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The role of Project Managers, Construction Managers and Technical Supervisors and similar under the FIDIC Construction and Plant and Design-Build Contracts

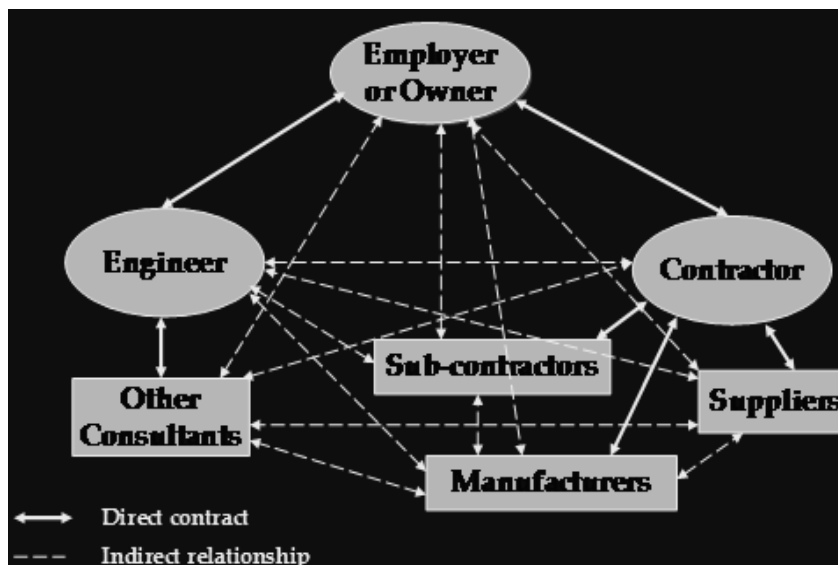
1. Background

The Middle East is a confluence of many cultures and people from different parts of the world with education background that influences their thinking and their activities.

This fact has a profound effect on construction activities and in particular on the method of procurement of the construction project. No attempt has been made in the Middle East to classify these methods or distinguish between them in an organised manner, particularly as construction activities soared in number and in value at an incredible rate throughout the last twenty years.

Procurement based on the FIDIC Conditions of Contract featured highly in the development of construction in the Middle East. The use of the FIDIC Conditions of Contract, particularly the 4th Edition of the FIDIC Red Book is widespread all over the region. However, in almost every case, these General Conditions were amended to varying extents, shifting the inherent risks to the Contractor. Their use became “contaminated” with ideas that form no part of the FIDIC procurement procedure.

Under the 4th Edition of the FIDIC Red Book, the main parties connected contractually to the Employer or the Owner in the procurement strategy are the Engineer and the Contractor, as can be seen from the diagramme. The Engineer is usually assisted by suitably qualified assistants who should cover all aspects of supervision, quality control, measurement and other required functions on the site and in the design office.



The diagramme shows the usual arrangements in a construction project based on a FIDIC procurement system under the Red Book 4th Edition and Yellow Book 3rd Edition Forms of Contract.

The allocation of risks and the resultant responsibilities and liabilities flowed from the diagram. The functions referred to in the Conditions of Contract on a construction project emanated from the principle of control of these of these risks and their effects, if and when they eventuate.

Under the 1999 Red (Construction Contract) and Yellow (Plant and Design-Build Contract) Books, the same arrangement existed, but with the transfer of the major part of the design risk to the Contractor in the Yellow Book, leaving with the Engineer the task of preparing and administering a document referred to as “the Employer’s Requirements”.

However, as stated above, in many projects where the FIDIC Conditions of Contract were used, the FIDIC procurement procedure was contaminated by other methods and other functions that are foreign to the basic principles of adopting and using the FIDIC Conditions of Contract were added.

Titles such as “Project Manager”, “Construction Manager” and “Technical Supervisor” crept into the Construction arena, particularly from the United States, with overlapping duties and responsibilities on site. Some of these duties and responsibilities formed part of the function of the Engineer, as understood under the FIDIC Contracts. In some projects, all three titles appeared with split responsibilities, and with different levels of such responsibility. As these titles are not mentioned within the FIDIC procurement procedure nor within the FIDIC Conditions of Contract, engineers and other professionals began to enquire as to where should the functions of persons with such titles be slotted within the FIDIC system.

2. Different Methods of Procurement

The meaning of the titles “Project Manager” and “Construction Manager” varies for different projects in different countries. For present purposes, either function of such titles can be used and refers to the Manager who is in charge of a project on behalf of the Employer. The project could include one or more construction contracts.

2.1 Separate Control of Design and Progress.

On some projects the supervision of design/quality is separated from the supervision of progress/payment within a single construction contract. The progress/payment is directly controlled by the Construction Manager/Project Manager. This might be done to suit the needs of the project, as noted in further examples below, or is done sometimes because the company which the Employer had appointed to control the overall project is not suitable to supervise the design/quality. The design supervisor then reports to the Project Manager, but in certain circumstances would be also allocated legal responsibility for the design.

