FOREWORD

CONTRACT ADMINISTRATION AND MANAGEMENT IN PAKISTAN

BY

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CONTRACT ADMINISTRATION

A contract is a legally binding agreement between two or more parties. Contract administration focuses on what happens before a contract is signed. Contract administrator's duties as taking control of the way the contract is prepared, analyzed and negotiated. Contract administration may start from issuing a request for proposal to potential contractors / vendors, inviting them to bid on a contract. Once a contractor / vendor is selected, the contract administrator sees the contract to its conclusion, handing it over to the contract manager after the agreement is signed by all parties.

Contract management focuses on what happens after a contract is formed. Contracts management involves deciding what human, financial and technical resources an organization will devote to various initiatives. Thus, a contract manager decides how the organization will ensure that it does what it agreed to do in an agreement with another party and that the other party also fulfills its obligations.

Administrative functions related to dealing with contracts, may be 1) request to bid, 2) evaluating bid, 3) allotment of contract, 4) Implementing contract, 5) measuring completed work, and 6) computing payments.

Types of Contract

Choosing appropriate contract type is essential to successful performance under a contract. The type of contract determines the cost and performance risks which are placed on the contractor. There are two broad contract groups--**fixed price and cost reimbursement**. Within each of these groups, there are various types of contracts which can be used individually or in combination.

Firm Fixed Price Contracts

This type of contract requires the contractor to successfully perform the contract and deliver conforming supplies or services for a price agreed to up front. This type of contract places the most performance and cost risk paid. A firm-fixed price contract is suitable for supplies and

services that can be described in sufficient detail to ensure complete understanding of the requirements by both parties and assessment of the inherent risks of performance.

Other Fixed Price Contracts

Within the fixed price contract group,contracts can be awarded with:

- Economic price adjustment factors to allow for industries where costs fluctuate frequently either up or down
- Various incentive types which can be used to reward good performance or to impose provisions to deduct for poor performance
- Price redetermination provisions which permit issuing an order on a fixed price basis and allow for revisiting the reasonableness of that pricing later during the contract performance
- A specified level of effort

Cost Reimbursement Contracts

A cost reimbursement contract allows for payment of all incurred costs, within a predetermined ceiling that can be allocated to the contractarea allowable within cost standards, and reasonable. Therefore, all types of cost reimbursement contracts place the least cost and performance risk on the contractor. They basically only require the contract to use their "best efforts" to complete the contract. However, this type of contract is required when the uncertainties of performance will not permit a fixed price to be estimated with sufficient accuracy to ensure a fair and reasonable price is obtained.

Other Types of Contracts

Labor-Hour/Time and Materials - This type of contract pays at fixed rates for services rendered and for materials at cost plus a handling fee.

Letter Contracts - This type of contract is a preliminary instrument which permits a contractor to begin work when all of the contract terms and conditions have not been agreed upon. This type of contract is only used in circumstances of unusual and compelling urgency.

Indefinite Delivery Contracts - There are three different types of indefinite delivery contracts -- definite quantity, indefinite quantity, and requirements. In general, these contracts provide for delivery of goods or services upon the issuance of a delivery or task order as needs arise.

It is generally believed that Contract Management in the public sector in Pakistan is very weak. There are no particular courses run by Universities and Institutions which cover this subject comprehensively. In order to highlight the importance of Contract Administration and Management, Pakistan Engineering Congress arranged a Seminar on "Contract Administration and Management in Pakistan" on 18th October, 2014. Following six papers coveringvarious aspects of Contract Administration and Management will be presented and discussed at the Seminar.

No.	Subject	Author
1.	Contract Administration in Pakistan and FIDIC Rainbow 1999	Engr. Abdul Qayyum
2.	Procurement of Civil Works and Evaluation of Bids	Engr. Ijaz A. Khan
3.	Arbitration	Engr. Balal A. Khawaja
4.	Dispute Resolution	Engr. Nasir Hanif
5.	Regulatory Frameworks for Procurement of Consultancy Services	Engr. Mazharul Islam
6.	Role of the Engineer in FIDIC Based Construction Contract	Engr. Mian Abdul Sattar
7.	Claims	Engr. Mushtaq A. Smoore

It is expected that presentation and discussion of these papers will enlighten the Members of the Congress and other participants of the seminar on this important subject.

Paper No. 314

CONTRACT ADMINISTRATION IN PAKISTAN AND FIDIC RAINBOW 99

Engr. Abdul Qayyum

CONTRACT ADMINISTRATION IN PAKISTAN AND FIDIC RAINBOW 99

By

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1. Abstract

Briefly the Contract administration consists of the means and measures to achieve quality and avoidance of the overrun of time and money in a project. Therefore it involves the activities like selecting the appropriate contract form, and addressing the pitfalls of the form of contract used for smooth execution of the project. It may be recalled that in practice quality of the different execution stages of the project depends upon the quality of the contract documents.

FIDIC Rain Bow 99 (Red, Yellow, Silver and the Green) Books are prepared by highly qualified technical, financial and legal experts and based on a 100 years tested and internationally accepted as good engineering practices /experience. In Pakistan major of the projects whether they are predominately civil, mechanical, chemical or a combination thereof are being controlled at government/public level and are apparently being planned, coordinated and controlled through first three of these Books i.e., via first three forms of the contracts. Primarily the three books, in isolation, are used for Employer's design, Contractor's design or for EPCT (Engineering, procurement and construction by the contractor/turn key projects) types of contract projects respectively. These books, if applied adequately, protect the rights and obligations of the parties in a rational way while delivering the end product of the requisite quality without overrun of time and money.

As per these books disputes as well as overrun of time and money can be minimized or even avoided if procurement is commenced and carried out with strategic decisions on contract packaging, for each contract on the allocation of design responsibility and the basis for determining contract price. It is only after these above matters have been considered and decisions reached, that a decision should be made on the appropriate General Conditions to be incorporated into a particular Contract. There may be border line cases, for which the selection of the appropriate books at initial tender stage may be provisional and need to be reviewed subsequently at final pre-tender stage.

Further the General FIDIC Conditions in all the books are globally oriented and to make them project specific, and compatible to design responsibility, project details and particularities including any modifications of the General Conditions are needed, except those to be specified in the Appendix to tender. It might even be necessary, depending on the design responsibility, to draft two alternative sets of Particular Conditions, one for Red and the other for Yellow, and

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only then decide which set or partial set to adopt. Some of these items are optional, such as changes to Sub-Clauses 3.5 or 20.1, but the others require data, because otherwise the related Sub-Clause shall not apply (See Sub-Clauses 4.2, 13.6, 13.8, 14.2, 18.25 (d) and 18.3).Sub-Clause 5.1 of Yellow Book requires the Contractor to scrutinize the Employer's requirement at pre tender stage as an experienced Contractor, otherwise Time for Completion shall not be extended and Contract Price shall not be adjusted. Consequently, during execution, disputes delays and overrun of time and money has to be faced.

Besides above the matters regarding Sub-Clauses 1.5, 3.2, 4.10, 4.12, 8.3, 8.4, 12.4, 13 and 20 are also important regarding Engineers duties, ambiguities and discrepancies, programme of Works, EOT, Variations and Contractor's Claims, etc., and will be discussed in the paper as well as presentation.

This paper is an attempt to describe the state of art "Contract Administration" techniques so that the overrun of time/cost is avoided or minimized while the quality of end product is achieved and the contracting parties may react favorably with each other to achieve the targets possibly, in accordance with the tendered schedules. The author hopes that the paper will be well received by the concerned authorities and the practicing engineers in Pakistan.

2. Introduction

Within the construction industry the use of standard forms has become common place. For different reasons in the international field the most frequently used standard forms are those of the International Federation of Consulting Engineers (FIDIC). In Pakistan both government and public sectors use these forms but usually without making them compatible to the requirement of Works to be implemented under the Contract. The FIDIC range of Contract comprises three major forms which are usually known as Red Book, Yellow Book and Silver Book. All of them contain a set of General Conditions, Guidance for Preparation of Particular Conditions and several model forms. All the aforementioned standard forms originate from common law jurisdictions and/or are strongly influenced by common law doctrines and experiences. They have been drafted in English by highly qualified technical, legal and financial experts but no authentic translations exist. It is also prudent to mention that all forms of Contract are governed by the law of the Country. In Pakistan the Contract law is the "Contract Act 1872" of the then "British India" amended afterwards with latest edition 2005-2006. Sub-Clause 1.13 of the entire FIDIC Books 1999 edition provides that the Contractor shall comply with the Laws, which means that all local laws, ruling safety and health issues as well as quality issues must be met.

The pre-contractual transfer of know-how and information, regarding Site 'Data' and applicable law and degree of responsibility on these issues is critical for the successful completion of the whole operation which in turn will depend on the form of the contract used and its adjustment recognizing the share of design responsibility either of the Employer or the Contractor or of both. The extent to which such kind of information is necessary depends however not only on the project and its specifications but also on the applicable law. By submitting their tenders, tenderers are usually deemed to know all relevant laws, acts and regulations that may in any way affect or govern the operations and activities covered by the tender and the resulting contract. The presumptive or future proper law of the contract will govern the contractual risk allocation.

Therefore this forum is requested to formulate the recommendations regarding Contract documents in accordance the prevailing applicable law of the Country and clear degree of interpretation and/or verification of Site Data and respective people should know it. For example the defect responsibility period of the Contractor is different in different countries' contract- laws from contractual defect notification period recommended in FIDIC forms of Contract. Likewise Particular Conditions should be formulated taking into account the Contractor's design responsibility including Contract Price. The same prevails regarding Site Data, Programme and Contractor's proposals under different forms of contract.

3. FIDIC Rainbow

i) Overview

The FIDIC RED BOOK (Construction) is a contract form where the design is made by the Employer and the Contractor is paid on a measurement basis. Thus the Red Book follows the traditional procurement route of Design, Bid and Build. The Accepted Contract Amount is based on estimated quantities. The Contractor is paid for the actual quantities of work he carried out.

The FIDIC YELLOW BOOK (Plant) is a contract form where the design is carried out by the Contractor who shall be paid on lump sum basis. It is considered to be a well-balanced contract form holding a fair balance between the interests of both parties to the contract. Practically it needs the preparation and incorporation of the Appendix to Tender, Particular Conditions and Employer's Requirements very carefully. Please note the Priority of different Contract documents is different in different forms of the Contracts.

The FIDIC SILVER BOOK (Turnkey) is a contract form where the design is carried out by the Contractor who shall be paid on a lump sum basis. The SILVER BOOK is envisaged for EPC/Turnkey projects and allocates most of the common risk to the Contractor. It is not intended for use where major unidentified risks are presumed or expected.

The FIDIC GREEN BOOK (Short Form) is intended for relatively small projects or works of a repetitive nature or short duration. The works are to be carried out according to the design provided by the Employer. FIDIC's Guidelines suggest that USD 500,000 and 6 months should be regarded as reasonable limits on the capital value and Completion Time respectively.

The FIDIC Design, Build and Operate form (also referred to as the Gold Book) is a design and build contract form to which an operation and maintenance period has been added. This form joins the series of contract forms published by FIDIC since 1999 and was first presented at the FIDIC Annual Conference in Singapore in 2007.It has been followed by the First Edition, published in September 2008. As the contract period is intended to continue for a period of more than 20 years it is critical that the parties to the contract attempt to co-operate throughout.The FIDIC DBO from provides a lump-sum price to be paid in installments.

The FIDIC Form of Contract for Dredging and Reclamation Works (also referred to as the Blue Book) has been published in 2006. This new publication can be used for all types of dredging and reclamation work and ancillary construction with a variety of administrative arrangements. The works are to be carried out according to the design provided by the Employer. However,

the FIDIC form can easily be altered into a contract that includes, or wholly comprises, contractor designed works. The most essential part of a Blue Book contract is the description of the activity itself, the specifications, drawings and design of the work. The nature of dredging and reclamation works typically requires major dredging equipment. Thus there is a need for a particular risk allocation in order to protect the Contractor in the event of any additional mobilization of such equipment.

ii) Services under a Contract form

Depending on the contract form used, the FIDIC Books comprise the following services:

a) Step: Pre-tender duties such as scrutiny of Employer's documents and requirements of site surveys and visits regarding interpretation/verification of Site Data.

b) Step: Pre-contract design.

c) Step: Final design.

d) Step: Completion of the works.

e) Step: Remedy of defects.

f) Post contractual liabilities.

g) Operation and Maintenance Services.

iii) Which Types of Contract to be used?

These Books, mentioned as above, were prepared as a "matching set", with each topic being covered in similarly-worded provisions in each Book except where otherwise necessary e.g. GCCs 1.9, 4.1 4.10, 4.11, 5 12 and 13 including 20 needs to be handled very carefully. Otherwise overrun of time and money combined with compromise on quality including disputes may arise. However, adoption of similarly-worded provisions may occasionally be considered to have resulted in the inclusion of a provision which is only applicable in a few of the contracts for which the Book will be appropriate.

The Books are all intended to be flexible in use, recognizing the wide variety of users requirements but extreme care, rich experience and qualification is required to optimize this flexibility. Where sub-clause deals with a matter on which different contract terms are likely to be applicable for different contracts, the sub-clause was drafted inanticipation of alternative possibilities: including it not being required, or it being amended in Particular Conditions, e.g. the term "fit for purpose" "Site Data" and the sub-clauses 4.9, 4.10 and 4.11 including 4.12 although have, almost similar, titles but differ in interpretation depending upon the type of the Contract. Further, if a mix e.g. Contractor design and the Employer's design is included in the same project, particular care regarding preparation and inclusion of Appendix to Tender, Particular Conditions and Employer's requirements and/or Specifications is needed for smooth running and/or for the avoidance of the overrun of Cost and Time. Emphasis added.

4. Performances

Once the contract has been awarded the Contractor shall execute the works including any design as stated in the Contract. All of the FIDIC Books provide for detailed rules concerning the execution of the Works and payment for it. The Works shall be completed within Time for Completion. If the Works are completed the Engineer will issue the Taking Over Certificate, which under the Gold Book has been renamed in Commissioning Certificate. After the expiry date of the latest of the relevant Defects Notification Period the Engineer shall issue the Performance Certificate. The Gold Book, due to the fact that the Contractor assumes the responsibility for the Operation Service, provides for a Contract Completion Certificate.

5. FIDIC Contracts Guide, Time Lines and Other Support

When in 1999, the Federation International des Inge´nieurs-Conseils ("FIDIC") published its three new forms of contract which are known as the 1999 Rainbow Edition, the Contracts Committee decided to publish a complementary guide. The three Books, published by FIDIC, are covered by this Guide and referred to as "CONS","P&DB" and "EPCT".

In the FIDIC Contracts Guide, the texts in the Books are reproduced in a three column layout. The Guide includes comments and recommendations as the case may be. It is not a comprehensive or conclusive clause by clause commentary but it gives extremely important advice and information about the books including their inter-relationship.

Finally each of the Books includes timelines. It is strongly recommended to have a view on it before entering into any contract. The timelines give a clear and comprehensive overview about all major events, such as the Commencement Date, the date on which the Taking-Over Certificate will be issued, the date on which the Performance Certificate will be issued or the date on which the Performance Security will be restored. The parties to the Contract are also informed about the typical sequence of Payment Events and the typical sequence of Dispute Events. In the Gold Book this concept has been maintained and amplified.

In summary, FIDIC books should be read in their common law context having regard to the governing law. The meaning of any contract term (e.g. fit for purpose) which is not yet defined in Clause 1 should not be determined by mere translation. Using dictionaries without having in mind that the wording has a common law background may, and quite often will, lead to misunderstandings. FIDIC has obviously adopted a considerable number of common law concepts, such as the concepts of substantial completion and time at large.

6. Drafting a Contract

The following comments on the drafting of international commercial contracts may be useful:

i) Matters of principle, such as venue, applicable law, price, etc., should be discussed before starting the process of contract drafting. As any contract is embedded in a law system the draftsman should be aware of the fact that the applicable law can affect the contract. It is therefore important to know at early stage which law will be applicable.

ii) It is useful to use standard clauses whenever possible because the other party will be

familiar with it, which will help during negotiations and to save time. When using standard clauses or standard forms, be reluctant to alter or change them. Ensure that the used standard clauses are coherent and remain coherent with the standard form when drafting Particular Conditions.

iii) In drafting clauses it is critical to use short sentences and sensible punctuation.Any wording should be clear and certain. Ambiguities in a clause are often construed by courts against the person who is trying to rely on it.

iv) If the draftsman uses a language other than his native language he should carefully verify the exact meaning of the used language, especially when the applicable law has been set in force in a different language. Sometimes the used terms have an exact legal meaning with which the draftsman is not familiar. Sometimes legal terms of the applicable law cannot be translated exactly into the ruling language.

v) Achieving the best result does not always mean to draft a contract which is heavily weighted in favor of one party. A reasonably balanced contract which covers all relevant points may be more appropriate.

vi) The draftsman should aim to use strictly identical wording. Any different wording will be interpreted by courts in a different way, because it will assume that different things are meant by different phrases. It is no mistake to repeat a sentence or words.

vii) Be vigilant for the impact of mandatory rules, which may be applicable. This may happen especially if the proper law of the contract is not the same as the local law of the site.

viii) Local legislation as to taxes, royalties, environment, currency transfer and employment should be taken into consideration.

7. General Observations as to the FIDIC Contract Documents

The parties must also be aware of the fact that the General Conditions contain so-called fall-back clauses which need to be given effect by the parties. Care has therefore to be taken when completing the Appendix to Tender. **Additionally, Sub-Clause 13.6 will only apply if a Day work schedule has been included in the documents. Also the Sub-Clause 13.8 only applies if the adjustment data have been included in the Appendix to Tender. If parties fail to complete those data which are necessary for the application of fall back clauses, those clauses will not apply**. further one of the most critical contract documents are the Particular Conditions, especially if they set aside provisions contained in the General Conditions and if they amend them. It is often the case that parties who are not familiar with the FIDIC risk allocation approach, the main FIDIC concepts, the underlying governing law, and the techniques on how to change and amend the FIDIC documents fail to put together a clear contract which is free from ambiguities and discrepancies.

It is however critical for a contract to be clear and free from ambiguities and discrepancies. The clearer the contract is, the greater will be the parties' incentive to avoid or mitigate non-performance and disputes. If a contract is unclear, it will be very difficult to make rational

decisions about avoiding or mitigating risks. Therefore it is strongly recommended to respect the above mentioned drafting general principles.

8. Contract Administration/ Management Tools

FIDIC forms of contract are viewed as manuals that provide details of contract management tools. The Books contain mechanisms for prescribing and controlling the behavior of the parties, in particular they require compliance with the reporting (see Sub-Clause 4.21) and communication rules (see Sub-Clause 1.3), the programming requirements (see Sub-Clause 8.3),the type of programme and the delay technique to be used(GCC 8.4) and the claim procedures (see Sub-Clauses 3.5, 2.5 and 20.1). Reviewing and altering a FIDIC based contract means therefore not only to have a look on risk allocation rules and the obligations of the parties, but also on the management tools. Beware that the alteration of Management rules may change the whole contractual system and can lead to unreasonable results. This will be the case if the Particular Conditions provide additional claims of the Employer without reference to Sub-Clause 2.5. Failure to do so may allow the Employer to withhold payments beyond the payment certificates which are issued by the Engineer. Keeping in view the practical importance of these tools to achieve the quality and avoid overrun of time and money during the execution of a Contract, these will be discussed and clarified as follows;

i) Progress Reports (GCC 4.21)

Unless this Sub-Clause is amended (or deleted) in the Particular Conditions, the Contractor is required to submit monthly reports. The Sub-Clause specifies the min some detail, but it is recognized that less detail may be appropriate for some projects. This detailed report on the progress during the month is considered to be an essential part of competent project management. Under Sub-Clause 14.3, the Contractor's Statement has to be submitted together with supporting documents which include the report in accordance with Sub-Clause 4.21. The period for payment under paragraph (b) of Sub-Clause 14.7 (Payments) does not commence until all these supporting documents have been received. The Contractor is to provide these reports regularly, until he has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works; namely, the work which is mentioned in Sub-Clause 11.1(a).Emphasis added.

ii) Programme Requirements (GCC 8.3)

The time for performance of a project is usually of the essence to the employer and the contractor. This has made it quite imperative for contracting parties to analyse project delays for purposes of making right decisions on potential time and/or cost compensation claims. Over the years, existing delay analysis techniques (DATs) for aiding this decision-making have been helpful but have not succeeded in curbing the high incidence of disputes associated with delay claims resolutions. A major source of the disputes lies with the limitations and capabilities of the techniques in their practical use. Developing a good knowledge of these aspects of the techniques is of paramount importance in understanding the real problematic issues involved and their improvement needs. This paper seeks to develop such knowledge and understanding (as part of a wider research work) via: an evaluation of the most common DATs based on a case study, are view of the key relevant issues often not addressed by the

techniques, and the necessary improvements needs. The evaluation confirmed that the various techniques yield different analysis results for the same delay claims scenario, mainly due to their unique application procedures. The issues that are often ignored in the analysis but would also affect delay analysis results are: functionality of the programming software employed for the analysis, resource loading and leveling requirements, resolving concurrent delays, and delay-pacing strategy. Improvement needs by way of incorporating these issues in the analysis and as well as programme remained a dream in construction.

