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Latest Developments in International Construction Contracts
Basis of FIDIC Systems :

The Engineer's Unique Dual Role

by :

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Introduction :

The current fourth edition of the Conditions Of Contract For Works Of Civil Engineering Construction issued 1987 and reprinted in 1988 with editorial amendments and reprinted again in 1992 with further editorial amendments, is one of the major standard forms of contracts issued by the International Federation of Consulting Engineers "FIDIC".

Since its first edition in 1957, the FIDIC Civil Engineering Contract Committee "CECC", had been made responsible to monitor its use, review and revise these conditions on regular basis. Thus, the second (in 1969) and the third (in 1977) editions were produced.

The changes and/or amendments undertaken under all these issues did not touch the basis upon which these conditions are drafted. These may be summarised as follows :

- The contract is a measured contract with an approximate Bill of Quantities for tendering purposes only. Final contract price is determined through the actually executed quantities.
- The risks are allocated taking into consideration that the employer is the party who should carry any risk which :
 - an experienced contractor could not be reasonably expected to foresee,
 - lies outside the control of both contract parties,
 - insurance do not cover , and finally
 - unpredictable geotechnical conditions
- English legal language and Common Law principles were applied when drafting these conditions.

- The engagement of an engineer to prepare the contract documents , participate in tendering and evaluating the offers and in the selection of the most suitable one, to administer the contract and manage the project.
- The FIDIC conditions require this engineer not to act solely as the Employer's Agent but also to act as an independent and impartial person wherever , under these conditions , he is required to exercise his discretion (Cl.2.6).

It is this feature that distinguishes the FIDIC conditions from all other types of contracts and creates in many cases strong questioning about his ability to act as independent and impartial person.

As we shall explain at the end of this paper , FIDIC itself realized lately this critique and in its attached circular letter to all its Member Associations in all member countries, this question is raised seriously on the occasion of preparing for the conditions fifth edition in 1997.

Contract Clauses :

Clause 1.1 of the fourth edition (first published in 1987 and reprinted with editorial amendments in 1988 and 1992), of the FIDIC General Conditions Of Contract For Civil Engineering Construction, defines the Engineer as the person appointed by the Employer to act as Engineer for the purpose of the Contract and named as such in Part II of the Conditions.

Clause 2.6 of the same Conditions states that :

" Wherever, under the Contract, the Engineer is required to exercise his discretion by :

- (a) giving his decision, opinion or consent, or
- (b) expressing his satisfaction or approval,
- (c) determining value, or
- (d) otherwise taking action which may affect the rights and obligations of the Employer or the Contractor,

he shall exercise such discretion impartially within the terms of the Contract and having regard to all circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, or reviewed or revised as provided in Clause 67.

Both the above Sub-Clauses show clearly that the Engineer, despite the fact he is appointed (and paid) by the Employer, is required through the terms of the FIDIC Conditions not to act solely as Employer's Agent. He is required to act also as an impartial and independent person when exercising any of his discretions.

This is one of the basic fundamentals of the FIDIC Conditions. Thus, the Engineer when exercising his discretion is assumed to have the authority and the liberty of deciding and/or acting as he thinks right and fit (Oxford Dictionary 1962). It is rather difficult to distinguish a function of the Engineer that does not involve Engineer's discretion or does not affect the rights and obligations of the Employer or the Contractor. This subject is discussed in detail by N.G. Bunni in his book "The FIDIC Form Of Contract [1].

The Two Viewpoints On Engineer's Impartiality :

This dual role of the Engineer has been subjected to much criticism from both sides i.e. the Employer and the Contractor as well.

The Contractors usually argument that the Engineer shall be unable to act independently and/or impartially for the following reasons :

- (a) He is appointed and paid by the Employer.
- (b) The Employer can replace him. In the third edition it is stated that "Engineer appointed from time to time by the Employer". In the present fourth edition this is still applicable if the Engineer is a firm. If he is named as an individual this replacement is subject to Contractor's approval giving

little more confidence against such action.

- (c) Wherever the Engineer is involved or had been involved in the design, consultancy activities and/or preparation of tender documents in the pre-contract phase, it is pointed out that the possibility of the Engineer having to decide claims the cause of which may be attributed to his own actions brings his role as adjudicator under suspicion. Most probably he will not be willing to admit or disclose any of his failings or shortcomings.
- (d) He may be keen to continue serving the same Employer in other projects, thus acting mainly to gain the confidence of the Employer.
- (d) FIDIC IV introduced the expression "... after due consultation with the Employer and the Contractor ..." in all Clauses where the Engineer is to make any decision as to money or time. The influence of the Employer and perhaps his organisation on such consultation is questionable specially if the Engineer is a government official.
- (e) Clause 2.1(b) gives the Employer the right to curtail any of the Engineer's authorities specified in or necessarily to be implied from the Contract Conditions by simply listing such functions, where the Employer is unwilling to delegate to the Engineer, in Part II of these Conditions. In all these cases the Engineer is to obtain the specific approval of the Employer before exercising any such authority.

