

The Role of Construction Managers

FIDIC offers two contributions on the question of the role of a construction manager in a construction contract:

- A. Notes on the use of FIDIC in the Middle East
- B. A Communication and Responsibilities Charter

A. Notes on the use of FIDIC in the Middle East

1. Introduction

These notes are based on discussions, with individuals and during training courses, during recent visits to Jordan and the UAE. They are based on limited exposure to the subject and anyone who is living in the region should be able to develop the theme and provide further examples.

The meaning of the terms 'Project Manager' and 'Construction Manager' varies for different projects in different countries. For present purposes, either term can be used and refers to the Manager who is in charge of a project on behalf of the Employer. The project will include one or more construction contracts.

2. Separate control of design and progress.

On some projects the supervision of design/quality has been 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 may be to suit the needs of the project, as noted in further examples below, or is sometimes because the company which the Employer/Owner has 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 many countries, also has a legal responsibility for the design.

Some people say that the system works well, but this is probably a matter of personalities rather than organisation. 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. The FIDIC system of an Engineer in charge, with suitably qualified assistants, must be preferable when the project only has a single construction contract.

3. Multi-prime contractor projects.

A system which is frequently used for large building projects is that 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 same site. This system originated in the USA and has been used in Kuwait for about 20 years. 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 contractors.

The individual contracts may be design-build or designed by a Consultant (i.e. covered by, FIDIC Design-Build or Construction Contracts). An overall Project Manager is 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. The FIDIC Engineer is then responsible for design/quality supervision and prepares payment certificates, etc. subject to the Projects 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 passed on to the individual works contractors will be carried by the Employer, while 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. An advantage of these arrangements over the traditional methods is considered to be that the designers can concentrate on their design work while leaving the supervision of construction to the management teams.

Under the usual arrangements for this type of project:

- the Employer:
 - provides the finance; and
 - will appoint 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
- the Construction Management Contractor may initiate variations; and
- payment to the contractor will be according to achieved milestones generally on a lump sum basis or on a measure and value basis depending upon the form of conditions of contract used; and
- the Employer seeks to ensure an equitable sharing of construction risks in the contractual arrangements.

In Kuwait they have used a highly modified form of FIDIC. In the UAE the Project Manager has no FIDIC role but represent the Employer. In Jordan a Consulting Engineer has been appointed to prepare the feasibility study and then act both as Project Manager and as Engineer for each package. Again, as noted above, some people say that the separation of progress from quality can work successfully, but this depends on the project Manager. The answer may be for the Project Manager to be suitably qualified and act also as the Engineer.

4. Employer/Contractor Joint Venture.

In Abu Dhabi, there are examples of very large projects where 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 the other contractors.

In one particular example they are using the NEC contract rather than FIDIC.

5. Design Development.

Another trend is for a Construction Contract Particular Conditions to require the Contractor to provide shop or working drawings for the approval of the Engineer. The Engineer's drawings do not provide all the necessary detailed information so the Contractor has to provide additional information for the approval of the Engineer, which includes some design work. The distinction between 'Engineer's design drawings' and 'Contractor's shop details' becomes blurred. The Contractor has to carry out additional work, often including design work, which may result in claims.

B. A Communication and Responsibilities Charter

In a construction management agreement, work items are typically distributed among project partners. This communications and responsibilities charter (developed by Munther Saket, JACEC, Jordan) specifies in more detail the responsibilities.

BASIC DEFINITION OF THE CONSTRUCTION MANAGER'S AND THE CONSULTANT'S ROLE IN A CONSTRUCTION CONTRACT

B1. As Extracted from General Conditions of Contract

The following paragraphs and clauses, extracted from a bespoke General Conditions of Contract, delineate the roles of Construction Manager and Consultant.

1.12. COMMUNICATION

The Owner and Consultant shall not communicate directly with the Contractor but shall only direct communication to the Construction Manager. Similarly, the Contractor shall not communicate directly with the Owner and Consultant, but shall direct such communication to the Construction Manager who shall have full authority to act with regard to all aspects of the administration of the Contract as stated in Article (4).