As per FIDIC Rainbow 99, an experienced contractor will always prepare an up-to-date programme. It will be required under CONS/P&DB by the Engineer to monitor progress and under all Books by Employer's Personnel to plan their activities. However, this Sub-Clause does not empower them to give or withhold approval to the programme, only to notify the extent to which it does not comply with the Contract. Therefore, neither Party can misuse the programme in order to achieve an unfair advantage over the other Party. Since there is no approval; approval cannot be wrongfully withheld unless and until the programme incorporates a constraint which was not envisaged in the Contract; and- if the Contractor wrongfully submits an over-optimistic programme or supporting report (in terms of productivity, for example), there will be no approved programme or report to be used thereafter for the unquestionable validation of a claim for extension of time. It would not be reasonable for obligations to be imposed on the Employer by reason of a document which was prepared after the Contract became effective and to which consent was not required to be given, and was not given.

The Employer's Personnel will, of course, be bound by any constraints contained in the Contract (the periods for reviews under P&DB 5.2, for example), and the programme may (or may not) be suitable for calculating an extension of time. The Employer's Personnel are stated to be entitled to rely upon the programme. They may, for example, need to arrange for certain people to be available when particular parts of the Works are being executed, or when particular Contractor's Documents are to be submitted for review. More of them may need to be on Site during periods when the rate of progress is at its peak, especially if the Contractor's Personnel will be working multiple shifts, including night-work.

The third paragraph requires the Contractor to give notice of probable future events which may adversely affect the Works and particularly those which may increase the actual time required for completion. Note that it is the actual time which is referred to as being affected, not the Time for Completion to which the Contractor is entitled, so the obligation to notify includes events other than those listed in Sub-Clause 8.4.Emphasis added.

Anticipation of future problems is an important part of project management. Similarly, the Employer's Personnel should keep the Contractor informed of these probable future events, it being in the Employer's interest to ensure that the Contractor is fully aware of them. There is no statement to this effect in the General Conditions, because an inadvertent failure might then be construed as excusing delayed completion. Under the second and the last sentences of Sub-Clause 8.3, the Contractor should revise the programme whenever the previous programme is inconsistent with:

a) actual progress (which may be either behind or ahead of the current version of the programme),

b) the Contractor's obligations (accelerated completion would be consistent with such obligations), or

c) his stated intentions (for example, "the arrangements and methods … for the execution of the Works" mentioned in Sub-Clause 4.1).

Important; The Engineer is advised not to accord consent or approval to the Contractor's programme nor let the programme become part of the Contract.

iii) Extension of Time for Extension(GCC 8.4)

Provisions for extension of time according to FIDIC Rainbow GCC 8.4 are for the benefit of both parties. The Sub-Clause benefits the Contractor by giving him more time if any of the listed events occurs and delays completion. The Sub-Clause protects the Employer (especially if there is a delay, impediment or prevention by the Employer under the final sub paragraph) from the possibility of Sub-Clause 8.2 being invalidated under applicable Laws. Note the following aspects of the first sentence:

"The Contractor shall be entitled …", which is not stated as being subject to anyone's opinion. - "… subject to Sub-Clause 20.1 …": the second and the final paragraphs of which may affect the entitlement to an extension of time. - "… to an extension … if and to the extent that completion … is … delayed by …": so the extension should typically be calculated by reference to the delay in completion attributable to a listed cause. It may have disrupted progress, but may not itself have been the cause of any delay incompletion. For example, a listed cause may only delay works which are not on the critical path and thus do not delay "completion for the purposes of Sub-Clause 10.1". - "...completion for the purposes of Sub-Clause 10.1 …": its first sentence (sub-paragraph 10.1(i)) defines the extent of the work which is to be completed within the Time for Completion, and which is thus relevant when considering extensions of time. The work must include the matters described in sub-paragraphs (a) and (b) of Sub-Clause 8.2 but may exclude, as permitted in Sub-Clause 10.1(a), "any minor outstanding work and defects which will not substantially affect the use of the Works or additional payment. CONS/P&DB 1.3 requires the Contractor to send a copy of his notices to the Employer. Most of the Sub-Clauses to which sub-paragraph (b) of Sub-Clause 8.4 relates provide for the financial consequences, but Sub-Clause 8.5 is one exception.

Under CONS or P&DB, Sub-Clause 8.4(c) entitles the Contractor to an extension of time for climatic conditions which are "exceptionally adverse". In order to establish whether such climatic conditions occurred, it may be appropriate to compare the adverse climatic conditions with the frequency with which events of similar adversity have previously occurred at or near the Site. An exceptional degree of adversity might, for example, be regarded as one which has a probability of occurrence of four or five times the Time for Completion of the Works (for example, once every eight to ten years for a two-year contract).However, there is no equivalent entitlement to additional payment in respect of a climatic condition, unless it satisfies the criteria specified in Sub-Clause 17.3(h). Satisfies these criteria, Sub-Clause 17.4 entitles the Contractor to compensation for rectifying some of the damage attributable to climatic conditions.

Under EPCT, the Contractor is not entitled to an extension of time for climatic conditions, unless they constitute Force Majeure under Clause 19.

Finally, the Sub-Clause concludes by confirming that the total of all extensions of time, either for the Works or for a particular Section, cannot subsequently be decreased. This is so even if many omissions are instructed as Variations, although the Contractor's obligation under Sub-Clause 8.1 to proceed "with due expedition and without delay" may infer completion sooner than is required under Sub-Clause 8.2.

Although the Contractor may submit a proposal (under Sub-Clause 13.2(i)) which will "accelerate completion", or he may (under Sub-Clause 13.1) be requested to submit such a proposal, the General Conditions contain no provisions under which he may be instructed to achieve completion before the Time for Completionexpires, including extensions due under Sub-Clause 8.4. If the Employer wishes this to be achieved, the Parties should endeavor to reach agreement.

Acceleration to complete within the Time for Completion is covered in Sub-Clause 8.6. Acceleration to complete prior to the Time for Completion is covered in Sub-Clause 13.2. This "Time for Completion" is defined in Sub-Clause 1.1.3.3 as including extensions of time due under Sub-Clause 8.4**. If the Engineer (under CONS or P&DB) or Employer (under EPCT) fails to determine extensions of time in accordance with Sub-Clauses 8.4 and 20.1:**

a) there would thereafter be no "Time for Completion" (time is said to be "at large"),

b) The Contract would be construed accordingly (Sub-Clause 8.6 may be inapplicable, for example), and

c) The Contractor's obligation would be to complete within a time which was reasonable in all the circumstances.

CONS/P&DB 3.3 requires the Contractor to comply with acceleration instructions given by the Engineer, although he is not empowered to instruct the Contractor to complete prior to the Time for Completion. If the Contractor receives such an instruction, he must obey it, but he may consider it advisable to notify the Employer immediately and advise him of the likely effect on the final Contract Price. The effect of these instructions may be much greater than the Employer may envisage, and would entitle the Contractor to request the evidence under Sub-Clause 2.4 of the Employer's ability to pay the increased Contract Price. EPCT 3.4 constrains the Employer's instructions to those necessary for the Contractor's obligations, which must be identified in the instruction. The Employer is not empowered to instruct the Contractor to complete prior to the Time for Completion, and the Contractor is not obliged to comply with any such instruction.

If the Parties intend to enter into an agreement for accelerated completion, their agreement should define the consequences if actual completion is not achieved within the desired accelerated time for completion, but occurs within the Time for Completion including extensions of time due. Will Sub-Clause 8.7 apply, but with respect to the failure to complete within such desired (and agreed) accelerated time for completion? Or will there be a reduction in a bonus payment, with Sub-Clause 8.7 (delay damages) only applying with respect to the failure to complete within the Time for Completion including all extensions of time due under

Sub-Clause 8.4.

It is worth noting that FIDIC forms of Contract are globally oriented and these do not stand alone, therefore, if dictated by the project, being complex, it is necessary on must run basis to specify in PCCs or Appendix to Tender or Employer's Requirements or in specifications or in all that both the programme and delay analysis techniques will be dynamic in nature otherwise no EOT will be considered by the Engineer. Emphasis added.

As the Contract law in Pakistan is the then 'British Act 1872' modified where need up to 2006,hence based on common law, therefore reference is also made to recent decision on a contract under Yellow Book made by Justice Akenhead of England and Wales High Court (Technology and Construction Court) dated April 16, 2014.

Neutral Citation Number [2014] EWHC 1028 (TCC), Case No.: HT-H-63. The honorable judge has discussed the risk and responsibility on the part of the Contractor (GCC 1.1.3.3, 1.1.5.8, 1.1.6.1, 1.1.6.7, 1.1.6.8, 4.1, 4.10, 4.11, 4.12, 4.13, 4.15, 4.18, 4.23, 5.1, 5.4, 8.1, 8.2, 8, 8.3, 8.4, 20.1 specifically un-foreseeability (GCC 1.1.6.8), GCC 8.4 (Extension of Time) and notice period under GCC 20.1 at its requisite detail.

The forum as well as all concerned personnel are requested to read the above decision again and again to understand the real legal, contractual and technical concepts associated with FIDIC Rainbow regarding EOT and/ or claim procedures.

9. Contract Documents Book by Book regarding FIDIC 99Rainbow

i) Red Book

Assuming the traditional procurement route with the FIDIC Red Book 1999 edition standard form of contract and a bill of quantities then the contract documents in order of importance GCC1.5) are as follows:

a) The Contract Agreement (if any)

b) The Letter of Acceptance

c) The Letter of Tender

d) The Particular Conditions

e) These General Conditions

f) The Specification

g) The Drawings

h) The Schedules and any other documents forming part of the Contract

The Contract Agreement (if any) as referred to in Sub-Clause 1.6, represents subject to the governing law, the legally binding agreement between the parties, which refers to all the

documents which are incorporated into the contract. Item (h) includes the BOQ and the adjustment or the mode of payment regarding Contractor design part of Works. For this part of the Works necessary amendment in Sub-Clause 12.3 is also required along with adequate attachment of Employer's document (A document needed for Yellow and Silver Book).

ii) Green Book

Assuming the traditional procurement route with the FIDIC Green Book 1999 edition standard form of contract then the contract documents in order of importance are as follows:

The Contract as referred to in Sub-Clause 1.1.1 represents the legally binding agreement between the parties. Pursuant to Sub-Clause 1.3 the documents forming the Contract are to be taken as mutually explanatory of one another. The priority of the documents shall be in accordance with the order as listed in the Appendix. The Appendix as included in the Book lists the documents as such:

a) The Agreement

b) Particular Conditions

c) General Conditions

d) The Specification

e) The Drawings

f) The Contractor's tendered design

g) The Bill of quantities

According to Sub-Clause 1.1.1 Contract means the Agreement and the other documents listed in the Appendix, which is included in the Book. Specification means the document as listed in the Appendix, including Employer's requirements in respect of design to be carried out by the Contractor, if any, and any variation to such document. Drawings means the Employer's drawings of the Works as listed in the Appendix, and any Variation to such drawings. Please note the difference between the documents listed in the two Books.

iii) Yellow Book

Assuming the Design and Build procurement route with the FIDIC Yellow Book1999 edition standard form of contract and Employer's Requirements then the contract documents in order of importance are as follows:

a) The Contract Agreement (if any)

b) The Letter of Acceptance

c) The Letter of Tender

d) The Particular Conditions

e) These General Conditions

f) The Employer's Requirements

g) The Schedules

h) The Contractor's Proposal and any other documents forming part of the Contract

The Contract Agreement (if any) as referred to in Sub-Clause 1.6, represents subject to the governing law, the legally binding agreement between the parties,which refers to all the documents which are incorporated into the contract. Employer's Requirement plays vital role in this Book and should be prepared by extremely respective competent professionals. Again if some Employer's design is included in this form of contact, then necessary BOQ and specifications should be added in Schedules and Programme. Please note, in accordance with Sub-Clause 1.5 the so-called Proposal, even though it has been developed from the Employer's Requirements, has lower priority than the Requirements. Thus in the event that the Contractor's Proposal includes details which deviate from the Requirements the Contractor must follow the Requirements instead of the Proposal. If the Contractor intends to follow his Proposal he must firstly request an instruction from the Engineer, who has the power to change the priority of documents. As it is suggested that an instruction which changes the priority of the contractual documents in a way that a document of lower priority overrules a document of higher priority constitutes a variation, the Engineer must carefully consider the consequences of such an instruction, in particular if he is under the duty to obtain prior approval from the Employer for any instructions which have an impact on the Contract Price. It is prudent to mention that this form of the Contract requires substantial amount of skill and care from the Contractor at pre-tender stage (Please refer to Sub-Clauses 1.9,4.10,4.11 and 12)

iv) Silver Book

Assuming the Design and Build procurement route with the FIDIC Silver Book 1999 edition standard form of contract and Employer's Requirements then the contract documents in order of importance are as follows:

a) The Contract Agreement

b) The Particular Conditions

c) These General Conditions

d) The Employer's Requirements

e) The Tender and any other documents forming part of the Contract

The Contract Agreement as referred to in Sub-Clause 1.6, and being the main document under a Silver Book contract, represents subject to the governing law, the legally binding agreement between the parties, which refers to all the documents which are incorporated into the contract. There is in principle no Letter of Acceptance. The related definition has been deleted in the Silver Book. The Tender isdefined in Sub-Clause 1.1.1.4. The so-called Appendix to Tender as

referred to in Sub-Clause 1.1.1.9 Yellow Book, covering important elements such as expected time for completion, access to the site, applicable law, ruling language, etc., is missing in the Silver Book. It is suggested to include such data in the Particular Conditions. The Particular Conditions as mentioned in Sub-Clause 1.5, which have to be drafted by the Employer according to the Guide for the Preparation of Particular Conditions, cover additionally important elements such as storage areas available to the Contractor, changes and amendments to the General Conditions, etc. The Employer's Requirements outline and define the purpose, scope, and/or design and/or other technical criteria, for the Works (see Sub-Clause 1.1.1.3).

Schedules as referred to in Sub-Clause 1.1.1.6 Yellow Book are not expressively defined in the Silver Book. However, they are important documents under the Silver Book as well and may include data, lists and schedules of payments and/or prices. Again, there is no definition for the Contractor's Proposal as referred to in Sub-Clause 1.1.1.7 Yellow Book. It is however suggested that the Contractor submits a preliminary design.

The term preliminary design is not defined. Thus the question arises as to what is meant by preliminary design. Sure, it has to be developed from the Employer's Requirements. The issue is that there is no clear definition of what is meant by Employer's Requirements. In essence the Requirements set out what the Employer requires from the Contractor. According to Sub-Clause 1.1.1.3 the Employer's Requirements specify the purpose, scope, and/or design and/or other technical criteria for the Works. The FIDIC Contracts Guide explains that the overall design may comprise three stages, the conceptual design (incorporated in the Employer's Requirements), the preliminary design (incorporated in the Proposal) and the final design to be made once the contract has been awarded. Hence, in principle the Employer's Requirements should describe the principle and basic design of the project on a functional basis (i.e. performance specification) and specify the purpose, scope and/or design and/or other technical criteria for the Works. But they may comprise much more than that.

Making use of the Silver Book requires an acceptance of a special risk allocation concept which requires both discipline and instinct from the draftsman. FIDIC points out that the Conditions of Contract for EPC/Turnkey Projects (the Silver Book) are not suitable for use in the following circumstances:

a. If there is insufficient time or information for tenderers to scrutinize and checkthe Employer's Requirements or for them to carry out their designs, risk assessment studies and estimating (taking particular account of Sub-Clauses 4.12 and 5.1).

b. If construction will involve substantial work underground or work in other areas which tenderers cannot inspect.

c. If the Employer intends to supervise closely or control the Contractor's work, or to review most of the construction drawings.

d. If the amount of each interim payment is to be determined by an official or other intermediary.

In the event of doubt the parties are advised to use the Yellow Book which is amore balanced contract form although also requiring a substantial amount of skill and care from the Contractor at pre-tender stage.

v) Gold Book

Assuming the design, build and operate procurement route with the FIDIC Gold Book 2008 edition standard form of contract and Employer's Requirements then the contract documents in order of importance are as follows:

a) The Contract Agreement (if any)

b) The Letter of Acceptance

c) The Letter of Tender

d) The Particular Conditions – Part A (Contract Data)

e) The Particular Conditions – Part B (Special Provisions)

f) These General Conditions

g) The Employer's Requirements

h) The Schedules

i) The Contractor's Proposal and any other documents forming part of the Contract

The Contract Agreement (if any) as referred to in Sub-Clauses 1.6 and 1.1.11, represents subject to the governing law, the legally binding agreement between the parties, which refers to all the documents which are incorporated into the contract.

The Letter of Acceptance means the letter of formal acceptance as referred to in Sub-Clause 1.1.48. The Letter of Tender is defined in Sub-Clause 1.1.49. This document no longer includes an Appendix to Tender, which was replaced by the Contract Data as referred to in Sub-Clause 1.1.14. It covers important elements such as expected time for completion, access to the site, applicable law, ruling language, etc., and became part A of the Particular Conditions. The Particular Conditions as mentioned in Sub-Clause 1.5, which have to be drafted by the Employer according to the Guide for the Preparation of Particular Conditions, cover additional important elements such as storage areas available to the Contractor, changes and amendments to the General Conditions, etc. The Employer's Requirements outline and define the purpose, scope, and/or design and/or other technical criteria, for the Works (see Sub-Clause 1.1.34). The Schedules as referred to in Sub-Clause 1.1.68 mean the documents entitled schedules, completed by the Contractor and submitted with the Letter of Tender. They may include data, lists and schedules of payments and/or prices. The Contractor's Proposal means, according to the definition in Sub-Clause 1.1.20 the document entitled proposal, which the Contractor submits with the Letter of Tender and covers the Contractor's preliminary design. The Operating License as mentioned in Sub-Clause 1.1.54 represents a license referred to in Sub-Clause 1.7 by which the Employer grants a royalty-free license to the Contractor to operate and maintain the Plant during the Operation Service.

This forum and all other concerned personnel are requested to be familiar and vigilant to the contract documents associated with each form of the Contract and if some mix is required in a project then proper and adequate measures have to be taken to accommodate that mix (adjust

appendixes, Particular Conditions, Specifications and Employer's Requirements including Contractor's Proposals). Emphasis added.