On the other hand the Employers have their own reservations and doubts in respect of the Engineer's impartiality for the following reasons :

- (a) Due to lack of understanding of the technicalities of the administration and execution of the project, Employers are usually dissatisfied by Engineer's decision concerning awarding time extensions and/or cost compensation to the Contractors.
- (b) In projects using foreign Contractors and foreign Engineers, Employers usually suspects the relationship

between both parties. The Employers have many reasons to assume that the Engineer, in such cases, is more interested in maintaining good relationship with such Contractors in consideration of the possibility of future cooperation.

Amended Forms Of Contract :

These doubts are usually behind amended forms of FIDIC Contract Conditions oftenly used in Egypt and many other Middle East Countries. Even when FIDIC Conditions are adopted, they are usually amended by Employers or their consultants in one way or another. The dangour of such amended conditions is that they aim mainly to adjust the balance of risks in favour of the Employer and thus add to the propability of arising of disputes when construction proceeds.

FIDIC's Conditions of Contract are considered generally well balanced and, as with any contract, the different clauses are very much inter-related, some times obviously and other times implicitly. The risk of upsetting this balance or creating unintended consequential changes to related provisions of the contract must be considered carefully when introducing any amendments.

Settlement of Disputes :

It is rather important to realise that this prescribed impartiality of the Engineer and getting him to wear two jackets creates oftenly doubts by both contract parties over the Engineers role. It is not rare that either or even both parties are not satisfied by the Engineer's actions and/or inactions. In such case Clause 67 shall be applied. This Clause defines the steps to be taken where the Engineer's decision is not satisfactory to any of the contract parties. Despite the good intensions of the drafter of this clause, it is clear to everybody that it can be "regarded as little more than a delay to the resolution of the dispute or a cooling-off period". As commented by E.C. Corbett in his book, FIDIC 4th

A Practical Legal Guide [2] " In practice , a reference under Clause 67.1 will often be preceded by correspondence between Contractor and Engineer in which the respective positions are set out. In these circumstances, the Contractor could justifiably consider a further 12-week delay, while the Engineer formalises his position, to be a time wasted.

Unless the Contract has come to an end, the Contractor continues to execute the works and both parties must give effect to the Engineer's decision. If either party is dissatisfied with the decision or Engineer fails to make a decision, they have 10 weeks in which to give notice of their intention to commence arbitration. For 10 weeks after the notice of arbitration is given, the parties try to settle the dispute amicably"within 8 weeks period. All in all, 30 weeks (210 days) may pass before arbitration can be started. This procedure seems very protracted and may affect the project negatively if the award will somehow affect the works on site.

For example, a decision as to whether an Engineer is entitled to instruct a particular variation specially in cases where the contract is amended to ensure that arbitration does not take place before substantial completion.

It is not understandable why this very long period is to pass before a dispute can be referred to arbitration under these FIDIC Conditions for Civil Works, while FIDIC Conditions for Electrical and Mechanical Works requires only 12 weeks for the same action (28 days for Engineer's decision as per Cl.2.7 plus 56 days for notice for arbitration as per Cl.50.1), [3].

The situation for the Engineer as adjudicator is sometimes too hard when he has to deal with some terms of the FIDIC Contract which are inconsistent with the Civil Code or the Administrative Law such as in relation to liquidated damages, terminations and decennial liability.

Conclusion :

A detailed survey of the FIDIC IV Contract Conditions shows that the Engineer is required to :