- 4.1.1 The Construction Manager shall administer the Contract as described herein.
- 4.1.2 The Construction Manager shall prepare the Work Forms to be used in correspondence, application for payments, application for inspection of Works, etc. The Contractor shall use such forms in his correspondence with the Construction Manager.
- 4.1.5 Except as provided in Article (9), the Construction Manager shall not revoke, alter, enlarge, relax or release the Contractor of any requirements of the Contract Documents or accept any portion of the Works not performed in accordance with the Contract Documents or to issue instructions contrary to Contract Documents.
- 4.3.5 The Construction Manager or Consultant will have the authority to reject work which does not conform to Contract Documents. Whenever the Construction Manager or Consultant considers it necessary, they will have the authority to require additional inspection or testing for implementation of the intent of Contract Documents. However, neither the Construction Manager's nor the Consultant's authority to act under the provisions of this Contract, nor a decision made by either of them in good faith, shall give rise to a liability or responsibility of any one of them towards the Contractor, subcontractors, suppliers, their employees, or other persons performing any portions of the Works.
- 4.3.6 The Construction Manager will receive from the Contractor all Builder's and Shop Drawings, Product Data and Samples, coordinate them with information received from Other Contractors and transmit to the Consultant for review. The Consultant will review and approve or take other appropriate action upon the Contractor's submittals such as Builder's and Shop Drawings, Product Data and Samples, but only for the purpose of checking for conformance with the requirements of Contract Documents and the design concept expressed in the Contract Documents. This review action will be taken with such reasonable promptness as to cause no delay in the work of the Contractor or in the activities of Other

Contractors while allowing sufficient time for the Construction Manager and Consultant to permit adequate review.

- 4.3.7 The Construction Manager will review and certify all applications for payment to the Contractor, including Final Payment, and the Consultant shall assist the Construction Manager in such review to check and certify the acceptance of works included therein as stated in Clause (11.2).
- 5.1.1 The Consultant shall provide to the Owner technical supervision services during construction as provided in this Contract, and as provided in the Engineering Consultancy Agreement between the Owner and the Consultant.
- 5.1.2 a. The Consultant is a member of the “Project Administration Team” as defined in para (4.3.1). The Consultant shall provide the technical supervision aspects of Contract administration throughout the Project Duration and the Defects Notification Periods, and assist the Construction Manager in the realization of the Project within the timing set in the Project Master Schedule and any amendments thereto.
- 5.1.3 a. The Consultant shall appoint the required technical staff on Site to provide continuous technical supervision of construction during all phases of work. Such staff shall monitor the quality of work performed to determine if the work is being performed in a manner indicating that the Works, when completed, will be in accordance with Contract Documents.
- 5.1.4 The Consultant shall promptly review Builder’s and Shop drawings, samples and other submittals, but his review shall be only for conformance with Contract Documents and for compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, and shall not extend to procedures of construction or to safety precautions or protection measures. The review of a separate item shall not indicate approval of the assembly in which this item functions.
- 5.1.6 Should errors, omissions or conflicts in Drawings, Specifications or other Contract Documents be discovered, the Consultant shall prepare such clarification, amendments or supplementary documents, and provide consultation as may be required by the Construction Manager. This information shall be transmitted to the Contractor by the Construction Manager.
- 5.1.7 a. The Consultant and his Representative on Site shall provide the services and duties assigned to them by various provisions of Contract, including verification of the quality of Works specified, and shall provide technical solutions for inquiries and problems that may arise at time of execution, for the purpose of assisting the Construction Manager to control the (Time and Cost) elements of the Project.
- 5.1.8 The Consultant and his Representative on Site shall inspect plant and systems that form part of the Permanent Works at the times of testing, calibration and initial operation and taking-over from the Contractor. They shall coordinate their activities in relation thereto with the Construction Manager.
- 9.2.1 A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Consultant and Contractor, stating their agreement upon introducing a change in the Works within the extent of Contract, and the amount of adjustment in the Contract Price, if any. As to the effect of the introduced change on the Contract Time, the Construction Manager shall study such effect based on the nature of the change, the time of its issuance, and its bearing on the Critical Path of the work activities.
- 9.3.1 A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Consultant directing a change in the Works and stating a proposed basis for adjustment, if any, in the value of changed work or

Contract Time, or both. The Owner may, by a Construction Change Directive, without invalidating the Contract, order changes in the Works within the extent of Contract, consisting of additions, deletions or other revisions.