10. Contract Documents Manual

i) Contract Agreement

Drafting of a Contract Agreement is not always essential. A FIDIC Yellow Book and a FIDIC Red Book contract become effective upon receiving the Letter of Acceptance. However, when preparing the Contract Agreement and its components as referred to in Sub-Clause 1.5 Silver Book the following aspects should be considered:

a) The Contract comprises all documents which are listed in Sub-Clause 1.5 as the case may be modified by the Particular Conditions or the Contract Agreement.

b) Under a Silver Book Contract the Particular Conditions replace the Appendix to Tender as referred to in the Yellow Book.

c) The Employer's Requirements play a pre-dominant role, because they have to be scrutinized prior to submission of tender. Whilst the Yellow Book allows for additional scrutiny at a later stage (see Sub-Clause 1.9 and 5.1) The Silver Book remains silent as to this issue.

Whilst under a Silver Book contract a Contract Agreement constitutes an essential element of the Contract, a Contract referring to either the Red or Yellow Book becomes effective upon receiving of the Letter of Acceptance.

However, if the Parties find it more appropriate to sign a Contract Agreement, they are free to do so. A model form for a Contract Agreement is included in each FIDIC Book.

ii) Particular Conditions

The Particular Conditions shall cover all project details and particularities including any modifications of the General Conditions, except those to be specified in the Appendix to Tender. Under a Silver Book contract all details otherwise contained in the Appendix to Tender must be covered by the Particular Conditions. The Silver Book comprises Guidance for the Preparation of Particular Conditions, to which reference is made. However, most of the data included in the Appendix to Tender of the Yellow Book form must also be inserted in the Particular Conditions of a Silver Book contract, as there are:

- Sub-Clause1.1.2.2 Employer's name and address
- Sub-Clause1.1.2.3 Contractor's name and address
- Sub-Clause1.1.3.3, 8.2 Time for completion of the works
- Sub-Clause1.1.3.7, 11.1Defects notification period
- Sub-Clause1.1.5.6 Sections

- Sub-Clause 1.3 Electronic transmission systems
- Sub-Clause 1.4 Governing law
- Sub-Clause 1.4 Ruling language
- Sub-Clause 1.4 Language for communications
- Sub-Clause 2.1 Time for access to the Site [Should be fixed with regard to Sub- 8.1: Notification of commencement date]
- Sub-Clause 3.5 Declaration of dissatisfaction by contractor [Can be changed, for example instead of 14 days 21 days]
- Sub-Clause 4.2 Amount of performance security % of the accepted contract price, in the currencies and proportions in which the contract price is
- Sub-Clause 4.4 Notice of subcontractors
- Sub-Clause 5.4 Technical standards
- Sub-Clause 6.5 Normal working hours
- Sub-Clause 8.7 Delay damages for the works % of the final Contract Price per day,in the currencies and proportions in which the Contract Price is payable
- Sub-Clause 8.7 Maximum amount of delay damages % of the final Contract Price
- Sub-Clause 13.6 Daywork The work shall be evaluated inaccordance with the Daywork
- Schedule reference to which ismade
- Sub-Clause 13.8 Adjustments for changes in cost [Insert adjustment data]
- Sub-Clause 14.2 Total advance payment
- Sub-Clause 14.2 Number and timing of installments
- Sub-Clause 14.2 Currencies and proportions
- Sub-Clause 14.2 Start repayment of advance payment
- Sub-Clause 14.2 Repayment amortisation of advance payment
- Sub-Clause 14.3 (c) Percentage of retention
- Sub-Clause 14.3 (c) Limit of retention money
- Sub-Clause 14.9 Percentage of retention for each section (if any)
- Sub-Clause 14.3 Minimum amount of interim payment

- Sub-Clause 14.15 Currencies of payment
- Sub-Clause 17.6 Limitation of liability
- Clause 18 Periods for submission of insurance
- Sub-Clause 18.1 Employer's insurance
- Clause 18.2 (d) Maximum amount of deductibles peroccurrence for insurance of the employer's risks
- Sub-Clause 18.3 Minimum amount of third party insurance
- Sub-Clause 20.1 Claim notification delay [Can be changed, for example instead of 28 days 21 days]
- Sub-Clause 20.2 Number of members of DAB: The DAB shall be:
  - One sole Member/adjudicator Or:
  - A DAB of three Members
- Sub-Clause 20.3 Appointment (if not agreed) to be made by The President of FIDIC or a person appointed by the President
- Sub-Clause 20.6 Any disputes shall be settled by Arbitral Court of the International Chamber of Commerce according to the Rules of Arbitration of the International chamber of Commerce.
- Sub-Clause 20.6 Arbitration language
- Sub-Clause 20.6 Seat of arbitration. The seat of arbitration shall be [. . .]

Some of the above-mentioned items are optional, such as changes to Sub-Clause 3.5 or Sub-Clause 20.1. Some of them require data, because otherwise the related Sub-Clause will not apply (see Sub-Clause 4.2, 13.6, 13.8, 14.2, 18.2(d), 18.3). Sub-Clause 13.8 Silver Book other than Sub-Clause 13.8 Yellow and Red Books do no texpressly mention what happens if the Particular Conditions or appendix to tender do not contain data for the *adjustment* of the Contract Price*. It is however suggested, that it will not apply if the parties fail to insert the relevant data.*

Under a Red or Yellow Book contract, where specific project details are specified in the Appendix to Tender or under a Gold Book contract where such details are specified in the Contract Data, Particular Conditions may be used for the adjustment of the General Conditions, if appropriate or necessary. A Guidance for the Preparation of Particular Conditions being included in each FIDIC Book provides for additional model clauses and/or recommendations as to the adjustment of the General Conditions.

iii) Employer's Requirements

Under a Silver Book or Yellow Book Contract as well as under a Gold Book Contract the

Contractor is in principle responsible for all design, workmanship and sequence of the works. When completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract (see Sub-Clause 4.1). The same is applied, for Contractor's specified design Works, even if Red Book is used. It can be seen from the above provisions that the Contractor is under an obligation to complete the design and then to complete the Works in accordance with that completed design, so that at the end of the day the Contractor hands over the Works which comply with the Employers' Requirements and the Contractor's Proposals or Contractor's documents, as the case may be.

In other words, the underlying philosophy of the Yellow Book, Silver and Gold Book contract is that the Contractor is responsible for satisfying the Employer's Requirements, which must therefore be the principal document. In addition, under the Silver Book at Sub-Clause 5.1 the Contractor is deemed to have scrutinized, prior to Base Date, the Employer's Requirements. The Employer shall not be responsible for any error, inaccuracy or omission of any kind in the Employer's Requirements. In view of this added responsibility taken on by Contractors who design and build the works for a particular project, caution must be exercised from the outset. From the point of view of the Employer care must be taken that this clear risk allocation will be maintained, when preparing the tender documents, including the Employer's Requirements. Again, when drafting the documents care should be exercised to avoid any possible conflict with the other contract documents.

Employer's Requirements means the document entitled Employer's Requirements, as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the Works (Sub-Clause1.1.1.5). The Employer's Requirements shall state the parts of the Works which are to be designed by the Contractor and the criteria which such designs must adhere to.

Such criteria could comprise details of the cubes, dimensions, form, geometry, specifications, and codes of practice, standards and environmental details. Care should be taken to not include method statements and to leave full responsibility as to the choice of methods with the Contractor. He shall then subject to Sub-Clause 8.3 which provides a general description of the methods which he intends to adopt. If dictated by the project complexity, the Employer's Requirements should stare that the programme should be of CPM format.

The reason for this is to allow the Engineer or Employer as the case may be to check that the proposed methods of construction will not have a negative effect on the intended quality or purpose. The purpose of this document is to impose obligations on the Contractor. US courts have held that performance specifications dictate an ultimate result that a contractor must achieve, leaving the contractor with the discretion to determine the means to achieve that result. However, if design specifications set forth in detail the materials that a contractor must use and the manner in which the contractor is to employ the materials under a particular contract, the contractor has virtually no discretion to deviate from these details, and must follow them like a road map.

The Employer's Requirements are intended to specify the purpose, scope and/or design and/or other criteria, for the Works. Under the Contract, the Contractor is required to execute the design and the Works in accordance with the Contract documents. They include these

Requirements, the Schedules and the Proposal, with the Employer's Requirements having priority under Sub-Clause 1.5 of the Conditions of Contract. The project brief should define the site and the works which may require drawings to be included. All relevant criteria which are to govern the works including quality and performance requirements should be provided.

Under a Gold Book contract the Employer's Requirements include Operation Management Requirements. The operation of the plant has to be done in compliance with the Operation Management Requirements and the Operation Maintenance Plan. The Employer is only responsible for the delivery of any raw materials (Sub-Clause 10.4 Gold Book). During the Operation Service Period the Contractor shall achieve the production outputs required under the terms of the Contract (Sub-Clause 10.7 Gold Book). Failure to achieve the production outputs may lead to claims of the Employer and/or the Contractor subject to the independent audit. Any further detail as to the operational duty has to be put in the Employer's Requirements and in the Operation and Maintenance Plan.

Two contrasting approaches to contract strategy and drafting Employer's Requirements, applicable to high-quality commercial schemes and buildings with a lower technical content, illustrate the options available to the employer:

a) Employer's Requirements drafted for projects where the contractor has limited influence over design development.

b) Concise, functional requirements, with an indication of only critical areas of design.

Both, the Yellow Book and the Silver Book follow the second route (b). The Silver Book Guidance for the Preparation of Particular Conditions as well as the Yellow Book Guidance clearly indicate that the Employer's Requirements should specify the particular specifications for the completed Works on a functional basis, including detailed requirements on quality and scope.

It is critical to understand that under a FIDIC Yellow Book or Silver Book or even Gold Book contract the Employer's Requirements shall define the full range of works and design to be carried out by the Contractor against the agreed Contract Price, which is a lump sum price. Hence in principle the Contractor will have to complete a whole work. The contract includes the promise to provide everything indispensably necessary to complete the whole works, even though not expressly specified or wrongly stated in the tender documents.

It is however sometimes a difficult question of construction to determine whether the contractor has promised to complete a whole work. If for example bills of quantities are incorporated in the contract or if drawings or descriptions comprise information with considerable precision it can be argued that the contract limits the obligation of the contractor to works expressly described in such bills of quantities, description or drawings.

However, it is critical that the Employer's Requirements document clearly communicates material standards, workmanship standards, performance standards, aesthetic intent and functional requirements. The Employer's Requirements needs to be responsive to this approach to describing the project, the designer's role and risk transfer to the Contractor. Where the design is complex, the emphasis is on transferring design, cost and programme risk to the Contractor.

The following recommendations should be followed:

a) The Employer's requirements shall contain a comprehensive definition of the critical item to be developed, including a specification of the minimum critical item design and construction standards that have general applicability and are applicable to major classes of equipment

b) The Employer's Requirements shall define in a comprehensive way which elements of design are prescriptive and which require completion by the Contractor.

c) The Employer's Requirements shall describe dimensional and cube limitations The Employer's Requirements shall state security criteria and health and safety criteria.

d) The Employer's Requirements shall contain specifications as necessary for particular materials and processes to be utilized in the design of any critical item.

e) The Employer's Requirements shall specify the Contractor's Documents which must be submitted to the Employer for review and/or approval. If appropriate there view period shall be indicated.

f) The Employer's Requirements should make no reference to the Tenderers, and should not specify actions which take place prior to award of the Contract.

g) The Employer's Requirements must describe the process of delivery so they may need to go beyond a typical preliminaries document.

h) The Employer's Requirements shall collate a comprehensive and consistent set of documentation.

i) The Employer's Requirements should only permit information, which is relevant to the Contractor to be included therein, rather than all associated project documentation, which can create ambiguity.

Moreover under a Yellow Book contract the following items shall be specified inthe Employer's Requirements:

- 2.1: Definition of conditions of access to the Site
- 4.20: Specification of Employer's Materials
- 4.6: Specification of co-ordination requirements
- 5.2: Documents to submit for review and approval
- 5.2: Delay for review and approval
- 5.1: Specification of experiences and qualifications of the designers
- 5.4 Specification of Technical Standards
- 5.5: Specification of training

- 5.6: Specification of as built drawings
- 5.7: Specification of maintenance manuals
- 6.1: Specification concerning personnel
- 9.1: Specification of testing procedures

Under a Gold Book contract the Employer's Requirements usually include general descriptions, outline drawings, performance specifications, applicable codes of practice and where necessary detailed specifications, provisions of the Operation Service. The following items shall be specified in the Employer's Requirements:

- 1.7 Operating Licence
- 1.12 Contractor's Use of Employer's Documents (Intellectual Property Rights)
- 1.14 Compliance with Laws (Permision being obtained by the Employer)
- 4.1 Contractor's General Obligations (Intended Purposes for which the Works arerequired)
- 4.5 Nominated Subcontractors
- 4.6 Co-operation
- 4.7 Setting Out
- 4.9 Quality Assurance
- 4.10 Site Data
- 4.18 Protection of the Environment
- 4.20 Employer's Equipment and Free-Issue Materials
- 4.21 Progress Reports
- 5.1 General Design Obligations (if Employer's Requirements include an outline design – clarification of suggestion or request)
- 5.2 Contractor's Documents
- 5.4 Technical Standards and Regulations
- 5.5 As-Built Drawings (5.6 Operation and Maintenance Manuals)
- 7.1 Manner of Execution
- 7.4 Testing

- 8.3 Programme
- 8.7 Hand back Requirements
- 10.4 Delivery of Raw Materials
- 11.1 Testing of the Works (1.1.76 on Completion of Design-Build, 1.1.77 toContract Completion)
- 11.9 Procedure for Tests Prior to Contract Completion
- 17.12 Risk of Infringement of Intellectual and Industrial Property Rights

A clear and careful distinction must be drawn between performance and prescriptive information, because in principle design specifications which set forth in detail the materials to be employed and the manner in which the work is to be performed put the Contractor under the obligation to follow them as one would a road map. Whereas, performance specifications simply set forth an objective or end result to be achieved, and the Contractor may select the means of accomplishing the task. In the United States it is well-settled doctrine that when government specification does not require a certain method of performance, the contractor is entitled to perform by its chosen manner or method, where it is stated:

When a contract prescribes the desired end but not the means of accomplishing that end, itis within the contractor's discretion to select the method by which the contract will be performed. A Government order rejecting the proposed method and requiring the contractor to perform in some other specified manner denies the contractor the opportunity to exercise a valid option as to the method of performance and changes the contract, justifying an equitable adjustment for additional costs incurred thereby.

11. Contract Preparation and Pitfalls

i) It is critical to underline that preparing the contract documents does not mean to make copies of existing schedules, bills of quantities, specifications and standard forms. Even though it may be helpful to review such existing forms, contract preparation means to shape an individual law for an individual project. Moreover existing standard forms assume that the parties using them have carefully scrutinized them and filled them out properly with full knowledge of what the standard form entails.

FIDIC standard forms are recommendations and recognize that particular adjustmentsare often appropriate. A careful reader of the FIDIC conditions will frequentlyfind the wording "unless otherwise" agreed or stated. Whenever thiswording has been used within the General Conditions the FIDIC Drafting Committeehas supposed that adjustments or changes to the recommended wording can beeither useful and appropriate or even necessary.FIDIC standard forms shall be completed by stating and indicating the accordingdata in either the Appendix to Tender or the Particular Conditions. Sometimescompletion of data shall be done in Schedules and Appendices. Some of the Sub-Clauses within the General Conditions do not apply if the therein required dataare omitted GCCs 4.2, 13.6.13.8, 14.2, 18.2(d) and 18.3 etc.).

ii) Technical Standards

Pursuant to Sub-Clause 5.4 of Yellow Book the design, the Contractor's Documents, the executionand the completed Works shall comply with the Country's technical standards,building, construction and environmental Laws, Laws applicable to the productbeing produced from the Works, and other standards specified in the Employer's Requirements, applicable to the Works, or defined by the applicable Laws. It is thus extremely important to carry out a local survey on existing technical standards in order to ensure compliance with them. In addition the Particular Conditions may specify supplemental standards or even replace local standards by other ones. However there are examples of clauses which may lead to uncertainty and disputes, such as the following:

a) Contractor will use European Codes and Iranian Codes where appropriate based on client approval.

b) Every item of electrical equipment used in the electrical system shall comply with the relevant IEC, or equivalent standards.

c) Power cables have to be in accordance with the respective IEC or DIN-VDE standards or other equivalent norms.

Such types of clauses are unclear. It is obvious that the parties have refrained from ascertaining the relevant rules and determining clear standards. Instead the parties would be advised to refrain from changing Sub-Clause 5.4.

iii) Dispute Adjudication Agreement

Since the introduction of the FIDIC Orange Book (Conditions of Contract for Design-Build and Turnkey) in 1995 under the task group chair of Axel Jaeger all FIDIC Books comprise clauses concerning the resolution of disputes by a Dispute Adjudication Board. A special form of agreement is annexed to the Books, which must be executed. If the parties agree – as recommended by the Silver Book and the Yellow Book – to an ad hoc DAB, the Dispute Adjudication Agreement will have to be executed if a dispute arises. If the parties agree – what seems to be reasonable in order to ensure the benefit of the dispute avoiding function of the DAB – to a permanent DAB, the Dispute Adjudication Agreement shall be executed within reasonable time after the contract has been awarded or even before. The Red Book and the Gold Book already provide for a permanent DAB. Again, at tender stage some preliminary steps as to dispute adjudication must be carried out. Either the Appendix to Tender or the Particular Conditions should indicate a list of eligible adjudicators and/or a nominating body in the event of failure to reach agreement as to the adjudicator(s).

iv) Claims & Claim Notices

Contractual claims arise where contractors consider that they are entitled to additional payments over and above those which are already included in the accepted contract amount or to extension of the already agreed time for completion. Claims should not be

confused with the consequences of any Variation. Variations must be dealt separately, although in principle Variations will also result in a determination subject to Sub-Clause 3.5 by the Engineer or Employer as the case may be.

Such kind of monetary claims are part of the Contract Price and therefore anticipated costs. However the entitlement to additional payment is usually subject to the condition that a formal claim is presented within the time limits provided by the contract. But despite this fact the parties have already agreed to additional payments at the date of the conclusion of the contract. Thus claims are nothing more than the crystallization of an anticipated, not yet specified, part of the Contract Price.

Claims are usually subject to claim notices. It is common practice for a first set of contractual rules to provide the Contractor's obligation to give notice. A second set of provisions states the consequences resulting from failure to so. Under most internationally used standard forms of contract the giving of notice is a condition precedent of an entitlement to a claim irrespective of the extent to which the contractor is under an obligation to inform the Engineer or the Employer of all relevant news.

12. Recommendations

i) It is strongly recommended to recognize and take into consideration that Sub-Clause 1.5 rules the priority of the contract documents. Hence it is critical to insert additional clauses in the appropriate document in order to avoid ambiguities and discrepancies which may be solved whether they occur within the same document or between different documents of the Contract.

According to FIDIC forms of contracts the priority of the documents listed below the Conditions of Contract is based on the principle that the Employer's documents should have priority over the Contractor's documents i.e., the employer's Requirements will have priority over Contractor's proposal, if applicable and ambiguity creates. Tenderers should be aware of the effects of this latter principle, and should emphasize any non-compliance. For example, if a tenderer provides details which are inconsistent with the requirements specified in adocument having a higher priority, it is these latter specified requirements which will have priority and thus be binding on the Contractor.

ii) FIDIC standard forms should be completed by stating and indicating the according data in either the Appendix to Tender or the Particular Conditions. Sometimes completion of data shall be done in Schedules and Appendices. Some of the Sub-Clauses within the General Conditions do not apply if the therein required data are omitted (e.g., GCCs 4.2, 13.6 and 13.8 etc.).

iii) Design responsibilities of the Contractor in Red Book and the Design responsibilities of the Employer in Yellow Book, if any, should be catered by preparing and incorporation of adequate Employer's Requirements in Red Book and Specifications in Yellow Book form of contract respectively.

iv) As priority of different contract documents in different forms of Contract is different, therefore due care of the priority in different types of the contracts is to be taken into

account. If a project contains a mix of two different types of the contract forms, that has to be catered through Particular Conditions or through the Employer's requirements or through Specifications, and whichever is the case.

v) It can be summarized that drafting the Employer's Requirements should be understood as an opportunity for the Employer to package a project in a way that optimizes project progress (GCC 4.21). Preparing Employer's Requirements that meet the demands of project monitors, funders, future users with regard to audit trails and availability of warranties, saves time and effort further down the line. Depending upon the time and Cost in Yellow Book, GC Sub-Clauses 4.10 and 4.11 should be clarified in Particular Conditions.

vi) According to FIDIC Red and Yellow Books GCC 3.2, the Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation from the assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation with copy to the Contractor. Strict compliance regarding both (delegation only by the Engineer and extent only defined by the Engineer) the issues is requested; otherwise potential claims from Contractor's side are possible.

vii) The programme under GCC 8.3 needs not to be consented or approved by the Engineer.

