement for Request for Technical Proposals
- b) Respondents submit Technical Proposals indicating their qualifications
- c) Selection Committee
- d) Evaluation Process with or without interviews
- e) Evaluation Criteria and relative weight (Proposals and Interviews)
- f) Negotiate fees with highest ranked firm

In the case of a QCBS procurement procedure, respondents submit both a technical and a financial proposal. The technical merit of the proposal constitutes the primary selection criterion and the financial terms are of secondary importance.

The effect of this principle is that proposals in separate envelopes are requested, one containing the technical proposal and the other the price. Recognizing that preparation of an attractive technical proposal costs a lot of time and energy, and that consultants may not wish to spend a lot of time and effort unless they see a chance of winning, it is advocated that a system of "short-listing" of eligible consultants be instituted. The result of the "short-listing" enables the procuring entity to address invitation to a limited number of selected firms, usually not less than three not more than six. Technical proposals are evaluated before any price proposal is opened. The technical evaluation is thus carried out in an atmosphere

where financial considerations do not influence the evaluator. The final selection usually is made on the basis of a mix of criteria, always retaining the idea that technical merit should carry most weight. Negotiation of the final terms of the contract, including the financial terms, is generally held to be acceptable, although less so when price is given some weight in the selection formula.

## **2.0 PROCURING CONTRACTING AND ENGINEERING SERVICES IN GHANA**

In Ghana, the law governing the procurement of both contracting and engineering services is Act 663, Public Procurement Act, 2003.

The law sets out the different components as:

- a) Establishment of the Board
- b) Procurement Structures
- c) Procurement Rules
- d) Methods of Procurement
- e) Tendering Procedures
- f) Methods and Procedures
- g) Methods and Procedures to engage the services of Consultants

Different approval levels for the different procurement entities have been established in the law for the different sizes and complexities of projects to be undertaken. These are in the form of financial thresholds.

### **2.1 CLASSIFICATION OF CONTRACTORS**

Contractors who purport to undertake the Government of Ghana projects are required to undergo classification by the Contractors Classification Committee.

The classification Register is solely for the use of Government Ministries, Departments, Agencies and Corporations, National, Regional, Metropolitan, Municipal and District Tender Boards and other Institutions which require the services of Roads, Building and Civil Contractors, etc., for the execution of projects.

The classification exercise aims at the proper grading of contractors into categories and financial classes. The inclusion of a contractor's name in the Register is not compulsory, but it should be noted that only contractors who are thus classified would be legible to undertake Roads, Building and Civil contracts awarded by the Government of Ghana.

Classification into the appropriate Categories and classes will be required before a contractor can bid for Government of Ghana Projects. The appropriate categories and classes are as follows:

MINISTRY OF ROADS & HIGHWAYS CLASSIFICATION FOR ROADS & BRIDGE WORKS

	CATEGORY A	CATEGORY B	CATEGORY C	CATEGORY S
CLASS	ROAD , AIRPORT & RELATED STRUCTURES	BRIDGES, CULVERTS & OTHER STRUCTURES	LABOUR BASED ROAD WORKS	STEEL BRIDGES AND STRUCTURES: CONSTRUCTION, REHABILITATION AND MAINTENANCE
4	Spot Improvement and reshaping, 80km and regravelling, 20km  a. <i>Tender figure up to cedi equivalent of US\$500,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$800,000</i>	Pipe culverts up to 1.2m diameters and non-reinforced concrete structures, drains 0.5km  a. <i>Tender figure up to cedi equivalent of US\$200,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$300,000</i>		This class is not applicable
3	Works in class 4 plus resealing up to 20km and resurfacing up to 10km  a. <i>Tender figure up to cedi equivalent of US\$1,300,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$2,000,000</i>	Works in Class 4 plus single box culverts and other minor reinforced concrete structure including short retaining walls  a. <i>Tender figure up to cedi equivalent of US\$500,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$800,000</i>	ROAD CONSTRUCTION MAINTENANCE AND SPOT IMPROVEMENT USING LABOUR BASED METHODS AS TRAINED BY THE DEPARTMENT OF FEEDER ROADS	Sand blasting, cleaning, jacking, changing of members and parts, tightening of bolts and nuts, other repairs including painting  a. <i>Tender figure up to cedi equivalent of US\$500,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$800,000</i>
2	Works in class 3 plus improvement, rehabilitation and minor construction works  a. <i>Tender figure up to cedi equivalent of US\$2,500,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$4,000,000</i>	Works in Class 4 plus single box culverts and other minor reinforced concrete structure including short retaining walls  a. <i>Tender figure up to cedi equivalent of US\$1,000,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$1,500,000</i>		Works in class 3 plus minor construction  a. <i>Tender figure up to cedi equivalent of US\$1,000,000</i> b. <i>Total value of work on hand up to cedi equivalent of US\$1,500,000</i>
1	Works in class 2 plus major construction of roads and airports  No limit on tender	Works in class 2 plus major bridges and other major structures  No limit on tender		Works in class 2 plus major steel construction  No limit on tender

MINISTRY OF WATER RESOURCES, WORKS & HOUSING CLASSIFICATION FOR  
BUILDING AND CIVIL WORKS

WORK CLASS	THRESHOLD	
BUILDING AND CIVIL		ELECTRICAL
D1/K1	>500,000 USD	E1
D2/K2	200,000 - 500,000 USD	E2
D3/K3	75,000 - 200,000 USD	E3

## 2.2 CLASSIFICATION OF CONSULTANTS

In the case of Consultants, there is currently no official classification in place. The newly established Engineering Council of Ghana is proposing to undertake classification of consultants. I am reliably informed that they intend to have on their register three (3) classes of consultants, namely small size, medium size and large size. The classification will be based essentially on the firms personnel numbers and may-be their turnovers.

In the procurement of consultants for engineering services, the Government Agencies, normally would request "an expression of interest" from consultants in the specific projects they intend to tender. Out of the submissions received a compilation of a long-list would be undertaken. The list would be pruned down into a short-list of say three to six consultants for the tendering. It is after this process that a two-stage tendering procedure (QCBS) would be organized to select a winning consultant.

Distinguished participants, ladies and gentlemen in my presentation, I have given you a short overview of the best practice in procuring contracting and engineering services across nations and the Ghanaian experience.

I believe that if procuring agencies would stick to the procedures for procurement discussed in this paper, there would be less favoritism and more openness in procurement. The results would be successful and efficient project implementation which ensures value for money for the purchasers.

It is therefore necessary to invest in sustainable reforms in order to continuously improve upon procurement processes, procedures, and practices (Scott, 2008).

Thank you for your attention.

**References:**

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- Procurement of Professional Engineering Services (A *Qualification Based Process*) *by Eric Wieduwilt (Dec. 9, 2014)*
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