16.1	Contractor's Employees	*		
16.2	Engineer at Liberty to Object	*	*	
17.1	Setting-out	*		
18.1	Boreholes and Exploratory Excavation	*		
19.1	Safety, Security and Protection of the Environment	*		
19.2	Employer's Responsibilities			
20.1	Care of Works			
20.2	Responsibility to Rectify Loss or Damage		*	
20.3	Loss or Damage Due to Employer's Risks	*	*	
20.4	Employer's Risks			
21.1	Insurance of Works and Contractor's Equipment			
21.2	Scope of Cover			
21.3	Responsibility for Amounts not Recovered			
21.4	Exclusions			
22.1	Damage to Persons and Property			
22.2	Exceptions			
22.3	Indemnity by Employer			
23.1	Third Party Insurance (including Employer's Property)			
23.2	Minimum Amount of Insurance			
23.3	Cross Liabilities			
24.1	Accident or Injury to Workmen			
24.2	Insurance Against Accident to Workmen			
25.1	Evidence and Terms of Insurances			
25.2	Adequacy of Insurances			
25.3	Remedy on Contractor's Failure to Insure			
25.4	Compliance with Policy Conditions			
26.1	Compliance with Statutes, Regulations			
27.1	Fossils	*	*	*
28.1	Patent Rights			
28.2	Royalties			
29.1	Interference with Traffic and Adjoining Properties			
30.1	Avoidance of Damage to Roads			
30.2	Transport of Contractor's Equipment or Temporary Works		*	*
30.3	Transport of Materials or Plant			
30.4	Waterborne Traffic	*		
31.1	Opportunities for Other Contractors	*	*	
31.2	Facilities for Other Contractors	*	*	
32.1	Contractor to Keep Site Clear		*	
33.1	Clearance of Site on Completion			
	Labour			
34.1	Engagement of Staff and Labour			
35.1	Returns of Labour and Contractor's Equipment	*		
	Materials, Plant and Workmanship			
36.1	Quality of Materials, Plant and Workmanship	*		
36.2	Cost of Samples			
36.3	Cost of Tests			
36.4	Cost of Tests not Provided for		*	
36.5	Engineer's Determination where Tests not Provided for		*	*
37.1	Inspection of Operations			
37.2	Inspection and Testing	*		
37.3	Dates for Inspection and Testing			
37.4	Rejection	*	*	*
37.5	Independent Inspection	*		
38.1	Examination of Work before Covering up	*		

38.2	Uncovering and Making Openings	*	*	*
39.1	Removal of Improper Work, Materials or Plant	*	*	*
39.2	Default of Contractor in Compliance			
Suspension				
40.1	Suspension of Work	*	*	*
40.2	Engineer's Determination following Suspension	*	*	*
40.3	Suspension lasting more than 84 Days			
Commencement and Delays				
41.1	Commencement of Works	*		
42.1	Possession of Site and Access Thereto		*	*
42.2	Failure to Give Possession		*	*
42.3	Rights of Way and Facilities			
43.1	Time for Completion		*	*
44.1	Extension of Time for Completion		*	*
44.2	Contractor to Provide Notification and Detailed Particulars		*	*
44.3	Interim Determination of Extension		*	*
45.1	Restriction on Working Hours	*	*	*
46.1	Rate of Progress	*	*	*
47.1	Liquidated Damages for Delay			
47.2	Reduction of Liquidated Damages			
48.1	Taking-Over Certificate	*	*	
48.2	Taking-Over of Sections or Parts	*	*	
48.3	Substantial Completion of Parts	*		
48.4	Surfaces Requiring Reinstatement			
Defects Liability				
49.1	Defects Liability Period		*	
49.2	Completion of Outstanding Work and Remedying Defects	*	*	
49.3	Cost of Remedying Defects		*	
49.4	Contractor's Failure to Carry Out Instructions		*	*
50.1	Contractor to Search	*	*	*
Variations, Additions and Omissions				
51.1	Variations	*		
51.2	Instructions for Variations		*	*
52.1	Valuation of Variations	*	*	*
52.2	Power of Engineer to Fix Rates	*	*	*
52.3	Variations Exceeding 15 percent		*	*
52.4	Daywork	*	*	
Procedure for Claims				
53.1	Notice of Claims		*	
53.2	Contemporary Records		*	
53.3	Substantiation of Claims		*	
53.4	Failure to Comply		*	*
53.5	Payment of Claims		*	*
Contractor's Equipment, Temporary Works and Materials				
54.1	Contractor's Equipment, Temporary Works and Materials; Exclusive Use for the Works	*		
54.2	Employer not Liable for Damage			
54.3	Customs Clearance			