Inter alia, the requirements of the Sub-Clause 8.3, should be made express through Particular Conditions or Appendix to Tender that it shall be based on (Critical Path Method) CPM format. Further the programme should never be declared as the part of the Contract Documents

viii) All FIDIC forms of Contract allow EOT only when completion is delayed due to reasons provided in GCC 8.4.This means that the Contractor is entitled for EOT when CPM is disturbed due to Employer's reasons described in GCC 8.4. As the requirement is not mentioned expressly, it is recommended that Particular Conditions or Employer's requirements or Appendix to tender or Specifications should make it express that the programme as well as delay techniques will be dynamic and the Contractor will be entitled for EOT and /or the Compensation if he follows these requirements.

ix) The Tender Dossier issued to tenderers does not contain any document called a "Proposal". This document has to be prepared by each tenderer in accordance with the Instructions to Bidders and the Employer's Requirements.

According to Sub-Clause 1.1.1.7 of Yellow Book the Contractor's Proposal means the document entitled proposal, which the Contractor submitted with the Letter of

Tender, as included in the Contract. Such document shall include the Contractor's preliminary design, which is a statement of the design fundamentals (supported by drawings) together with a more or less detailed specification of the Works.

Therefore in case of contractor's design, whether in Red, Yellow or Silver Book is

used as form of contract, adequate and reasonable measures (through Employer's Requirements or Particular Conditions) are recommended so that proper proposal compatible to the design responsibility is achieved.

x) The application of GCC 13.8 requires completed table of adjustment data for each currency of payment; otherwise this clause shall not apply. Further the cost indices or reference prices stated in the adjustment data shall be used. The cost indices or reference prices mentioned in the table of adjustment data should be of the country of input or the country of origin. If their source is in doubt, the Engineer will determine it.

References;

1 The FIDIC Contracts Guide by FIDIC @ Copyright FIDIC 2000.

2 FIDIC-A Guide for Practitioners by Axel- Volkmer , @ Springer-Verlag Berlin Heidelberg 2010

3 Discussions

i) Discussions on "FIDIC Contract Group" managed by Linked in

ii) Discussions on "Construction Claims Expert Group" managed by Linked in

4 Contract Administration and Construction Inspection Manual by Manitoba infrastructure and transportation Version 1.0 February 2011.

Paper No. 315

PROCUREMENT OF CIVIL WORKS AND EVALUATION OF BIDS

Engr. Ijaz Ahmad Khan

PROCUREMENT OF CIVIL WORKS AND EVALUATION OF BIDS

BY
Engr. Ijaz Ahmad Khan[1]

Introduction:

- Evaluation of Bids and Award is most important step in Procurement process but often have potential to be controversial
- Bid and Proposal – distinguished
- Bid is a price and conditions at which a bidder intends to sell at any given time
- Bid refers to Quoted price in the context of over-the counter sell and
- Types of bidding: ICB, LCB, SSB (Single Source)
- Tender and bid are used in the same meaning
- Choices of bidding Process:
  - Single Stage-single envelope
  - Single Stage – two envelopes
  - Two Stage – single envelope
  - Two Stage – two envelopes
- Evaluation is the process to determine whether a bid meets specified criteria
- Basis of Evaluation: ITB Provided Criteria
- Generally according to provisions in the bid Documents
- Agreement = Bid (proposal) + Acceptance
- A contract is the agreement enforceable by law
- Principles to conform to Contract Act 1872
- Essentials of a valid contract:

---

[1] Director, National Development Consultants (Pvt) Ltd.

(a) competent to contract

(b) free consent

(c) lawful considerations

(d) lawful objectives

Parameters:

- Discussions limited to procurement of goods and works
- Process initiated upon receipt of bids
- Process to end after Award
- Valid for Single Stage – Single Envelope method
- Basis For Evaluation: PEC documents;
  - Standard Procedure for Evaluation
  - Instructions to Bidders for Civil Works Documents
  - Instructions to Bidders for Smaller Works Documents
  - PPRA Rules 2010
  - Construction bye-laws

Primacy of Documents for Evaluation:

- Provisions stated in the Bidding Documents
- In absence – relevant provisions in PEC Act, Bye-laws, procedures & PPRA Rules
- Bidding Documents can not be prepared in contradiction to statute laws & relevant PEC framework bidding documents and Bye-laws
- Priority of PEC Documents:
  - Act
  - Relevant Bye-laws
  - Framework bidding documents
  - Procedures (Guidelines)
- PPRA Rules which However are assimilated in June, 2007 PEC documents

General Principles:

- Evaluation shall be based on explicit provisions in the Bidding Documents
- In case provisions deficient/ambiguous; PEC documents and International Practices to follow
- Three bids requirement is a convention and an inference from Section 42 of PPRA Rules
- Members of Committee for adjudication of evaluation should be engineers
- Instructions to Users of PEC documents are of legal value as rules
- Besides required knowledge, evaluators must have moral integrity, impartiality and should work on good faith
- Non-transparent evaluation and awards result in:
  - Lack of interest by bidders at large
  - Foreign bidders hesitate to invest in Fruitless Effort
  - Less competition, increased cost, more time for project completion/consequential benefits loss

Areas of Varied Opinion:

- Arithmetic corrections
- Substantial responsiveness
- Price Adjustments of acceptable deviations (Loadings)
- Long list of unresolved issues
- Pre-award negotiations/clarifications
- Domestic Preference
- Conditional acceptance (NOCA, LOA)
- Award to Lowest Evaluated Responsive Bidder (LERB)

Getting Ready for Evaluation:

- Evaluation team to comprise of relevant professionals
- Preferably team members from among those preparing Bidding Documents
- Necessary checklists, formats specific to the Bidding Documents Finalized
- Bid opening materials received:
  - Copies of verified bids with original bids
  - Signed copy of the bid opening Proceedings' Minutes from committee members
  - Instructions to proceed with evaluation with schedule

❖ ISO-9001 Process and Quality Plan for evaluation

Conformance to Bidder Requirements (Commercial):

Sr. No.	Clause no. of "Instructions to Bidders"	Description	Specified Requirement	Bidder A (1)	Bidder B (2)	Bidder C (3)
1	2.1	Prequalification of Bidders	Whether the Bidder is pre-qualified	C	C	C
2	2.1	Eligibility of Bidders	- Registered with PEC	C1	C1	NC1
3	2.1	Eligibility of Plant and Services		C	C	C
4	9.1	Documents comprising the Bid	(a) Covering Letter (b) Form of Bid/Letter of Offer (duly filled- in, signed and stamped)	C C2	C C	C C
C: Conformance NC: Non Conformance S: Submitted NS: Not submitted NA: Not applicable						

Example of note against table:

Bidder A

C1: As required under the provisions of Sub-Clause 2.1 of Instructions to Bidders (IB), PEC licence valid for the year 2005 has been provided for Siemens Pakistan only, whereas, Bidder has only provided Enlistment Certificate for Siemens AG, Germany. The Bidder's response to post bid query is discussed at Section 2.2.2 (a) of Chapter-2 of this Report.

C2: Form of Bid is not authenticated by a Notary Public nor countersigned by a Pakistani Consul or diplomatic representative in Germany as per Sub-Clause 45.1 of IB. The Bidder's response to post bid query is discussed at Section 2.4(a) of Chapter-2 of this Report.

C3: Bid – Schedule A Price Schedule is initialed by a person for whom no Power of Attorney is available with the Bid. In response to post bid query, Bidder provided Power of Attorney of required person.

C4: Bid – Schedule 'E' Specific Plant Data is not initialed as per Sub-Clause 9.1 of IB. This matter has further been discussed in Chapter-2 of this Report.

C5: The amount of Bid Security shown in paragraph No.4 is incorrect. This matter has further been discussed in Chapter-2 of this Report.

STANDARD PROCEDURE FOR EVALUATION OF BIDS FOR PROCUREMENT OF WORKS

Annex-I

BID OPENING CHECKLIST

(To be filled-out for each bid as it is read-out)

Contract Reference: _____

Bid Opening Date: _____ Time: _____

Name of Bidder: _____

(a) Is outer envelope of bid sealed?

(b) Is Form of Bid completed and signed?

(c) Expiration date of bid : _____

(d) Is documentary authority for signing enclosed?

(e) Amount of bid security (as required): _____

(f) Describe any "Substitution," "Withdrawal," or "Modification" submitted.

(g) Describe any alternative bid made.

(h) Describe any discounts or modifications offered.

(i) Additional comments

(j) Name of bidder or his representative who attended bid opening.

(k) Total bid price: _____

(If bid is for a package of contracts, the price for each slice should be read out).

Signed by:

_____

Members of Committee

_____

Bidders Representatives

_____

Convenor of Committee

Annex-II

Table-1

IDENTIFICATION

1.1 Name of Project	_____
1.2 Employer (a) Name (b) Address	_____ _____
1.3 Contract number (identification)	_____
1.4 Contract description	_____
1.5 Engineer's cost estimate(s)	_____
1.6 Method of procurement (check one)	ICB_____LCB(NCB)_____ Other_____
1.7 Fixed price contract	Yes_____ No _____

Annex-II

Table-2

BIDDING PROCESS

2.1 Prequalification, carried out (a) Number of firms prequalified	_____
2.2 Procurement Notice (a) Name of national newspaper (b) Issue date c) Number of individual firms notified	_____ _____ _____
2.3 Standard Bidding Document a) Title, publication date b) Date of issue to bidders	_____ _____
2.4 Number of firms to whom documents issued	_____
2.5 Amendments to documents, if any a) List all ammendments No. & dates	1._____ 2. _____ 3. _____
2.6 Date of pre-bid conference, if any	_____
2.7 Date minutes of the conference sent to bidders	_____

Annex-II

Table-3

BID SUBMISSION AND OPENING

3.1 Bid submission deadline (a) Original date, time (b) Extensions, if any	
3.2 Bid opening date, time (Actual)	
3.3 Number of bids submitted	
3.4 Bid validity period (days, weeks or months) a) Originally specified b) Extensions, if any	

Bid Opening:

- Committee publicly announce and sign tabulated sheet for:
  - Name of bidder, single or a J/V of firms
  - Bid Price
  - Discounts, if any
  - Modifications to Bid
  - Withdrawal of bids, if any
  - Late receipt of bids, if any
  - Presence/absence of bid security & amount
  - Alternate bids, if any
  - Minutes of the meeting prepared by the Committee
  - Reps. of Bidders
    - Sign
    - Accept

Annex-II

Table-4

SUMMARY OF BID PRICES (AS READ OUT)

Bidder Identification		Read-out Bid Price(s)		Modifications or Comments[1] (e)
Bidder (a)	Address (b)	Amount (c)	Currencies(s) (if FE also demanded) (d)	
etc.				

[1] Describe any modifications to the read-out bid, such as discounts offered, withdrawals, and alternative bids. Note also the absence of any required bid security or other critical items. Refer also para 3.1, Bid Opening.

Preliminary Examination:

- Pertains to Verification; Eligibility, Bid Security and Completeness of Bid
- Eligibility of Bidders:
  - Have valid PEC License
  - Pre-qualification/enlisted with Employer
  - From eligible countries
- Qualification of Bidders:
  - Capacity to work & minimum years of work experience
  - Average Annual turn over in last five years equal to or more than the Bid price
  - Adequate funding facility/line of credit
  - Adequacy of Equipment/Staffing
  - Properly Signed & By Authorized Person
  - Written power of Attorney for the signatory
  - Joint Venture Agreement, in case the bidder is a J/V
  - At least one of the J/V partners shall satisfy experience requirement or Jointly as listed for Pre-qualification
  - Properly signed by the authorized person(s) and the authorization is bona-fide and available
  - Any other items, provided in the Bidding Documents due to its peculiarity
- Documents comprising the Bid are complete, duly signed and stamped
- Accompanied Bid Securities:
  - Amount is adequate (upto10% deficiency condonable by Client in Special circumstances)
  - In the prescribed form
  - From Scheduled Bank in Pakistan
  - For the specified period (upto Few Days Variation Condonable)
  - Original Security

- In the name of J/V in case bidder is a J/V
- Segregation of Bid Security in special circumstances

❖ Clarification of Bids – IB.25 & IB.23 (if Necessitated):

- To assist in examination, evaluation and comparison
- Query to bidder is at the discretion of Employer
- Post – bid Queries only in writing
- Not to change the substance of the bid
- Requirements for clarifications may also include confirmation/provision of data

❖ Substantial Responsiveness – IB.26 & IB.24: not responsive, if:

- Not accompanied with Proper bid security
- The bidder participated in more than one bid
- Bid received after deadline for submission
- Bid submitted through fax, telex, telegram or e-mail
- Prices quoted are not firm in case of firm price contract
- Bidder refuses to accept arithmetic corrections
- Bid is materially deficient
- Any other conditions of rejection stated in particular Bidding Documents

❖ A material deviation or reservation is one:

- Which affects in any substantial way the scope, quality, or performance of the works
- Which limits in any substantial way, Employer's rights or bidder's obligations or is inconsistent with the Bidding Documents
- Whose rectification/adoption will affect competitive position of bidders

❖ Minor In-conformity, non-conformity or irregularity will not constitute reasons for rejection, which can be waived-off or which can be translated into Financial Terms

❖ Detailed evaluation to be carried out only for the substantially responsive bids

❖ Arithmetic Corrections – IB.27 (Civil):

- Check for the substantially responsive bids

- The amount in words will govern amount in figures
- Unit rates govern to correct line total
- Exception to the general rule, if the Employer is of the opinion that "gross misplacement of the decimal point in the unit rate"
- Correction thus made is binding upon bidder, non-acceptance will entail forfeiture of Bid Security

Detailed Evaluation of Bids:

❖ Correction for Prices:

- Read-out total bid prices excluding provisional sums and discounts
- Corrected total bid price (Minus the discounts +arithmetic corrections)
- Corrected price converted to single currency
- Evaluated Bid Price after Price Adjustment

Annex-II

Table-5

RESULTS OF PRELIMINARY EXAMINATION

Bidder (a)	Verification (b)	Eligibility (c)	Bid Security (d)	Completeness of Bid (e)	Substantial Responsiveness (f)	Acceptance for Detailed Examination (g)
etc.						

Note: For explanations of headings, see para-3.4. Additional columns may be needed, such as for responsiveness to technical conditions. See example in Annex-III.

Annex-III

EXAMPLE OF PRELIMINARY EXAMINATON

Bidder (a)	Verification (b)	Eligibility (c)	Bid Security (d)	Completeness of Bid (e)	Substantial Responsiveness (f)	Acceptance for Detailed Examination (g)
Bidder A	Yes	Yes	Yes	Yes	Yes	Yes
Bidder B	No[1]	Yes	Yes	Yes	Yes[2]	No
Bidder C	Yes	Yes	Yes	Yes	Yes	Yes
Bidder D	Yes	Yes	No[3]	No	Yes	No
Bidder E	Yes	No	No[4]	Yes	Yes	No
Bidder F	Yes	Yes	Yes	Yes	Yes	Yes
Bidder G	Yes	Yes	Yes	Yes	Yes	Yes
Bidder H	Yes	Yes	Yes	Yes	Yes	Yes

1. Joint Venture agreement missing.

2. Requires 25 percent mobilization advance; bid document states maximum of 15 percent. Deviation is minor or major depending on the resources of Employer.

3. Bid security not in required amount/format.

4. Required validity period of security not met (8 weeks instead of 12 weeks).

Annex-II

Table-6

CORRECTIONS AND UNCONDITIONAL DISCOUNTS

Bidder (a)	Read-Out Bid Price(s)		Corrections		Corrected Bid Price(s) (f)=[(c)+(d)]-(e)	Unconditional Discounts[2]		Corrected/ Discounted Bid Price(s) (i) = (f) - (h)
	Amount (b)	Currency(ies) (if FE also demanded) (c)	Computational Errors[1] (d)	Provisional Sums (e)		Percent (g)	Amount (h)	
etc.								

Note: Only bids accepted as a result of preliminary examination (Table 5, column g) should be included in this and subsequent tables. Columns a, b and c in this table correspond to columns a, c and d respectively of table-4.

1. Correction in column d may be positive or negative (negative should be shown in parenthesis).

2. If the discount is offered as a percent, column h is normally the product of the amounts f and g . If the discount is provided as an amount, it is entered directly in column h.

Read-Out Total Bid Prices and Discount:

Sr.		Read-Out Tender Price			Discount	Tender Security	Discounted Tender Price		
No.	Tenderer's Name	F.C.C.		*L.C.C.	Offered	Provided	F.C.C.		L.C.C.
		EURO	USD	PKR		Yes/No	EURO	USD	PKR
1	Bidder A	-	1,478,779	43,584,814	Nil	Yes	-	-	-
2	Bidder B	2,806,511	-	65,908,443	Nil	Yes	-	-	-
3	Bidder C	-	2,431,072	68,760,570	Nil	Yes	-	-	-

* Includes Provisional Sum of PKR 15,000,000

Corrected Total Bid Price:

Sr. No.	Tenderer's Name	Corrected Total Tender Price (Ref. Table 3-1)			Corrected Total Tender Price Excluding Provisional Sums Eq.PKR
		FCC		L.C.C PKR	
		EURO	USD		
(1)	(2)	(3)		(4)	5={(3)x**}+{(4)-15,000,000}
1	Bidder A	-	1468814	43557284	115922341
2	Bidder B	2806511	-	65908452	266897539
3	Bidder C		2431072	68760570	198360733

Prices Converted to Single Currency:

Sr.	Tenderer's Name	Corrected Total Tender Price (Ref. Table 3-1)			Corrected Total Tender Price Excluding Provisional Sums Eq. PKR
No.		FCC		L.C.C.	
		EURO	USD	PKR	
(1)	(2)	(3)		(4)	**5={(3)x**}+{(4)-15,000,000}**
1	Bidder A	-	1,468,814	43,557,284	115,922,341
2	Bidder B	2,806,511	-	65,908,452	266,897,539
3	Bidder C	-	2,431,072	68,760,570	198,360,733

Annex-II

Table-7

ADDITIONS, ADJUSTMENTS AND PRICED DEVIATIONS

Bidder (a)	Corrected/Discounted Bid Price (b)	Additions[1] (c)	Adjustments[1] (d)	Priced Deviations[1] (e)	Total Price (f) = (b) + (c) + (d) + (e)
etc.					

[1] Each insertion in columns c, d, or e should be footnoted and explained in adequate detail, accompanied by calculations. Refer to paras 3.5(d), 3.5(e) and 3.5(f) respectively.