There are obvious potential problems of divided responsibility, with consequences for the efficient management of the project, particularly if there are claims to be considered.

2.2 Multi - Main Contractor Projects.

For large building projects, a system which is frequently used is where the Employer appoints a Construction Manager/Project Manager, either in-house or as a Consultant, together with a

number of separate Contractors for different parts or trades in the Works. Different Contractors work both concurrently and sequentially on the site. This system originated in the United States and has been used in different parts of the Middle East for some time. It is particularly favoured for large building projects where excavation, concrete frame, external cladding, internal walls, finishes, etc. can be let as separate contracts to different Main Contractors.

The individual contracts might be let either as traditional Construction Contracts (designed by the Employer or on his behalf by a Consulting Engineer) or as design-build where the sketch design is carried out by the Employer or on his behalf by a Consulting Engineer and the remaining design by the Contractor. An overall Project Manager is then appointed to coordinate and control progress on the different contracts. However, he may not be suitable for the design/quality supervision of the individual contracts. An engineer similar to the FIDIC Engineer would then be appointed to be responsible for design/quality supervision and for the preparation of the payment certificates, etc., subject to the Project Manager's approval on behalf of the Employer. The coordination of progress and study of claims, particularly when one Contractor has delayed another Contractor, will involve more than one Contract.

In this type of project, which is normally divided into a number of separate "works packages", the Employer enters into an agreement with a designer for the overall design of the works and, at the same time, concludes an agreement with a Construction Management Contractor who is to liaise closely with the designer and be responsible for managing the implementation of the works.

The Construction Management Contractor will arrange for the invitation of tenders for the separate works packages for contracts to be entered into directly with the Employer.

The contractual risks which are not shifted to the individual works contractors would remain with and be carried by the Employer. The Construction Management Contractor will be paid a management fee.

The aims of these arrangements are to increase the involvement of constructors during the design stages of a project and to reduce the overall period from inception to completion. Advocates of this method contend that an advantage of these arrangements over the traditional method is that the designers can concentrate on their design work while leaving the supervision of construction to management teams. On the other hand, it is clear that the best party to supervise a construction object is the designer.

Under the usual arrangements for this type of project:

- Employer
- - provides the finance; and
 - appoints the Construction Management Contractor to administer the contract, monitor the design and manufacturing activities, the installation and erection on site and construction work and to certify payment; and
 - arranges a sharing of construction risks in the contractual arrangements.
- Construction Management Contractor would deal with variations; and

- Payments to the contractor would be in accordance with milestones generally on a lump sum basis or on a measure and value basis depending upon the form of conditions of contract used.

2.3 Specific Trends

2.3.1 Employer/Contractor Joint Venture

In certain circumstances, very large projects have necessitated that the Developer sets up a Joint Venture Company with a Contractor. The Joint Venture Company then becomes the Employer for a series of separate contracts as discussed above. The Contractor part of the JV may be *appointed as Contractor for some contracts and may also purchase materials in bulk and provide* them to other contractors.

2.3.2 Design Development.

Another trend in the Middle East generally is for a Particular Conditions of the Conditions of Contract to require the Contractor to provide shop drawings or working drawings for the approval of the designer. The designer's drawings do not provide all the necessary detailed information so the Contractor has to provide additional information for the approval of the designer, which includes some design activities. The distinction between "Engineer's design drawings" and "Contractor's workshop details" becomes blurred.

3. Recommendations

The arrangements in a construction project based on the FIDIC procurement procedure under the Red and Yellow Forms of Contract

As explained in section 1 above, for a project that has only a single construction contract, the FIDIC system of an Engineer in charge, with suitably qualified assistants, the main parties connected contractually to the Employer/Owner in the procurement strategy are the Engineer and the Contractor. This system leaves the Engineer to be in charge of all activities in the design office and on site. This system must be preferable to the other systems discussed above.

If the Parties wish to introduce people or parties with titles such as those referred to above, i.e., "Project Manager", "Construction Manager" and "Technical Supervisor", then it is wise not to dismantle the FIDIC system but to allow the persons or parties allocated these functions to work within the system, i.e., to work either under the Engineer's team or, if applicable, under both the Engineer's team and the Contractor's team, and be given detailed description of the task or tasks allocated to them from within the responsibilities of the Engineer and/or the Contractor.

It is further recommended here that even in the case of multiple contracts with more than one main contractor on one site, it is better to retain the integrity of the FIDIC system of procurement, as described in the previous paragraph rather than introduce these other functions with shared responsibilities and liabilities that would, more likely than not, lead to conflict and dispute regarding their precise nature and quantum.