38.2	Uncovering and Making Openings	*	*	*
39.1	Removal of Improper Work, Materials or Plant	*	*	*
39.2	Default of Contractor in Compliance			
	Suspension			
40.1	Suspension of Work	*	*	*
40.2	Engineer's Determination following Suspension	*		
40.3	Suspension lasting more than 84 Days			
	Commencement and Delays			
41.1	Commencement of Works	*		
42.1	Possession of Site and Access Thereto		*	*
42.2	Failure to Give Possession			
42.3	Rights of Way and Facilities			
43.1	Time for Completion		*	*
44.1	Extension of Time for Completion		*	*
44.2	Contractor to Provide Notification and Detailed Particulars		*	*
44.3	Interim Determination of Extension			
45.1	Restriction on Working Hours	*	*	*
46.1	Rate of Progress	*		
47.1	Liquidated Damages for Delay			
47.2	Reduction of Liquidated Damages			
48.1	Taking-Over Certificate	*	*	
48.2	Taking-Over of Sections or Parts	*	*	
48.3	Substantial Completion of Parts	*		
48.4	Surfaces Requiring Reinstatement			
	Defects Liability			
49.1	Defects Liability Period		*	
49.2	Completion of Outstanding Work and Remedying Defects	*	*	
49.3	Cost of Remedying Defects		*	
49.4	Contractor's Failure to Carry Out Instructions	*	*	*
50.1	Contractor to Search			
	Variations, Additions and Omissions			
51.1	Variations	*		
51.2	Instructions for Variations	*	*	*
52.1	Valuation of Variations	*	*	*
52.2	Power of Engineer to Fix Rates		*	*
52.3	Variations Exceeding 15 percent	*	*	
52.4	Daywork			
	Procedure for Claims			
53.1	Notice of Claims		*	
53.2	Contemporary Records		*	
53.3	Substantiation of Claims		*	
53.4	Failure to Comply		*	*
53.5	Payment of Claims			
	Contractor's Equipment, Temporary Works and Materials			
54.1	Contractor's Equipment, Temporary Works and Materials; Exclusive Use for the Works	*		
54.2	Employer not Liable for Damage	*		
54.3	Customs Clearance			

54.4	Re-export of Contractor's Equipment			
54.5	Conditions of Hire of Contractor's Equipment			
54.6	Costs for the Purpose of Clause 63			
54.7	Incorporation of Clause in Subcontracts			
54.8	Approval of Materials not Implied			
	Measurement			
55.1	Quantities		*	
56.1	Works to be Measured			
57.1	Method of Measurement			
57.2	Breakdown of Lump Sum Items	*		
	Provisional Sums			
58.1	Definition of "Provisional Sum"	*	*	
58.2	Use of Provisional Sums	*	*	
58.3	Production of Vouchers			
	Nominated Subcontractors			
59.1	Definition of "Nominated Subcontractors"	*		
59.2	Nominated Subcontractors; Objection to Nomination			
59.3	Design Requirements to be Expressly Stated		*	
59.4	Payments to Nominated Subcontractors	*	*	
59.5	Certification of Payments to Nominated Subcontractors	*	*	
	Certificates and Payment			
60.1	Monthly Statements		*	
60.2	Monthly Payments		*	
60.3	Payment of Retention Money		*	
60.4	Correction of Certificates		*	
60.5	Statement at Completion		*	
60.6	Final Statement	*		
60.7	Discharge		*	
60.8	Final Payment Certificate		*	
60.9	Cessation of Employer's Liability			
60.10	Time for Payment			
61.1	Approval only by Defects Liability Certificate		*	
62.1	Defects Liability Certificate			
62.2	Unfulfilled Obligations			
	Remedies			
63.1	Default of Contractor		*	
63.2	Valuation at Date of Termination		*	
63.3	Payment after Termination		*	
63.4	Assignment of Benefit of Agreement		*	
64.1	Urgent Remedial Work		*	
	Special Risks			
65.1	No Liability for Special Risks			
65.2	Special Risks	*	*	
65.3	Damage to Works by Special Risks			
65.4	Projectile, Missile		*	*
65.5	Increased Costs arising from Special Risks		*	*
65.6	Outbreak of War			
65.7	Removal of Contractor's Equipment on Termination		*	*
65.8	Payment if Contract Terminated			*

66.1	Release from Performance Payment in Event of Release from Performance			
	Settlement of Disputes		*	
67.1	Engineer's Decision			
67.2	Amicable Settlement			
67.3	Arbitration			
67.4	Failure to Comply with Engineer's Decision			
	Notices			
68.1	Notice to Contractor			
68.2	Notice to Employer and Engineer			
68.3	Change of Address			
	Default of Employer			
69.1	Default of Employer			
69.2	Removal of Contractor's Equipment			
69.3	Payment on Termination	*	*	
69.4	Contractor's Entitlement to Suspend Work			
69.5	Resumption of Work			
	Changes in Cost and Legislation			
70.1	Increase or Decrease of Cost	*	*	
70.2	Subsequent Legislation			
	Currency and Rates of Exchange			
71.1	Currency Restrictions			
72.1	Rates of Exchange			
72.2	Currency Proportions			
72.3	Currencies of Payment for Provisional Sums			