Computation of Evaluated Bid Prices:

Sr. No.	Description	Bidder A			Bidder B			Bidder C		
		FCC EURO	LCC Pak. Rs.	Total Eq.Pak. Rs.	FCC EURO	LCC Pak. Rs.	Total Eq.Pak. Rs.	FCC EURO	LCC Pak. Rs.	Total Eq.Pak. Rs.
1	Corrected Total Tender Price (Excluding Provisional Sums) Ref. Table 3.3)	44,091,683	468,097,715	3,635,196,122	45,947,000	692,744,640	3,993,117,650	44,129,577	757,999,734	3,927,827,245
2	Price Adjustment for Technical	-	-	-	-	-	-	-		
3	Price Adjustment for Commercial Compliance (Ref. Table 5.1)	-	-	-	-	-	-	-		
4	Total: Evaluated Bid Price (1 thru 3)			3,635,196,122			3,993,117,650			3,927,827,245

Detailed Evaluation of Bids:

- Computations & rates to be part of Bid Evaluation Report:
  - Exchange Rate used As Provided in the Bid Documents
  - Price Adjustments for Technical Compliance
  - Price Adjustments for Commercial Compliance
  - Domestic Preference, if applicable
- Domestic Price Preference – IB.27(E&M):
  - For Civil Works – no preference For Local Firms
  - Preference for use of indigenous products under SRO 827
  - All Bidders; domestic, J/V, foreign entitled to Price Preference for minimum total of 20% value addition
  - Price Preference of 15%, 20% & 25% are allowed
  - Preference is calculated on a prescribed formula by reducing corresponding ex-factory bid price

Computation for Domestic Preference:

Domestic Goods (Value added in Pakistan)

[Bidders claiming eligibility for domestic preference should fill in for supply items only, all columns hereunder and provide necessary documentation to substantiate their claim]

Sr. No.	Description of Indigenous Goods	Unit	Qty	Total Price of Goods Ex-Factory (Pak Rs.)	Domestic value added in the manufacturing cost as percentage of Ex-Factory Price	Amount of value addition (Pak Rs.)
1	2	3	4	5	6	7

Computations:

A. Total amount of Value Addition (from Col.7) Rs_____

Total Ex-Factory Price of Indigenous Goods (from Col.5) Rs_____

C. Total DDP Price of imported supply items Eqv.Rs_____

D. Total Price of supply items [B+C] Eqv. Rs _____

E. % of value addition = [(A/D)x100] _____%

F. Domestic Preference =(15,20 or 25)% of B Rs_____

Detailed Evaluation of Bids:

- Price adjustments (Loading):
  - For evaluation purpose only
  - Only against stated provisions
  - Completeness – included in other items
  - Missing items – competitor's average price
  - Technical compliance – highest price of bidders
  - Payment terms – highest Bank Rate/annum
  - Completion Schedule – 0.05% of total bid price
  - Commercial Compliance – cost of doing the deficiencies
  - Other deviations – Prima Facie situation

Evaluation Process:

- Process to be confidential until Announcement of evaluation result
- Announcement to be made at least 10 days prior to Notice of Contract Award (NOCA)
- Announcement text has been simplified under IB.24(Civil)
- Any effort to influence Employer in evaluation process or award may result in rejection of such bid
- Aggrieved bidder may lodge written complaint within 15 days of Announcement
- Mere lodging of Complaint should not suspend procurement process
- Employer's Evaluation Committee will Review/ dispose off the grievances
- Bid Evaluation should not contain unresolved issues requiring resolution prior to award

Annex-II

Table-8

PROPOSED CONTRACT AWARD

1. Lowest evaluated responsive bidder (proposed for contract award) (a) Name b) Address	_____ _____	
2. If bid from joint venture, list all partners, nationalities, and estimated shares of contract.	_____ _____	
3. Estimated date (month, year) of contract signing.	_____	
4. Estimated completion period.	_____	
5. Bid Price(s) (Read-out)[1]		**Amount(s)**
6. Corrections for Errors [2]		
7. Discounts [3]		
8. Other Adjustments [4]		
9. Proposed Award [5]		

1. From Table 6, column b.
2. From Table 6, column d.
3. From Table 6, column h, including any cross-discounts.
4. All adjustments (which includes Addition, Adjustments and Priced Deviations).
5. Sum of the prices in Items 5 to 8.

Award of Contract:

- Employer's Right to Accept or Reject
  - Prior to contract award: Accept or reject any bid, annul bidding process and reject all bids at any time
  - No Consequential liability of Employer for affected bidders
  - Grounds for rejection (without justification) will be communicated to requesting bidder(s)
  - Rejection of all bids shall be notified to all bidders promptly
  - IB 29.1 when read in conjunction with PPRA Rule-38; lowest evaluated responsive bidder can not be avoided
- Employer shall not award to a bidder black listed by PEC (IB.24)
- Employer's right to post qualification
  - Even if the bidders were pre-qualified, for a reason or prima facie evidence
  - If pre-qualified, post qualification is carried out for only lowest evaluated responsive bidder
  - Minimum post qualification review items are; (a) completed at least one such project and value of the project is equal or higher than the Bid Price in last five years
- No negotiations but clarifications on outstanding items in Bid Evaluation Report (IB 31.2)
- Conditional Acceptance of NOCA by bidder is not tenable under Section 7 of Contract Act 1872
- Letter of Acceptance or NOCA to be issued prior to expiration of Bid validity period
- Upon receipt of Performance Security, employer will notify others and return their bid securities
- Failure to furnish Performance Security within 28 days of LOA may annul the contract and forfeit the bid security

Paper No. 316

CLAIMS UNDER FIDIC CONTRACTS, EDITION 1999

Engr. Mushtaq Ahmad Smore

Claims under

FIDIC Contracts, Edition 1999

Engr. Mushtaq Ahmad Smore[1]

Introduction

The aims of this presentation are:

- to give an overview of how the Parties to a Contract can be compensated for delay and cost
- to review the requirements of proving entitlement of claim
- to review the recoverable heads of Cost claim

Contractor's Claims under Sub-Clause 20.1

Claim

- What is a claim?

  A claim is an assertion of a Party's right under the terms of the Contract or at law.

- In the Construction Industry, a claim is usually for
  - ❖ Additional time
  - ❖ Additional payment
  - ❖ Both time and payment
- Claims under the Contract
  - ❖ FIDIC Red Book 1999 includes many circumstances which the Contractor can claim
- Claims under Variations may include:
  - ❖ Changes to the quantities of work; changes to the quality and characteristic of

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[1] B.Sc Engg (Pak), MDRBF (USA), MDBF (Switzerland), Former Head of Contracts Division NESPAK

work; changes to the levels, positions, and/or dimensions any part of Works; omission of any work; any additional work; changes to the sequence or timing of the execution of the Works

Examples of changes to the sequence of the execution of the Works

1. For construction of civil engineering works for Tarbela Units 11 to 14 (4 x 432 MW)

Completion dates: Specified sequence in the Contract	Completion dates: Changes to the sequence
Unit 11	Unit 14
Unit 12	Unit 13
Unit 13	Unit 12
Unit 14	Unit 11

2. For construction of civil works for Guddu – Unit 4

Specified sequence of construction of Civil Works under contract C-1, was changed, to match with the installation of the Electrical and Mechanical Plant under contract EM-1.

- ❖ The Engineer to issue the instruction for Variation
- ❖ If the Contractor considers that the Engineer's instruction comprises a Variation but the Engineer
  - ▪ does not issue such instruction, or
  - ▪ does not evaluate the Variation properly,

  then the Contractor is obliged to follow the "procedure for Contractor's Claims" specified under Sub- Clause 20.1
- ❖ Example

  Taunsa Barrage Emergency Rehabilitation and Modernization Project: Contract for Civil Works - Compacted sand filling in extended portion of downstream Right and Left Guide Banks

- Claims for compensation under the Law governing the Contract
  - ❖ When the circumstances are not included in the Contract
  - ❖ Claims are made on some legal ground and not made pursuant to any clause of

the FIDIC Contract

- ❖ Some Pakistani Employers delete the provision of remedy regarding Failure to Give the Site. Claim under the Contract is not valid. However the Contractor can pursue the case under the law of Islamic Republic of Pakistan.
- ❖ Example

  Construction of Faizabad Interchange, Islamabad

- The Claims procedure
  - ❖ The Sub-Clause 20.1 provides:
  - ❖ The Contractor to give notice of claim
  - ❖ The Contractor to keep contemporary records
  - ❖ The Contractor to submit fully detailed claim
  - ❖ The Engineer to response

1. Notice of Claim

- The Contractor to give a Notice to the Engineer with a copy to the Employer (authorized persons) at the proper address
- The Notices are required to make the Engineer and the Employer aware of the events in order that corrective action or mitigation measures may be considered
- In the Notice, the Contractor is not required to state the amount or time claimed nor the contractual basis of the claim nor provide any supporting documents
- When should the Sub-Clause 20.1 Notice be given?
  - ❖ Notice to be given
    - as soon as practicable,
    - and not later than 28 days after the Contractor became aware, or
    - should have became aware,
    - of the event or circumstance causing "effect" on the execution the Works
  - ❖ Examples
    1. Notice of late issuance of Drawing should be given immediately
    2. Reference: Judgment - High Court of Justice, Queen's Bench Division, Technology and Construction Court, London, year 2014

Obrascon Huarte Lain SA Claimant

Her Majesty's Attorney General for Gibraltar Defendant

…the "event or circumstance giving rise to the claim" for an extension of time must first occur and there must, second, have been either awareness by the Contractor or the means of knowledge or awareness of that event or circumstance before…

(a) A variation instruction is issued on 1 June to widen a part of the *dual carriageway...*

(b) At the time of instruction, that part of the carriageway is not on the *critical path*

(d) ...dual carriageway is started in October, it is only then clear that the Works overall will be delayed by the variation. It is only however in November that it can be said that the Works are actually delayed.

(e) Notice does not have to be given for the purposes of Clause 20.1 until there actually is delay (November) although the Contractor can give notice with impurity when it reasonably believes that it will be delayed (say, October)

- Failure to give notice - NO CLAIM ENTITLEMENT

2. Contemporary records

Following the giving of Notice, the Contractor required to keep records "as may be necessary" to substantiation any claim. Such record is produced or prepared at or about the time giving rise to the claim. The maintenance of adequate record is an essential feature for proving claims

Some of the essential contemporary record:

- Programme (initial Programme sequence under Sub-Clause 8.3, and the subsequent changes to the Programme due to the delaying event)
- Record of actual resources
- Record of any resources which were on standby or uneconomically employed
- Progress photograph / or videos
- Drawings (with details of amendments and updates)
- Approved minutes of meetings
- Site diary / daily site report

The Engineer after receiving any Notice, monitor the record keeping and instruct the Contractor to keep further contemporary record

3. Details and particulars

Submission of detailed claim

Within 42 days after the Contractor became aware, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor required to submit detailed particulars / fully detailed claim

Objective of submission of detailed claim

The objective of submission of a fully detailed claim is to demonstrate that the Contractor has the entitlement to claim the required EOT and / or compensation

- Extension of Time for Completion
- Cost
- Both

Claim for an additional payment / Cost

Contractor to include:

Nature of Cost

- Cost associated with any activity to be executed under the Engineer's instruction
- Prolongation Cost
- Disruption Cost

Basic requirement of Particulars of Claim

1. Cause
2. Effect
3. Entitlement
4. Substantiation

The Cause

The cause is the event or circumstances giving rise to the claim

Examples

- Late issuance of drawings or instructions
- Late access or possession of the Site

- Encountering unforeseeable physical conditions

The Effect

The effect on which the claimed Cost is based was caused by the event or circumstance by linking "cause" with "effect", for each event

Examples

Cause: Engineer's instructions to suspend the entire Works

Effect:

- How long is the suspension period?
- Whether there is requirement to protect the works during the period of suspension?
- Whether demobilization or remobilization of resources?
- What effect will this event have on the Programme?
- Other effects of EOT and Cost.

Entitlement

- Entitlement is the claim basis which entitles the Contractor for Cost, Entitlement is based on:
  - ❖ specific provision of the Contract

    or
  - ❖ Law of the Islamic Republic of Pakistan
- The purpose of compensation is to put the Contractor back in the position he would have been if the Contract had been performed
- Substantiation

  Substantiation means "to establish by proof or competent evidence"
  - ❖ Substantiation of Cause: Contemporary record
  - ❖ Substantiation of Effect: (a) Contemporary record, (b) Calculations
  - ❖ Substantiation of Entitlement:
    - The Contract,
    - Law of Islamic Republic of Pakistan,

- Communication as agreed between the Parties regarding entitlement of Cost

Cost associated with extension of Time for Completion

Cost claim is based on the expenditure which is reasonably incurred by the Contractor as a consequence of the delaying events. These are time related Costs

For one off capital costs, Costs are not included except for items which have lesser life than the Time for Completion

Example

Purchase cost of office photocopiers, vehicles not to be included

Task related Costs, not to be included. Such Costs would have been incurred in any event, may be at a later date, however disruption Cost to be included

Example:

Testing charges of Materials to be incorporated into the Works

The Contractor is not entitled to costs arising from delay events for which he is responsible

For Cost associated with extension of Time for Completion,

Typical Cost Centers / Heads of Cost Claim

- Equipment Cost
- Material Cost
- Manpower Cost
- Subcontractor's Cost
- Job Site Overhead Cost (including supervision and project management, General items or Preliminaries)
- Off-Site Cost: (a) Head Office Overheads (including head office staff allocated to the job), (b) regional offices Cost
- Insurances and Guarantees Cost
- Un-recovered escalation of labour, Equipment, and Materials resulting from inflation as a result of delay

For each Cost center, Contractor's submission to include

- Introduction
- Contractor's Claim
- Entitlement / basis of claim
- Method of calculation
- Source of cost data
- Calculations

Time during which cost to be calculated

- At the time of delaying events, for most of the items
- During the extended period, for some of the items

4. Contractor's response

Ref: FIDIC Conditions of Contract for Design, Build and Operate Projects, Edition 2008

Determination of claim by the Engineer

Within 42 days after receiving fully detailed claim, or further particulars requested by the Engineer, or within such other period as may be agreed by the Engineer and the Contractor, the Engineer to proceed in accordance with Sub-Clause 3.5 to agree or determine EOT, additional payment to which the Contractor is entitled

The Engineer to give his response on the contractual or other aspects of the claim within the 42 days after receiving the fully detailed claim from the Contractor

Sub-Clause 3.5 Determination

The Engineer is obliged under Sub-Clause 3.5 to consult with each Party to try to reach agreement. Failing agreement, he has to make:

- a fair determination of the claim in accordance with the Contract, taking due regard of all relevant circumstances

Ref: FIDIC DBO 2008

- If either Party dissatisfied with the determination of the Engineer, either Party may within 28 days after receiving the determination issue to the Engineer and the other Party, Notice of dissatisfaction, and thereafter proceed in accordance with Sub-Clause 20.4 [Obtaining Dispute Adjudication Board's Decision].
- If no Notice of dissatisfaction is issued by either Party within the said 28 days, the determination of the Engineer shall be deemed to have been accepted by both Parties.

Failure to give Notice, NO CLAIM

Failure to submit particulars, no entitlement to that part where the Contractor failed

Payment of Claims by the Employer

- Sub-Clause 3.5 also provides that each Party will give effect to each agreement or determination unless and until revised under Clause 20. Whenever the Engineer has notified determination under Sub-Clause 3.5, the Contractor entitled to apply for it and to be paid.
- Sub-Clause 14.3 provides that the application for interim certificates shall include, among other things;
    - ❖ "any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Clams, Disputes and Arbitration]
- If after certifying the Contractor's application for payment, the Employer does not make the payment, the Contractor is entitled to receive financing charges.

Cut-off date for the submission of claims

The Contractor must submit his claims to the Engineer in "Statement at Completion" within 84 days after receiving the Taking-Over Certificate for the Works, except for matters or things arising after the issue of such Certificate which would then need to be included in the Contractor's draft final statement, and "Final Statement"

Employer's Claims under Sub-Clause 2.5

Examples

- Sub-Clause 4.2 Performance Security
- Sub-Clause 8.7 Delay Damages
- Sub-Clause 11.3 Extension of Defects Notification Period
- Sub-Clause 11.4 Failure to Remedy Defects
- Sub-Clause 11.11 Clearance of Site
- Sub-Clause 18.1 General Requirements for Insurance

The Employer must comply with a claims Clause 2.5

Procedure for Employer's claims

- No longer than 28 days after the Employer's became aware, the Employer or the

Engineer to give Notice and particulars of claims to the Contractor

- Ref: FIDIC Conditions of Contract for Construction, MDB Harmonised
- Edition, 2010
- No Notice required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Employer's Equipment and Free-Issue Materials], or for other services requested by the Contractor, for which the payment has presumably been agreed by the Parties in advance.
- Particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension of the Defects Notification Period
- Engineer to make determination under Sub-Clause 3.5
    - ❖ The deduction shall be determined and certified by the Engineer
    - ❖ The Employer not to make deduction from the amount certified in the Payment Certificate

Conclusion

FIDIC Condition of Contract for Design, Build and Operate Projects Edition, 2008 have detailed claim procedure, it may avoid injustices.

Recommendations

An institution be established at the national level to develop the capacity building for educating in the FIDIC forms of contracts, covering contractual matters particularly claim procedure and imparting training facilities

NESPAK and other reputed consulting engineers are recommended to have in-house training centers in the field of engineering contracts

It will help save Pakistan in an amount which can not be measured at all.

Paper No. 317

ARBITRATION ACT

Engr. Balal A. Khawaja

ARBITRATION ACT

Engr. Balal A. Khawaja[1]

ARBITRATION ACT, 1940.

Arbitration is an agreed mode of dispute resolution agreed by the parties to a contract in advance whereby the identified disputes arising under that contract between the parties are resolved through arbitration. Because it depends upon the mutual consent of the parties to the contract the modality itself is desirably flexible. The parties may agree what types of disputes shall be the subject matter of arbitration and the procedure, if any, which such disputes must pass through before they become arbitrable. A very good example of this can be the arbitration clause included in the FIDIC format of contracts which envisages a dispute to pass through (i) a reference to the Engineer for his Decision (ii) a reference to the Dispute Resolution Board (DRB) where the either party or both parties are agreed by the said Decision (iii) a notice of intention to commence arbitration to be given by a party aggrieved by the DRB Decision; (iv) amicable settlement proceedings before commencement of arbitration proceedings and then the arbitration itself. For any dispute to get to arbitration, it is mandatory that it should have first gone through steps (i) to (iv) above. On the other hand it is open to the parties to agree upon the opposite procedure whereunder any dispute between the parties in relation to the contract in question may, upon its notification by one party to the other, become the subject matter of arbitration in respect thereof without any other procedural formality such as identified at (i) to (iv) above.

Since arbitration regarding any disputes is the exception to the general rule that all disputes may be taken to a court of law for resolution, it is obviously important that the willingness of the parties to opt for the said exception must be formalized in an agreement called the arbitration agreement. This agreement should contain the relevant terms and conditions underlying the said arbitration agreement such as the nature and extent of disputes which are covered by the arbitration agreement, the rules / law of arbitration under which such arbitration is to take place etc.

The law of arbitration in Pakistan is codified in the Arbitration Act, 1940. This act comprises of 7 Chapters which, in turn, contain 49 Sections and one Schedule containing 4 Annexures. Broadly speaking parties may initiate arbitration without intervention of court (Chapter II) or with intervention of a court (Chapter III). It is to be clearly understood that arbitration is a substitute for proceedings in court and, therefore, once agreed as the mode of resolution of disputes between the parties, it will come in the way of any subsequent attempt by either party to take any dispute otherwise covered by the arbitration agreement to a court of law. The law

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of arbitration understandably contains an appropriate provision which, if invoked, will require the proceedings in the court to be stayed and the dispute referred to arbitration in terms of the arbitration agreement. This provision is contained in the following Section 34 of the Act:

> **"34. Power to stay legal proceedings where there is an arbitration agreement.** –Where any party to an arbitration agreement or any person claiming under him commences any legal proceedings against any other party to the agreement or any person claiming under him in respect of any matter agreed to be referred, any party to such legal proceedings may, at any time before filing a written statement or taking any other steps in the proceedings, apply to the judicial authority before which the proceedings are pending to stay the proceedings; and if satisfied that there is no sufficient reason why the matter should not be referred in accordance with arbitration agreement and that the applicant was, at the time when the proceedings were commenced, and still remains, ready and willing to do all things necessary to the proper conduct of the arbitration, such authority may make an order staying the proceedings".