- 11.8.2 The Construction Manager together with the Consultant shall, within (14) days from receiving the Contractor's request, conduct an inspection of the Works or Section and submit a report comprising the result of the inspection to the Owner within the said period (with a copy to the Contractor). The report may either comprise certification that the Works or Section have been completed and are ready for taking over by the Owner and specify the date of such completion, or comprise written instruction to the Contractor specifying the outstanding works which are required to be completed by the Contractor prior to taking over prescribing the period of time for completing the outstanding works to the satisfaction of the Construction Manger and the Consultant, whereby the Contractor shall complete the outstanding works specified in the report within the said prescribed period. Omission of any outstanding items of work in the report shall not relieve the Contractor from the obligation of completing the Works or Section fully in accordance with the Contract Documents. When the Contractor considers that he has completed the required outstanding works he shall submit a request for a new inspection to the Construction Manager, and the Construction Manager and the Consultant shall follow the procedures stated in the beginning of this para again.
- 11.11.1 Upon completion of the Works, and towards the end of the Defects Notification Period, the Contractor shall forward to the Construction Manager a written notice that the Works are ready for final inspection and acceptance and shall also forward to the Construction Manager a Final Contractor's Application for Payment. Upon receipt, the Construction Manager and Consultant will promptly make such inspection. When the Construction Manager and Consultant find the Works acceptable under the Contract Documents and the Contract fully performed, then the Construction Manager will, within (28) days after the expiration of the Defects Notification Period, issue a Final Payment Certificate stating that the amounts found to be due to the Contractor and noted in the said Final Payment Certificate are due and payable.

B2. As per the Work Forms referred to In Para. 4.1.2 of the Conditions of Contract

The Work Forms to be adopted in the administration of the Contract are as attached. The forms further clarify the roles of Construction Manager and Consultant in strict compliance with the Conditions of Contract.

B3. As per the Responsibility Matrix forming part of the Construction Management Agreement

Responsibility Matrix forming part of the construction management agreement

DISTRIBUTION OF MAIN RESPONSIBILITIES AMONGST PROJECT PARTIES

In a construction management agreement, the following work items are typically distributed among project partners (Designer; Technical Supervisor; Construction Manager; Employer):

Pre-Construction Phase

- Budget Allocation
- Design
- Review of Design and Technical Documents
- Planning & Work Schedules
- Estimation of Construction Cost
- Construction Contracts:
 - Work Breakdown Strategy
 - Technical Bid Documents
 - Contractual Bid Documents
 - Qualification of Contractors

- Licensing and Approvals
- Provision of Employer's Materials
- Contract Processes
- Issuance of Documents
- Receiving & Evaluating Bids
- Awarding Contracts

Construction Phase

- Site Handing Over
- Management of Construction
- Coordination of Contractors' work
- Coordination Meetings & Progress Reports
- Follow-up & updating schedules
- Follow-up cash-flow and cost estimates
- Quality Control
 - General
 - QC Program
 - Technical Supervision
- Interpretation of Contracts
- Record Keeping
- Variations
- Initial Acceptance at substantial completion
- Final Acceptance at final completion
- Contractors' Payments:
 - Auditing
 - Issuance of payment certificates
 - Effecting Payments
- Contractors' Claims

As Per the Responsibility Matrix forming part of the Construction Management Agreement

DISTRIBUTION OF MAIN RESPONSIBILITIES AMONGST PROJECT PARTIES				
Work Item	Designer	Technical Supervision	CM	Employer*
Pre-Construction Phase				
Budget Allocation				M
Design	M			A
Review of Design & Tech. Doc.			M	M
Planning & Work Schedules	S		M	A
Estimation of Construction Cost	S		M	A
Construction Contracts:				
Work Breakdown Strategy	S		M	A
Technical Bid Documents	M			A
Contractual Bid Documents			M	A
Qualification of Contractors	S		M	A
Licensing and Approvals	S		S	M
Provision of Employer's Materials	S		S	M
Contract Processes				
Issuance of Documents	S		M	A
Receiving & Evaluating Bids	S		M	A
Awarding Contracts	S		S	M
Construction Phase				
Site Handing Over				M
Management of Construction		S	M	
Coordination of Contractors' work		S	M	
Coordination Meetings & Progress Reports		S	M	
Follow-up & updating schedules			M	
Follow-up cash-flow and cost estimates	S	S	M	
Quality Control				
General	S	M	S	
QC Program		S	M	
Technical Supervision		M	S	
Interpretation of Contracts	S	S	M	
Record Keeping			M	
Variations	S	S	M	A
Initial Acceptance at substantial completion		M	S	
Final Acceptance at final completion		M	S	
Contractors' Payments:				
Auditing		S	M	
Issuance of payment certificates		S	M	
Effecting Payments				M
Contractors' Claims	S	S	M	A

* Employer & His Other Consultants

M: Main
S: Secondary
A: Approval