Under the Arbitration Act, 1940, as applicable in Pakistan, an arbitral tribunal normally does not have any power to pass any interim orders on an application filed by either party before the arbitral tribunal. This power vests in the court of law (under section 41 of the Act). So, therefore, while the dispute is to be heard and decided by the arbitral tribunal, all interim orders can only be passed by the court. This provision is as under:

> "**41. Procedure and powers of Court**. – Subject to the provisions of this Act and of rules made thereunder-
>
> (a) the provisions of the Code of Civil Procedure, 1908, shall apply to all proceedings before the court, and to all appeals, under this Act, and
>
> (b) the Court shall have, for the purpose of, and in relation to, arbitration proceedings, the same power of making orders in respect of any of the matters set out in the Second Schedule as it has for the purpose of, and in relation any proceedings before the Court;
>
> Provided that nothing in clause (b) shall be taken to prejudice any power which may be vested in an arbitrator or umpire for making orders with respect to any of such matters".

The first thing that is conspicuous by its presence in the provisions of the Act is the informal nature of the proceedings. The proceedings in a court of law, as we all know, can be embarrassingly open and can attract a varying degree of publicity, depending on the nature of proceedings. A court of law is a public place in as much-as it is extremely rare, if at all, that any section of the public may be debarred from attending court proceedings. Contrary to this

arbitration proceedings are private and held in the privacy of the venue of arbitration where entry can be controlled with the agreement of the parties. Secondly, the procedural laws such as the Civil Procedure Code and Qanoon-e-Shahadat do not apply to the arbitration proceedings thereby rendering the proceedings desirably flexible and easy to operate. It is not that there is anything wrong with the said procedural laws but it has to be said that these are unnecessarily inelastic and time consuming. The requirements of these laws are better understood and appreciated by lawyers who may or may not be engaged by the parties to appear for them in the arbitration proceedings.

Non-applicability of the provisions of the Civil Procedure Code renders it possible to conduct arbitration proceedings in a relaxed and tension free atmosphere. It also permits doing away with any such requirements of procedure which may not really be necessary in a given case. It may, however, be kept in mind that non-applicability of Qanoon-e-Shahadat or Civil Procedure Code cannot be taken as a license to conduct the proceedings in a cavalier or slipshod manner. The proceedings must always pass the test of transparency and provision of fair opportunity to both the parties to plead and prove their respective positions.

There are no strict timelines for the various events which comprise arbitration proceedings. However, it is to be kept in mind that reasonable timelines are always to be deemed implied in the Act. In this regard reference may be made to the following Section 3 of the Act:

> "**3. Provisions implied in arbitration agreement**.-An arbitration agreement, unless a different intention is expressed therein, shall be deemed to include the provisions set out in the First Schedule in so far as they are applicable to the reference".

The First Schedule to the Act contains 8 Implied Conditions which are as under:

> "1. Unless otherwise expressly provided, the reference shall be to a sole arbitrator.
>
> *2. If the reference is to an even number of arbitrators, the arbitrators shall appoint an umpire not later than one month from the latest date of their respective appointments.*
>
> *3. The arbitrators shall make their award within four months after entering on the reference or after having been called upon to act by notice in writing from any party to the arbitration agreement or within such extended time as the Court may allow.*
>
> *4. If the arbitrators have allowed their time to expire without making an award or have delivered to any party to the arbitration agreement or to the umpire a notice in writing stating that they cannot agree, the umpire shall forthwith enter on the reference in lieu of the arbitrators.*
>
> *5. The umpire shall make his award within two months of entering on the reference or within such extended time as*

the Court may allow.

6. *The parties to the reference and all persons claiming under them shall subject to the provisions of any law for the time being in force, submit to be examined by the arbitrators or umpire on oath or affirmation in relation to the matters in difference and shall, subject as aforesaid, produce before the arbitrators or umpire all books, deeds, papers, accounts, writings and documents within their possession or power respectively, which may be required or called for, and do all other things which, during the proceedings on the reference, the arbitrators or umpire may require.*

7. *The award shall be final and binding on the parties and persons claiming under them respectively.*

8. *The costs of the reference and award shall be in the discretion of the arbitrators or umpire who may direct to, and by whom, and in what manner, such costs or any part thereof shall be paid, and may tax or settle the amount of costs to be so paid or any part thereof and may award costs to be paid as between legal practitioner and client".*

It has to be kept in view that the inclusion of the above 8 Implied Conditions is subject to there being nothing contrary thereto in the arbitration clause agreed between the parties. An example may be given here by making a reference to Implied Condition No.3 which apparently lays down a timeline of 4 months for the conclusion of the arbitration proceedings before the arbitral tribunal. Section 28 in the Act, however, provides that the court may enlarge this time "from time to time" for the making of the Award. This Section 28 is as under:

"**28. Power to Court only to enlarge time for making award.** -

(1) the court may, if it thinks fit, whether the time for making the award has expired or not and whether the award has been made or not, enlarge from time to time the time for making the award.

(2) Any provision in an arbitration agreement whereby the arbitrators or umpire may, except with the consent of all the parties to the agreement, enlarge the time for making the award, shall be void and of no effect".

Arbitration proceedings may be commenced by the parties with mutual consent or, in case of such mutual consent not being possible, through a court of law. Section 20 of the Arbitration Act is the provision which may be invoked by either party through an application praying that as there was an arbitration agreement between the parties and various disputes had arisen which were covered by the scope of such agreement the court may refer the said disputes to arbitration after satisfying itself that the said ingredients were present therein. Section 20 of the Arbitration Act is as under:

"20. Application to file in Court arbitration agreement. –

(1) Where any persons have entered into an arbitration agreement before the institution of any suit with respect to the subject matter of the agreement or any part of it, and where a difference has arisen to which the agreement applies, they or any of them, instead of proceedings under Chapter II, may apply to a Court having jurisdiction in the matter to which the agreement relates, that the agreement be filed in Court.

(2) The application shall be in writing and shall be numbered and registered as a suit between one or more of the parties interested or claiming to be interested as plaintiff or plaintiffs and the remainder as defendant or defendants, if the application has been presented by all the parties, or, if otherwise, between the applicant as plaintiff and the other parties as defendants.

(3) On such application being made, the Court shall direct notice thereof to be given to all parties to the agreement other than the applicants, requiring them to show cause within the time specified in the notice why the agreement should not be filed.

(4) Where no sufficient cause is shown, the Court shall order the agreement to be filed, and shall make an order of reference to the arbitrator appointed by the parties, whether in the agreement or otherwise, or, where the parties cannot agree upon an arbitrator, to an arbitrator appointed by the Court.

(5) Thereafter the arbitration shall proceed in accordance with, and shall be governed by, the other provisions of this Act so far as they can be made applicable."

It has to be kept in view that before passing the order referring the disputes to arbitration under the arbitration agreement between the parties the court has to satisfy itself that the arbitration agreement had been entered into "before the institution of any suit with respect to the subject matter of the agreement or any part of it", and the difference(s) between the parties is covered by the scope of the arbitration agreement between them. Before passing of this order an opportunity has to be given to the other side to show cause why such order should not be passed.

There can be a situation where the parties are already participating in arbitration proceedings regarding certain disputes before a two or three member arbitral tribunal. The membership of such tribunals is completed by nomination of one member each by the two parties and appointment of third member by such two nominees of the parties. It is likely that during the course of arbitration proceedings the nominee of one of the parties becomes unavailable for

further participation for any personal reasons such as ailment, disability etc., or on account of his death. The party who had originally nominated such member as the right to nominate its substitute but for reasons and despite reminders from the other party for making such nomination fails or refuses to do the needful. Section 8 of the Act entitles the other party to approach a court of law and have the vacancy filled. This provision of the Act is as under:

> **"8. Power of Court to appoint arbitrator or umpire.-**
>
> *(1) In any of the following cases—*
> *(a) where an arbitration agreement provides that the reference shall be to one or more arbitrators to be appointed by consent of the parties, and all the parties do not, after differences have arisen, concur in the appointment or appointments; or*
> *(b) if any appointed arbitrator or umpire neglects or refuses to act, or is incapable of acting, or dies, and the arbitration agreement does not show that it was intended that the vacancy should not be supplied, and the parties or the arbitrators, as the case may be, do not supply the vacancy; or*
> *(c) where the parties or the arbitrators are required to appoint an umpire and do not appoint him;*
> *any party may serve the other parties or the arbitrators, as the case may be with a written notice to concur in the appointment or appointments or in supplying the vacancy.*
> *(2) If the appointment is not made within fifteen clear day after the service of the said notice, the Court may, on the application of the party who gave the notice and after giving the other parties an opportunity of being heard, appoint an arbitrator or arbitrators or umpire, as the case may be, who shall have like power to act in the reference and to make an award as if he or they had been appointed by consent of all parties."*

Another important aspect of arbitration proceedings under the Arbitration Act, 1940, is that once appointed the authority of the arbitral tribunal to act as such cannot be withdrawn / revoked by either party except by the orders of the court under Section 5 or 11 of the Arbitration Act. For such orders to be made by the court the parties interested in revocation of authority of the tribunal has to approach the court with an application to that effect. These two provisions are as under:

"**5. Authority of appointed arbitrator or umpire irrevocable except by leave of Court**. **–** The authority of an appointed arbitrator or umpire shall not be revocable except with the leave of the Court, unless a contrary intention is expressed in the arbitration agreement".

> *"**11. Power to Court to remove arbitrators or umpire in certain circumstances. –***
>
> (1) The Court may, on the application of any party to a reference, remove an arbitrator or umpire who fails to use all reasonable dispatch in entering on and proceeding with the reference and making an award.
>
> (2) The Court may remove an arbitrator or umpire who has misconducted himself or the proceeding.
>
> (3) Where an arbitrator or umpire is removed under this section, he shall not be entitled to receive any remuneration in respect of his services.
>
> (4) For the purposes of this section the expression "proceeding with the reference" includes, in a case where reference to the umpire becomes necessary, giving notice of that fact to the parties and to the umpire."

It will thus be seen that there is desirable protection afforded to the arbitral tribunal for being independent and unbiased in its deliberations and dispensations. The Act contains ample security of tenure by way of the above two provisions to encourage the tribunal to be independent and objective in the conduct of the proceedings and in coming to whatever conclusions it feels are warranted and justified.

As already pointed out the above provisions contained in the Civil Procedure Code do not apply to arbitration proceedings under the Arbitration Act. This means that interalia the provisions regarding appeals, revisions and reviews contained in the Civil Procedure Code are not relevant to the arbitration proceedings. All appealable orders passed under the Arbitration Act have to be specifically made appealable under a specific provision of the Act. This provision is contained in Section 39 of the Act which is as under:

> "**39. Appealable orders. –** An appeal shall lie from the following orders passed under this Act (and from no others) to the Court authorized by law to hear appeals from original decrees of the Court passing the order:-
>
> An order—
>
> (i) superseding an arbitration;
>
> (ii) on an award stated in the form of a special case;
>
> (iii) modifying or correcting an award;
>
> (iv) filing or refusing to file an arbitration agreement;
>
> (v) staying or refusing to stay legal proceedings where there is an arbitration agreement;

(vi) setting aside or refusing to set aside an award;

Provided that the provisions of this section shall not apply to any order passed by a Small Cause Court.

(2) No second appeal shall lie from an order passed in appeal under this section, but nothing in this section shall affect or take away any right to appeal to [the Supreme Court]."

It is to be noted that there are no comparable provisions in the Arbitration Act dealing with the subjects of revisions and/or reviews. The relevant powers for the same are thus not available in regard to any order passed under provision of the Act.

Coming to the provisions dealing with the Award, once it is pronounced at the end of the proceedings, the most important provision is Section 30 of the Act which contains the grounds on which an Award may be interfered with or set aside by the court. Reference may also be made to Section 15 (power of court to modify award) and Section 16 (power to remit award) which are also relevant once an Award has been made in the proceedings. It is to be noted that no regular appeal lies against an Award under any provision of the Arbitration Act. However, the grounds are provided in the said provisions viz: Section 15, 16 and 30 of the Act which may be used to attack an Award and have the same amended, remitted or set aside. The proceedings under these provisions are not proceedings in appeal and therefore the procedure which is followed while hearing an appeal and the powers that are exercisable while doing so are to be disregarded / ignored by a court while hearing the matter under these provisions of Arbitration Act. The unfortunate experience, however, is that the courts almost as a habit tend to ignore/disregard this firm distinction and proceed as if they were hearing a regular appeal under the Civil Procedure Code. This practice has robbed the Arbitration Act of the efficacy which the draftsman of the Act intended to give to it. It also begs the question that, if the matter was to come back to a court of law by way of a regular appeal, that would be destructive of the very reason why the parties opted for arbitration instead of proceedings in a court of law to resolve their dispute. There are complaints galore that the courts completely disregard the plain language and scope of Sections 15, 16 and 30 in the post Award proceedings thereby getting bogged down in usual court proceedings which go on and on in the courts. The very purpose for which law of arbitration was devised thus appears to have been buried.

It is more than obvious that the law of arbitration in Pakistan is in bad need of a thorough review aimed at identifying the areas where reforms are needed. Some of these areas are as under:

(a) In the year 1996, a thoroughly revised law of arbitration was introduced in India through The Arbitration & Conciliation Act, 1996. In bringing about this change from their Indian Arbitration Act, 1940, the Indian lawmakers have liberally benefited from the internationally known UNCITRAL Model on International Commercial Arbitration, 1985. Thereby upgrading their law from the 1940 position to the conditions prevailing in 1996. The various improvements in law felt to be necessary during the intervening 56 years which were reflected in UNCITRAL Model thus automatically acquired the force of law in India. Similarly, in UK the codification of the law of arbitration took place through

Arbitration Act, 1889, which was supplemented through Arbitration Act, 1934. The existing legislation on the subject was consolidated in the Arbitration Act, 1950, which was finally replaced by Arbitration Act, 1996. While drafting the latest Act of 1996 the UNCITRAL Model developed and adopted by the United Nations in June 1985, and the same was obviously kept in view while drafting the English Law. Reference may also be made to the Arbitration Act, 2005, which is in force in Malsia since March 15, 2006. This law also draws very heavily from the UNCITRAL Model. It will thus be seen that with the introduction of the UNCITRAL Model need has generally been felt for coming close to the standards contained in this model. The reforms in the law of arbitration in the three countries mentioned above, as well as in several other countries have had this common objective. The law of arbitration in Pakistan has unfortunately remain stagnant and has thus become hopelessly out of time and inconsistent with the requirements of the present commercial dictates. There is thus an urgent need to review the entire law of arbitration against the background of the UNCITRAL Model and to bring it at par, or atleast nearly at par, with the standards enshrined in the said Model.

(b) The law of arbitration was considered as a desirable alternative to litigation in courts particularly for commercial disputes. It was thought to be expeditious, cost effective and better suited to the requirements of commercial litigations. However, with the passage of time the said view has become irrelevant and inapplicable to these proceedings. Now it takes nearly as long and costs more to go for arbitration rather than proceedings in a court of law. The impression that through diversion to arbitration some of the workload of the courts of law could be reduced has proved in erroneous assumption inasmuch-as almost every arbitration matter, sooner or later, ends up in a court of law thereby meaning that the view regarding arbitration helping in reducing the workload in the courts is misplaced. As an example, getting an arbitral tribunal appointed through Section 20 proceedings or procuring a court decree after hearing of objections by the court under Section 30 of the Act are procedures which, more often than not, take years to conclude. The bewildered litigant is left thinking that he had opted for arbitration procedure as he did not want to suffer the delay and the resultant frustration inherent in the court proceedings and yet that is where he has finally landed. Considering that the schedule to the Act contemplates conclusion of the proceedings, in most cases, if not at all, within a period of 4 months it is extremely rare, if at all, that an arbitration concludes within such period. There are several reasons for this most unfortunate situation, most importantly the absence of a specialist bar and arbitrators trained in conducting arbitrations as per the letter and spirit of the law. There is a very strong case for increasing the 4 months stipulated time period to 12 months, but with the rider that on conclusion of the 12 months' period, a maximum of 3 more months shall be available to conclude the proceedings. In case the same are or cannot be conclude the matter shall be taken to another arbitral tribunal for completing the balance work and fee of such tribunal shall be recovered from the first tribunal and paid to the second. The proceedings which took place before the first tribunal shall be used for further proceedings by the second tribunal. The second tribunal while pronouncing the Award shall fix the responsibility for the delay in the conduct of the proceedings and the guilty party must be saddled with punitive costs irrespective of the outcome of the proceedings.

(c) Under the current procedure the arbitral tribunal cannot award interest from the date of commencement of the proceedings up to the date of the Award which, as stated earlier can be considerable period of time. More than substantial sums of money are being regularly awarded in the ongoing arbitration proceedings and the denial of markup on the awarded sums runs into millions of rupees. It should also be specifically provided that such markup shall be awarded at the rate which is charged by the commercial banks from their customers. It is really very difficult to appreciate that while such power is available to a court of law in the shape of pendente lite interest, the same has not been made available to an arbitral tribunal to may, in fact, be hearing identical disputes between the parties. There is obviously an immediate need for this amendment in law, particularly as it otherwise encourages the guilty party to drags its feet during the arbitration proceedings knowing that he will have no liability to pay any markup for such period.

(d) Although there appears to be no justification in the Act itself for this practice, the courts hear objections to the Award by settling issues, directing parties to adduce evidence and then to address arguments in support of their respective positions. This makes the exercise like a trial and requires the parties to go through the exercise all over again. There is need to curb this practice through appropriate amendments in the Act. Although it is implied that hearing of objections may proceed on the basis of affidavits (like hearing of applications) this should be precisely provided. Secondly, there should only be one proceeding for the hearing of objections to the Award before a bench of not less than two judges with no further appeal. It should further be enacted that the proceedings for the hearing of objections to an Award shall be heard as number one on the cause list of the court immediately after the admission hearings / kutcha peshi. It should further be provided that adjournment of the hearing of objections will be the exception rather than the rule and the advocates seeking any adjournment must make alternate arrangements otherwise the request for adjournment shall not be granted. Thirdly, it should be provided that while filing objections to the Award the losing party shall deposit in court the awarded sum, which may be withdrawn by the other side subject to furnishing of acceptable security. Considering that more than 80% of the objections to an Award are filed on frivolous grounds with a view to delay payment in terms of the Award, it should be made painful for the party who has lost the arbitration case and merely wants to delay giving effect to the Award by taking advantage of the procedural loopholes.

(e) There is need to do away with the requirement contained in Section 41 of the Arbitration Act (courts power to pass interim orders to the exclusion of the arbitral tribunals) it is indeed amazing while the law is comfortable such arbitral tribunal dealing with the main case and passing final judgment by way of Award therein, it feels uncomfortable with vesting the power of passing interim orders in the matter in the same tribunal. This is, to say the least, illogical. The power to pass interim orders should be vested in the arbitral tribunal with a similar right of appeal before a two judges bench as in the case of Section 30 proceedings.

(f) Special provisions should be enacted for removing the major grievance of those who opt for arbitration viz: the inordinate delay in the appointment of the arbitral tribunal and hearing of Section, 15, 16 and/or 30 applications against the Award.

Paper No. 318

DISPUTE RESOLUTION UNDER CONSTRUCTION CONTRACTS OF HYDROPOWER PROJECTS OF PAKISTAN

Nasir Hanif, Muhammad Amin & Hashim Hanif

DISPUTE RESOLUTION UNDER CONSTRUCTION CONTRACTS OF HYDROPOWER PROJECTS OF PAKISTAN

Nasir Hanif[1], Muhammad Amin[2] & Hashim Hanif[3]

Abstract:

The occurrence of delay in construction industry is a regular trend all over the world which is caused by number of factors. The Hydropower projects are no exception to such delays. It is difficult to find a Hydropower project in Pakistan not experiencing delay. Construction Industry in Pakistan is transforming itself into a very well organized and scientifically managed industry over the past one decade. Given the fact that the industry is in transformation phase in Pakistan, it still contributes significantly to the economy of the country. It is observed that Construction Management issues related to mega projects such as Hydropower Projects, still need to be addressed. First step in finding out the causes of delay in Hydropower Projects is to identify the factors that significantly contribute towards the deformation of triple constraint (Cost, Scope and Time) of Construction Projects. These delays ultimately lead towards claims and disputes in Hydropower Projects.

Claims and disputes are inevitable in complex and long term construction contracts. Non attending of claims and disputes arisen, in timely manner and / or lack of proper mechanism under a contract, adversely affect the progress of work and subsequent completion of projects. Precisely drafted contracts containing fair and efficient method of dispute resolution is basic to avoid claims and disputes. The provision of such mechanism under a contract instills the confidence between the parties that the contract will be justly operated.

Various, in vogue, methods of dispute settlement with particular emphasis on FIDIC Dispute Adjudication Board have been described. Practices observed locally and recommendations for adequate and fair dispute resolution system at national level have been given. There is need to have better understanding of internationally practiced dispute resolution methods amongst all concerned.

Keywords: Claims, Delays, Disputes & Hydropower Projects.

1. Delay Factors leading to Disputes

The delay factors have been identified on the basis of experience of researchers in Construction industry who are working on Hydropower Projects of Pakistan [1 & 5]. These factors have been categorized into four main Categories which leads to Disputes in Hydropower Projects. Summary of all the delay factors has been explained in Table 1.

Table1: Factors affecting Delay in Hydropower Projects

Sr. No	Factors causing Delay	Sr. No	Factors causing Delay
CONSULTANTS CAUSED DELAYS		EMPLOYER CAUSED DELAYS	
1	Difference between Building Codes & Specifications	1	Late Variation Order's Approval
2	Delay in Issuance of Drawings	2	Poor Professional Management
3	Errors in Soil Investigations	3	Delay in Interim Payment Certificates
4	Improper Investigation of Foundations at Site	4	Land Acquisition Problems
5	Improper Project Feasibility Study	5.	Weak Decision Making
6	Delay in Instructions from Consultants		
CONTRACTOR CAUSED DELAYS		OTHER DELAYS	
1	Lack of Baseline Schedule	1	Unfavorable Site Conditions
2	Poor Coordination	2	Extreme Weather Conditions
3	Late Deliveries of Materials		
4	Shortage of Fuel, Materials and Equipment		
5	Lack of Capable Representative		
6	Poor Site Supervision		
7	Delay by Sub-Contractors		

2. Dispute

In construction contracts, a claim is an assertion by a party of a right to money, time or other remedy which may or may not be permissible. The claim ends up as 'Dispute', if the parties do not agree to its eligibility or otherwise. The oxford dictionary defines dispute as *"a misunderstanding between two parties, either contractual or non-contractual"*. It involves disagreement over issues capable of resolution by negotiation, mediation or third party adjudication.

Any misunderstanding or disagreement between parties needs an intervention of a neutral body who will not be biased in awarding the decision.

Methods of Dispute Resolution

Many methods of resolving contraction disputes have evolved over years. The most commonly used are:

- Engineer's Decision;

- Dispute Adjudication Board / Disputes Board;
- Amicable Settlement;
- Mediation;
- Arbitration; and
- Litigation.

Arbitration and litigation leads to a solution that is imposed on the parties in dispute, through an arbitral award or court judgment. All the other methods are called Alternative Dispute Resolution Methods (ADR) i.e. alternative to arbitration or litigation.

2.1 Engineer's Decision

Disputes are initially determined by the Engineer under FIDIC 4th edition 1987 of Red Book (Civil works) and 3rd edition 1987 of Yellow Book (Mechanical & Electrical) within specified period of its reference. Arbitration has to be notified within 70 days of Engineer's Decision or after the period of such decision had expired. The disputes are attempted thereby for resolution through amicable settlement within 56 days of notification for arbitration. The arbitration may commence after said period whether attempt for amicable settlement was made or otherwise.

2.2 Dispute Boards (DB)

Introduction of dispute boards is relatively new concept for dispute resolution. The role of traditional Engineer's Decision rests with independent board. FIDIC introduced the concept in the Orange book in 1995 and thereafter in fourth edition of Red Book, through a supplement in 1996. The suite of FIDIC three major contracts published in 1999, the Red Book, the Yellow Book and the Silver Book have adopted this concept as the first step in dispute resolution mechanism, although in different forms. Under FIDIC Design, Build and Operate, Conditions of Contract, the Gold Book, published in 2008, further refinements have been introduced.

The basic concept of DB is to continuously track the progress of a project and assist the parties in resolving any point of contention or disagreement, should they arise. General procedures and functioning of DB is as follows:

- Board members visit the site periodically within 70-140 days to keep track of construction activities and issues or development of potential claims;
- The claim is referred to the board after Engineer's determination when either of the parties has expressed its dissatisfaction;
- The board gives its decision within specified time. If neither party notifies its dissatisfaction to other party within specified time after receiving it, it is deemed to become final and binding decision upon both parties.

2.3 Dispute Adjudication under FIDIC 1999

The clause 20 of FIDIC 1999 major contracts provide for Dispute Adjudication Board (DAB) role in place of the Engineer. The role of the DAB is twofold under these conditions of contract.

(a) To prevent disagreement from becoming disputes by providing an opinion, if the parties jointly refer a matter to the board; and

(b) To resolve disputes that may arise at any stage throughout the duration of the contract between the parties in connection with, or arising out of, the contract for execution of works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer.

To fulfill its obligations within prescribed time, the board undertakes regular site visits, hold meetings and keep update of progress.

2.3.1. Composition and Establishment of DAB

The dispute board may be composed of one (sole) or more members depending on the size and complexity of project. As per World Bank guidelines, the board consists of 3 members for contracts over US$50 million and either a sole or a three member board for smaller projects. Three members Board is most common in international contracts, where the Employer and the Contractor each select one member of the Board. The chairperson of the Board, being the third member, is then selected by two board members subject to concurrence of both the parties.

FIDIC has provided "General Conditions of Dispute Adjudication Agreement" and "Procedural Rules" as an Appendix to General Conditions of Contract.

The Board may be a 'full term' or 'ad hoc'. A 'full term' DAB shall provide services as mutually agreed by the parties'. The Board members visit the site on a regular basis. 'Ad hoc' dispute adjudication is appointed 28 days after a party gives notice to the other party of its intention to refer the dispute to a DAB. The appointment of the board expires when the DAB has given the decision on the dispute.

2.3.2. Procedural Steps for Seeking Opinion or Decision of DAB

(a) Referral of a matter to the Board for its opinion

- An informal joint reference by both the parties may be made to the DAB seeking its opinion under provision of sub-clause 20.2 of Red Book. Neither party shall consult the DAB on any matter without the agreement of the other party.
- A matter that has already developed into a dispute cannot be referred to the Board in this way since a dispute can only be referred to the Board for its decision under sub-clause 20.4.
- The Board may ask each party to provide its case in writing or present orally at an informal meeting.

- The Board may provide its opinion either in writing or orally, as required by the parties.
- The Board may subsequently deviate from its opinion, should the matter develop into a dispute as it was specifically based on the content of presentations made by the Parties.
- The Board's opinion is not binding on the parties to the contract.

(b) Referral of a matter to the Board for its Decision

- A claim is submitted to the Engineer under or in connection with the contract by either of the parties for determination under relevant provisions of contract.
- The Engineer is bound to give determination within 42 days after receipt of fully detailed claim.
- Under DBO contract (2008), there is time limit of 28 days for notifying the dissatisfaction by either of the parties to the determination, failure to which determination shall be deemed to have been accepted by both the parties.
- If a dispute has developed, then either party may refer it to the Board for resolution under relevant provisions of the Contract. Such reference must be in writing and be copied to the other party stating that it is made under this sub-clause.
- The decision of the Board should be given within 84 days after receiving the reference or such other period as may be proposed by the DAB and approved by the parties. If the board fails to give its decision within the 84 days, then either party may within 28 days after this period has expired, give notice to the other party of its dissatisfaction.
- The decision of the Board should be reasoned and is binding upon the parties who shall give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award.
- Dissatisfaction by either party with the Board decision leads to the other dispute resolution mechanism as provided in conditions of Contract i.e. amicable settlement or arbitration. Notice of dissatisfaction is to be given within 28 days after receipt of the decision.
- In case of disagreement, arbitration may begin on or after 56th day after the day on which notice of dissatisfaction was given.
- If no notice of dissatisfaction has been given by either party within 28 days after it received the DAB's decision, then the decision shall become final and binding upon both the Parties.

2.4 Amicable Settlement

In case notice of dissatisfaction by either party with the Board's decision is issued within specified time of 28 days, both parties shall attempt to settle the dispute amicably before the commencement of arbitration. A period of 56 days is allowed for settlement of dispute

amicably. This period is extendable by agreement of the parties. The 56 days period starts following the day on which notice of intention to commence arbitration under sub-clause 20.4 is given. Arbitration may then be commenced whether or not any attempt for amicable settlement had been made.

Amicable settlement may be by direct negotiation between parties in dispute. Amicable settlement usually involves elements of mutual agreement. If successful can save time and money by avoiding expensive and time consuming options of arbitration and litigation. It is the last step in resolution of dispute prior to arbitration or court proceedings.

2.5 Mediation

Mediation is a voluntary form of dispute resolution where a neutral person or party actively assists parties in dispute for working towards a negotiated resolution of a dispute. The mediator facilitates the process but the parties are and remain responsible for the outcome. It is aimed at leading the parties to an amicable settlement of their differences or disputes. The mediator tries to provide the necessary support without procedural background and restrictions. The parties share relevant information and meet in both confidential discussions with the mediator and face to face with each other, as deemed appropriate.

Any settlement reached during mediation is binding once put into writing and signed by the parties subject to the governing law. It is cost and time effective in comparison to arbitration and litigation.

2.6 Practices at National Level

The concept of Dispute Board in Pakistan was first introduced in major project of Ghazi Barotha Hydropower in 1995. It helped in resolution of disputes and proved to be more effective in avoiding arbitration and litigation in the cases as could have been in case of traditional role of the Engineer without dispute review by a neutral body having trust of both the parties. Thereafter Dispute Boards have been appointed on some of projects, particularly those funded by international agencies wherein the provision of Dispute Adjudication Board had been made.

However in general, the role of traditional Engineer is incorporated, mainly because PEC has not still adopted FIDIC 1999 documents. Secondly, in small to medium sized projects, there is lack of awareness as well as reluctance on part of Employer and Contractor in adoption of new procedures.

A Task group was constituted by PEC in August 2011 to update the approved/notified Bidding Documents by incorporation of 1999 rainbow of Contract forms. The task group comprising two members from WAPDA out of six, completed the assignment and submitted updated documents to PEC in June 2013. The modified documents need to be processed expediously and be finalized on priority basis.

2.7 Conclusions and Recommendations

(i) Provision of adequate and fair dispute resolution mechanism is essential in construction

contracts as it encourages competitiveness amongst bidders and help completion of projects on time and with optimal cost. The success and prominence achieved by Dispute Boards in short period of time is reflective of its significant advantages in comparison to traditional forms of dispute resolution methods.

(ii) For Plant and Design Build and EPC / Turnkey contracts, appointment of 'standby' DAB may be more appropriate than 'ad hoc' DAB provided under FIDIC.

(iii) The provision and procedural rules of Dispute Adjudication Board under FIDIC1999 suite of major contracts and 2008 (DBO) are seen to be fair and balanced to either of the parties to contract. PEC should adopt these documents at domestic level.

(iv) Provision under FIDIC DBO (2008) contract concerning observance of time frame after determination, in case of dissatisfaction by either of the parties, is a good addition and should be incorporated in other contracts.

(v) Pakistan Engineering Council (PEC) shall expediously process the updated/modified bidding submitted by Task Group in June 2013. PEC shall also set up training facilities for familarization with the updated documents.

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Paper No. 319

REGULATORY FRAMEWORKS FOR PROCUREMENT OF CONSULTANCY SERVICES

Engr. Mazhar-ul Islam

REGULATORY FRAMEWORKS FOR PROCUREMENT OF CONSULTANCY SERVICES

By: Engr. Mazhar-ul Islam[1]

Abstracts:

Regulation is a rule of order having the force of law, prescribed by a competent authority relating to the action under the control of such authority. Regulations are issued by the government departments, statutory bodies,' other authorities under the delegated function of the higher legislations. "A Consultant is a person, partnership, corporate body or any other legal entity which independently performs study, prepares reports, makes designs, supervises constructions or under takes any other similar advisory activities in Engineering disciplines and is registered as such by the Council"(Section 2(vi) of PEC Act, 1976). The objective of the regulations to provide transparency, equitability; minimize malpractices, increase productivity, ensure quality and timely completion for selection of consultants and rendering of consultancy services.

In Pakistan, consultancy services are regulated by two statutory federal government bodies, namely; Public Procurement Regulatory Authority (PPRA) and Pakistan Engineering Council (PEC); besides Provincial regulatory authorities which must be ceased to exist after 18th Constitutional amendments under which regulations are now the Federal subject. Both PEC and PPRA regulations are enforceable at its own domain. PPRA rules 2010 and the PEC regulatory frameworks generally do not contradict with each other. However, many projects implementing agencies, due to their inability to distinguish between procurement of works and procurement of consultancy services; ask for bid security, performance security and Liquidated Damages in case of consultancy services which are otherwise applicable to procurement of goods and works. PEC regulations facilitates transparent competition in award of consultancy projects; provides preference of domestic consultants in award of consultancy contract where foreign expertise are not required, mandatory joint venture requirement between the Pakistan and foreign consultants in case a foreign consultant intends provide services in Pakistan which facilitates technology transfer into Pakistan. PEC also do not distinguish between public and private sectors in award of consultancy contract; provides quality based, and quality and cost based selection methods, professional liability of the consulting engineers in case of errors and emissions in design, imposition of punitive action in case of proven misconduct of a consultant. Due to non-implementations of the PEC regulations in its true intent, there several issues cropped up which are confronting the consulting engineers in Pakistan.

In Pakistan there are over 1200 registered engineering consultants with Pakistan Engineering

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Council. Association of Consulting Engineers Pakistan (ACEP) is a representative body of the consultants to promote the consultancy profession in Pakistan and establish networking outside Pakistan for the growth of the Pakistani Consultants. Members of ACEP become member of FIDIC also due to such association. However, ACEP member are required to work under the PEC regulatory regime and ACEP is to monitor and get implemented relevant regulations.

1. Introduction:

This paper titled- "Regulatory Frameworks for Procurement of Consultancy Services" is to explain regulatory provisions for *Engineering Consultants* in Pakistan who are to perform such services for projects in Pakistan whether individually or in Joint venture with Local and Foreign partners. Among the regulatory frameworks prevailing in Pakistan for consultancy services, all regulatory documents including important provisions are highlighted in this article, however, discussions have been made in several areas which are currently confronting implementation of the applicable regulations. Although relevant regulations of PEC and PPRA are applicable in its own domain, however, where there is conflict between PEC & PPRA regulations, PEC regulations shall prevail; as, under the PEC Act 1976 enacted by the Parliament of Pakistan, PEC was constituted "*for the regulation of engineering profession*".Rendering of such engineering services is a Professional Engineering Works as defined in Section 2(xxv) of the PEC ACT 1976. Several issues confronting the consulting engineers in Pakistan cropped up due to non-implementation of the PEC regulations in its true intent are discussed at the end of this Paper.

2. What is regulation:

The regulations are the rules having force of law framed and notified under delegated authority of a higher law. Generally, such regulations are issued by the Government Departments, statutory bodies and other authorities, relating to the action under the control of such authority. Purpose of regulations for regulating the construction & consultancy sector pertaining to Professional Engineering Works; are to provide transparency, equitability, minimize malpractices, increase productivity and ensuring quality and timely completion for selection of contractors / consultants and execution of the works/services. In Pakistan, Pakistan Engineering Council (PEC) and Public Procurement Regulatory Authorities (PPRA) are the two federal regulatory bodies which regulate; among others, engineering consultancy services sector. Two provinces namely Punjab & Sindh also maintain their own such regulations despite the fact that after the 18th constitutional amendment, the function of regulations has been vested with the federal government only after deleting such functions from the Concurrent List. As for the province of Balochistan, KPK and AJ & K, they have notified the PEC regulations in their respective provinces/ regions.

3. Who are consultants:

Under Section 2(vi) of the PEC Act 1976, "Consulting Engineer" means any person, partnership, corporate body or any other legal entity which independently performs study, prepares reports, makes design, supervises construction or undertakes any other similar advisory activities in engineering disciplines and is registered as such by the Council". Similar

definition has also been given under Section 2 (aa) in "Conduct & Practice of Consulting Engineers Byelaws 1986". This statutory definition that a valid Consultant shall have to obtain mandatory registration of the PEC and he is to work independently i.e. the Consultant is to form his opinion according to the professional ethics, technical standards, national &International practices and without being influenced by the Client or any other entity which is contrary to the PEC regulations. Generally it has been observed that some Clients attempt to use the Consultant to cover their malpractices and/or deal them like a servant. This type of master and servant relation is against the norms of International practices and professional role of a Consultant. Unlike construction sector, minimum qualification for CEO of an Engineering Consultant is bachelor degree in any discipline of engineering. Consultants provide intellectual inputs for a small amount of fee which generally ranges from 2 to 7 % of construction cost of a project, depending upon the scope of services.

4. Regulatory Processes:

Comprise of (a) Publication of Notice, (b) Issuance of EOI documents, (c) Evaluation of EOI applications, (d) issuance of RFP (e) evaluation of proposals, (f) Notification of evaluation result, (g) Award notification, (h) signing of Contract Agreement (i) Administration of Contract, (j) Dispute Adjudication. PEC relevant regulation has provided rules for each of these stages of the regulatory processes.

5. Regulatory Documents:

The regulatory documents issued by PEC & PPRA for regulating the engineering consultancy services in Pakistan are (a) PEC Act 1976 as amended in 2011, (b)PEC Conduct and Practice of Consulting Engineers Bye-laws, (c) 2 PEC guidelines & 3 form of contract documents, (d) PEC Rules of Conciliation & Arbitration, (e) PPRA Ordinance 2002, (f) PPRA Rules 2010, (g) PEC Code of Conducts, (h) PEC Code of Ethics, (i) PEC Standard Form of Joint Venture/Consortium/MoUs, (j) Punjab PPRA-2014 & Sindh.

6. Salient Previsions in the PEC ACT:

Under the PEC Act 1976 as amended in January-2011, the following salient provisions can be highlighted which empowers PEC to regulate the whole of the Engineering Profession including Consultancy Services. (a) PEC is to regulate whole of the engineering profession when 1st sentence of the Preamble read with Section 8 of the Act, (b)Pursuant to section 27 (5) & (5A) professional engineering works can be carried out only by the professional engineer, (c) Section 25 when read in conjunction with Section 2(xii), 2(xiv) and 2(xxv) empowered PEC to regulate Engineering Procurements, (d) Section 2(xxv)(i) provides for standard bidding/contract documentation and Arbitration rules, (e) Section 8(s) stipulates PEC as forum for Arbitration, (f) Section 8(p) entrusted PEC for development of construction cost data (schedule of rates), (g) Section 20(4) empowers PEC to take suo-moto action against any organization, (h) Section 27(1) stipulates punitive action against non-compliance of PEC regulation.

7. Salient Provisions in Consulting Bye-laws:

7.1 Ownership:

(a) 51% shares should be owned by Professional Engineer having minimum 5 years' experience with master in engineering or 10 years' experience as graduate engineer. Other 49% should be owned by the engineers / allied professionals having minimum 15 years' experience, (b) Chief Executive must be Professional Engineer with minimum 5 years' experience with masters or 10 years as graduate engineer, (c) In case Govt. owned firm having 100% shares, above rule at item (a) is not applicable, (d) P.E and firm should work solely as an independent entity having no conflicting interests., (e) PE in Government and public organizations can under-take private practice with permission.

7.2 General Regulations:

Some of the salient points of the general regulations are as under:

(a) A consulting firm is responsible for professional conduct of his employees or others connected with service, (b) A consulting engineer or an Executive, Director, Partner, Sole Proprietor or MD shall have no conflicting financial interests, (c) A consulting engineer shall not injure the interests of other consulting engineers except for review, (d) Dignified advertisement by cards, sign boards, brochures etc, (e) Seeking professional work through agent or commission is prohibited, (f) Selection of a consulting engineer purely on financial bid is prohibited, (g) Two or more firms having common directors can bid only jointly and not in competition, (h)No team up with construction company except for specified work as consultant with clearly defined remuneration for services, either internally or jointly to a third party.

7.3 Professional liability:

Important provisions vis-à-vis Professional Liabilities are as under:

(a) Twice the design fee for proven fault, (b) Liability expires after three years of design or one year of construction whichever is earlier, (c) Liability Insurance beyond the limit of 1% of total design cost is at the option of employer, (d) Consultant may procure PII beyond the limit set forth above to be borne by the employer, (e) Unlimited liability for misconduct in case employer suffered loss or damages, (f) No liability due for other designers or constructors, (g) Employment of employer's employees without prior consent is prohibited except as in the agreement, (h) Consultants are exempted from above provisions in overseas jobs but to adhere to the regulations of the country where working.

7.4 Selection process:

Salient provisions of selection process are as under:

(a) Contract for rendering Engineering Services to only registered consultants, (b) foreign consultants can work in a joint venture with Local in the ratio of expertise not available in Pakistan, (c) Independent foreign consultants permissible with prior PEC approval for short assignment on Technology Transfer Agreements.

7.5 Selection Procedure:

Salient provisions for selection procedure are as under:

(a) Invitation of pre-qualification application except Technical Assistance, (b) Two envelope proposals from Pre-qualified consultants either in QCBS or QBS, (c) Qualified Committee to evaluate technical proposals for quality based ranking , (d) Open financial of technically top three and make weighted evaluation ranking for cost & quality basis, (e) Technically top ranking consultant will first be invited for negotiation in case of QBS, (f) For consultancy service contract relevant PEC form of contract shall be used.

7.6 Registration & Penalties:

Salient Provisions are as under:

(a) Renewal application by 1st December on the status as on 31st November every year, (b) Consulting Engineer may continue working after submitting renewal application unless refusal of renewal by PEC, for one month for the ongoing projects, thereafter, for new projects with old license (c) Infringement of these bye-laws will attract punitive action, (d) False information intentionally to the PEC to be considered misconduct, (e) Working, abetting or helping without registration is punishable.

7.7 Registration of foreign consultants:

(a) Two stage registration for foreign consultants (b) Pre-registration on Form No. 4B for bidding, (c) Registration for specific project on Form 4C, only on submission of J/V with description and share of work.

7.8 PEC Building Codes:

(a) Seismic provision-2007 for design, (b) Energy provisions-2011 for design having total connected load 125 KVA or more, (c) Non implementation of above codes shall be considered as violation of Section 2(XXV) of PEC Act 1976.

8. Overview of PPRA Rules 2010:

PPRA Rule 2010 was issued by PPRA exclusively to regulate consultancy services in Pakistan. Salient provisions are as under:

(a) Differentiated between Expression of Interest and Request for Proposals to be issued to pre-qualified consultants, (b) Specified components for RFP- Letter of Invitation, Instructions to consultants, TOR, Evaluation criteria, Type of contracts, (c) Introduced five methods of selection of consultants- Quality based (QBS), Quality and Cost based (QCBS), Least Cost, Single Source or direct selection, Fixed budget,- in contradictions with PEC specified two methods i.e. QCBS and QBS only(d) Eligibility to avoid conflict of interest, (e) EOI requires 15 days' notice to National and 30 days for International, (f) Minimum Components for EOI- Name and address of procuring agency, Assignment descriptions & scope of services required, Deadline for submission of EOI doc, Evaluation criteria to be followed,(g) Short-listing of

consultants except for Single Source, normally of minimum three(*if less than three received, it should be accepted*) but no upper limit, (h) Components for Short-listing- Qualification, Experience, Any other factor deemed appropriate not inconsistent with PPRA Rule-2004, All applicants shall be informed about result , (i) Selection Committee be formed composed of three relevant persons, (j) Negotiation is limited to clarification and no changes in rates, (k) Professional liability equal to not less than remunerations excluding out of pocket expenses but not more than twice the remunerations.

9. Issues Confronting Consultants:

In absence of true implementation of the relevant regulations and lack of understanding of the relevant regulatory provisions by the PEAs; many issues have been cropped up which is hindering transparency and quality of services. Some of the issues are discussed below:

9.1 EOI should be project to project basis:

Under section7 (1) & Section 7 (2) of PEC Consulting Byelaws, advertisement for EOI/ PQ should be published for project to project basis. However, it has been observed during last one year that some of the departments particularly in the province of KPK are publicizing name and addresses of around 23 consultants repeatedly for submission of the proposals for all projects. This practice is not only unlawful but also depriving the other 1200 registered Consultants in Pakistan to compete. This practice must be abundant by the concerned project implementing agencies as soon as possible. Association of Consulting Engineers Pakistan (ACEP) shall have to coordinate with PEC to enforce the relevant PEC Regulations in its true spirit in this regard.

9.2 EOI and Proposals mixed up:

On many occasions,Project Executing Agencies (PEAs) invite for Expression of Interest; however, in the same advertisement they also ask for Technical & Financial Proposals without issuing any EOI documents.Under the regulations,PEAs can invite the proposals directly by issuing the proper RFP in which pre-qualification criteria may also be built in for a project in urgency of such nature for which the expertise are not available with large number of consultants.Despite the fact that pre-qualification and proposals are two separate items, generally to be short in two stages by issuing an appropriate documents; however, the practice stated above is continuing very frequently particularly by the Government Department.

9.3 Irrelevant demands for securities:

Many PEAs in their advertisement or in their RFP are seeking to submit Bid Securities, Performance Securities; and also built in the provision of Liquidity Damages in case of the project delayed. Such demands are primarily due to inability of some of the PEAs to differentiate applicability of the rules for procurement of goods and works; and procurement of engineering services. This is also due to the existence of PPRA Rule 2004 which has been publicized effectively during last 2 or 3 years.PEC has contended time and again that PPRA Rule 2004 is meant for procurement of goods & works, and in some cases related services associated with the works. This has been subsequently endorsed by PPRA itself by issuing

PPRA Rule 2010 which is to provide rules for regulating the consultancy services. Neither in the PEC relevant regulations nor in the PPRA Rule 2010 there is such requirement of Bid Security, performance security and imposition of LDs for rendering consultancy services. This is not also required by the leading lending agencies like WB, ADB etc. PEC has time and again written letters in this regard to federal and provincial entities, however, such practices by many PEAs particularly by the Government Departments are still continuing which shall have to be addressed effectively by meeting with relevant higher authorities in the federal and provincial Governments.

9.4 Appointment of The Engineer:

Many PEAs some time notify The Engineer from among their employee (s) to act as The Engineer. This trend is depriving the aggrieved parties whether the Consultants or the Contractors for obtaining an independent & impartial opinion of the Engineer in case of disputes between the contracting parties. The intent of the Local Regulations and the International practices are that the engineer shall have to be appointed by employer/ client to a firm/ person who are not the part of either of the contracting parties and who does not have the conflicting interest with either of them.

9.5 Client's interference:

Under the PEC Act, a consultant is to render its services independently. However, many a times, it has been observed that the consultant works under the dictates of the Client violating the applicable regulations particularly in the area of preparing bidding documents, making bid evaluations, undertaking resident supervisions certifying contractor's payments etc. Presumably, such practices are continuing at alarming rate due to the connivance of the Consultants with the Clients; as, consultant believe that giving Regulation compliant and independent opinion will make the Clients annoyed which will hamper in receiving payments on regular basis and also possibility of further projects projects from the same clients.

9.6 Number of prequalified consultants:

In most of the cases, it has been observed that maximum number of consultants to be pre-qualified for a project is neither mentioned in the advertisement nor in the PQ documents. This keep the Client at their discretion to prequalify as many numbers of Consultants they will like. This practice is not only in contradiction with International practices but also attracts dispute and litigation subsequent to pre-qualification.

9.7 Engineering design by architectural firm:

Despite the provision in PEC Act & Byelaws that engineering design for structures, infra structures and other projects can only be undertaken by a firm registered with Pakistan Engineering Council (PEC) to be headed by a Professional Engineer; Architectural firms are undertaking the Professional Engineering Works. Such practice will render the PEAs under punitive actions pursuant to PEC ACT for assigning such projects to the architectural firms. PEC regulations do not prohibit undertaking such projects by an A/E firm.

9.8 Unequal competition:

Some of the PEAs assigning consultancy services to the firms; whether Sole Proprietors, Partnership, Private Limited or Public Limited without ensuring that they have registration with relevant tax authorities and filling the taxes regularly. At present, taxes to a consultant are approximately 24 % which are to be considered in any proposal by a tax payer consultant. Therefore, those firms not paying taxes regularly are getting undue advantage of at least 24 % while competing in submitting the proposals. This trend can be checked by ensuring that unlike previous practices; PEC is issuing registration to a consultant only after ascertaining that the consultant is registered with appropriate registered bodies and filing the taxes. The PEAs are always to ask for these requirements while inviting EOI & Proposals.

9.9 Advance payment:

The PEAs have the right to ask for advance payment security in case advance is paid to a consulting engineer. Due to the fact that such security from the banks not only require payment of premiums but also take a lot of time to arrange. Keeping in view the role and income of a consultant and the difficulties mentioned here above; a mechanism of Revolving fund has been introduced in the PEC form of Contracts. However, in most of the cases this is being ignored.

9.10 Extension in services:

Due to the misinterpretation of provisions for repeat order in PPRA rule 2004, occasionally PEAs contend that ongoing consultancy services cannot be extended due to the above provisions which limit the repeat orders up to minimum 15 % of the original Contract. This is due to the gross misunderstanding and failure to appreciate that PPRA Rule 2004 is not applicable for the consultancy services.

9.11 Professional Liabilities:

Section-5 of PEC Consulting Byelaws prescribes Professional Liabilities in case of errors and omissions; and in case of misconduct. The provision also provides that in case the consultants secure the Professional Liability Insurance, the client will pay the premium beyond 1 % which should be paid by the Consultant.

9.12 Top Supervision:

PEC in its latest amendment available in the PEC website introduced new definition for "Top Supervision:", "Supervision" and "Negotiations". Under Section 2 (h), 2 (g) & 2 (f) respectively in PEC Consulting Byelaws. Whereas, Supervision has been defined as the "Resident Supervision", Top Supervision is defined as "Intermittent visit as and when needed"; however, the Consultant rendering Top Supervision has been barred verifying Contractors Payment Liability. Negotiations has been defined as joint deliberations to primarily clarify RFP & TOR provisions for the winning proposal but barred from seeking across the board cost cutting.

9.13 Track record of foreign firms:

The regulations do not bard to use the expertise and track record of the foreign firm in Joint

Venture with a local firm. However, a few consulting firm of foreign origin has made their commercial presence in Pakistan and registered as a local form; and subsequently making joint venture with their parent foreign firm utilizing the foreign track record to promote the local partners business. This is a ploy to betray the rights of local consultants who cannot compete if such intrigues are continued. PEC must have to resolve this matter urgently.

9.14 Provincial PPRAs:

Although provincial PEAs would cease to exit after the 18th Constitutional amendment, however, conflicting regulations by the Government of Punjab and Sindh are still in practice. Recently, Punjab Government has issued an amended PPRA rules in 2014 in which the spirit of the regulations have been violated and discriminatory power has been introduced. For example Government can award a project to any public sector consultancy organization without going through the bidding process and entering into the competition, which is a clear violation of the PEC regulation under which no discrimination can be made in award of consultancy contract whether the consultant is in public sector or in private sector.

9.15 Consultants Role to implement:

It has been observed that sometimes consultants do not resist intention of the PEAs to violate the regulations just to get a project whether in compliance with the regulations or not. It is believed that consultants are most conversant persons regarding the applicable regulations for procurement of consultancy services and they will have to educate the PEAs about the requirements of regulations and consequences of violating such regulations, not limiting to the imprisonment and penalties by PEC. This role can be effectively played by the ACEP which is also ex-officio member in the PEC Governing Body and responsible to develop and promote the consultancy sector in Pakistan. In this regard, they can arrange frequent seminars, workshops in various places attracting the PEAs to participate for their capacity building. Funding for such exercises can also be obtained through an appropriate contact, from WB, ADB, USAID etc.

10. Conclusion:

In view of the forgoing, it is hoped that all stake holders particularly ACEP will play effective role to get implemented Country regulations for transparent and unbiased award and execution of procurement of consultancy services in Pakistan.

Paper No. 320

ROLE OF THE ENGINEER IN FIDIC BASED CONSTRUCTION CONTRACT

Engr. Mian Abdul Sattar

ROLE OF THE ENGINEER IN FIDIC BASED CONSTRUCTION CONTRACT

By

Engr. Mian Abdul Sattar[1]

The Construction Contract is between two parties – the Employer and the Contractor, the Engineer is not a party to the Contract, the Contract names him as an authority, and it appoints him, in effect, to administer the Contract.

Various Clauses in the Conditions of Contract give a number of different roles to the Engineer, which may be enumerated as follows:

- Designer
- Quality Controller
- Valuer and Certifier
- Adjudicator

The Engineer as a Designer

The role as a designer is the first and primary role of the Engineer. Design phase is normally completed, by the time the Conditions of Contract come into operation. The more complete the design of the project is at the time of inviting tenders for its construction, the lower the risk of an unsatisfactory outcome.

The Engineer as Quality Controller

The design is expressed through Drawings and specifications which set out the required quality to be achieved. Quality must be monitored by competent people / Engineer's Assistants familiar with the concept and parameters of design, so as to ensure that all quality control measures necessary for compliance of the works with the drawings and Specifications are achieved.

The Engineer as Valuer and Certifier

The Engineer under the provisions of the Contract is required to "certify to the Employer the

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amount of payment to the Contractor which he considers due and payable". On the strength of an interim certificate issued by the Engineer, the Contractor is to be paid by the Employer the amount due to him. Besides issuing interim certificates, the Engineer's role as a certifier includes other certification duties under the Contract. The duties include:

- Issuing a taking over certificate;
- Certifying date of completion of the Works;
- Issuing final certificate;
- Signing and delivering defects liability certificate.

The most important of these duties is, perhaps to certify monthly payments to be made to the Contractor. These payments are essential for the smooth performance of the Contract as they represent to the Contractor the lifeline with respect to the Contract.

The Engineer as Adjudicator

This role embodied in clause 67 of FIDIC 1987 provides that any dispute may be referred to the Engineer for his decision and such reference is a condition precedent to arbitration. The Engineer under this Clause is independent and free to decide the issue referred to him without obtaining the approval of the Employer.

The Engineer is thus required to act both as agent for the Employer in the process of execution of the Contract and as an independent person for the administration of the Contract and for the settlement of disputes.

Functions of the Engineer in his various capacities can broadly be categorized as below:

Engineer's Role as Agent for the Employer

- The Contractor shall not subcontract any part of the Works without the prior consent of the Engineer;
- Any discrepancies or ambiguities in the Contract Documents shall be explained and adjusted by the Engineer;
- Issue ofdrawings and instructions to the Contractor for execution of the Works;
- Approval of Contractor's drawings;
- Consent to Contractor's programme;
- Request Contractor's cashflow estimate;
- Approval of Contractor's superintendence;
- Objection to Contractor's employees if any;
- Rectification of any setting out error;

- Instructing exploratory boreholes;
- Protection of the environment;
- Requiring labour returns;
- Instructions and tests on materials;
- Examination of the work before covering up;
- Instructions to suspend work;
- Permission to resume work;
- Issue notice to commence;
- Issue of Taking overCertificate;
- Instructions of variations;
- Instructing provisional sums.

Engineer's Role for Determination of Time and Costs in Consultation with the Employer and the Contractor

- Determination of time and cost in case of delay of drawings;
- Determination of time and cost in case of not foreseeable physical obstructions or conditions;
- Determination of additional cost if any for uncovering and making openings on instructions of Engineer;
- Determination of Employer's costs if any for removal of improper work, materials or plant;
- Determination of time and cost following suspension of work;
- Determination of time and cost if any due to failure to give possession of Site;
- Determination of extension of time for completion of Works;
- Instructions regarding outstanding works at the time of issue of Taking–Over Certificate;
- Opinion regarding defects if any at the end of Defects Liability Period – Determination of cost;
- Instructions to search for any defect or fault in the Works prior to the end of Defects Liability Period – Determination of cost;
- Valuation of variations;

- ❖ Determination of adjustment due to variation in quantities beyond the specified limits;
- ❖ Opinion on need for and repair of urgent remedial work during execution of work or duringthe Defects Liability Period – Determination of cost;
- ❖ Determination of costs arising from Special Risks;
- ❖ Determination of cost due to termination of Contract because of outbreak of war;
- ❖ Determination of costs due to subsequent legislation.

Functions of the Engineer in Short

In short, it can be stated that the Engineer is required to issue instructions and provide appropriate information to effect the commencement and progress–to–completion of the Works, and to satisfy himself that the requirements of the drawings and specifications are fulfilled. He must also concern himself with the methods of executing the Works and agree with the Contractor's programme, and monitor the progress of the work. The Engineer is required to value the work done, and certify payments due to the Contractor. He is responsible for instructing the Contractor on variations to the Contract, or extra works, and the issue of completion certificate. Upto FIDIC 1987 4thEdition, the conditions require the Engineer to give his independent decision on any dispute, which may arise between the Employer and the Contractor, and the Engineer (himself) and the Contractor. It was only after the Engineer had made a decision on the dispute, the matter in dispute could be referred to an outside dispute resolver foramicable settlement or arbitration. The 1996 supplement to the FIDIC 4th Edition introduced an option for a Dispute Adjudication Board (DAB) and in the 1999 Conditions, the DAB is the standard procedure for resolution of disputes. Under the 1999 Conditions the role of the Engineer laid earlier in Clause 67 has been completely changed. Reference of disputes to the Engineer for a decision has been removed and replaced by DAB. Throughout the 1999 Conditions of Contract,whenever the Contractor submits a claim of an extension of time or reimbursement of costs, the Engineer is required to proceed in accordance with Sub–Clause 3.5. This Sub-Clause requires the Engineer to consult with each party in an endeavor to reach agreement. To comply with this requirement the Engineer is expected to act as a mediator and try to help the parties towards agreement. If agreement is not achieved, the Engineer is required to make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

Concluding Remarks

There is a growing tendency among the Employers, whereby an Employer whilst using the standard FIDIC Conditions, modifies in Part II of the Conditions, the powers of the Engineer by retaining to himself certain decisions or approvals on which expert judgement and impartiality are essential for an equitable valuation or determination. The effects may be slight or substantial but if the Engineer's powers are weakened in this way, the Contractor may feel that the Contract is becoming inequitable.

The role of the Engineer has from time to time been subjected to attack emanating from both parties to the Contract. On the one side the Engineer is accused by the Contractor of being

biased in favour of the Employer because:

- his fee is paid by the Employer;
- he is expected to go through 'due consultations' with the Employer prior to making certain determinations / decisions;
- he may have to obtain the specific approval of the Employer prior to taking certain actions or decisions.

Therefore, he is sometimes assumed by those who attack the Engineer's role as adjudicator, to act in collusion with the Employer.

On the other side, he is sometimes accused by the Employer of being biased towards the Contractor during the administration and execution of the Contract in such areas as awarding extensions of time and determining amounts of claims, and giving instructions in favour of the Contractor. He is also sometimes accused of being too lenient on the Contractor, thereby relieving the Contractor of some of his obligations under the Contract.

The above mentioned criticism of the role of the Engineer led to the introduction of Dispute Adjudication Board (DAB), who can render a decision in respect of a dispute of any kind whatsoever, in connection with or arising out of the Contract. It is important that any person appointed to a DAB has appropriate construction experience, including experience of claims and dispute resolution, knowledge of Contract interpretation and knowledge of DAB procedures. The DAB decision must be implemented but if either party is not satisfied with the DAB decision it can refer the original dispute to arbitration.