Claims, Disputes and Arbitration under the Red Book and the New Red Book (Part 1)

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Construction claims; FIDIC conditions of contract

Introduction

In this article, the author discusses the first of three parts dealing with the claims, disputes and arbitration pursuant to the conditions of the forms of contracts issued by the International Federation of Consulting Engineers (FIDIC) since the issue of the first edition of the form of contract "Conditions of Contract for Works of Civil Engineering Construction" in 1957 until the fourth edition in 1987 followed by the first issue of the form of contract "Conditions of Contract for Electrical and Mechanical Works Including Erection On Site" in 1969 until the third edition in 1987, as well as by the first edition of the form of contract "Conditions of Contract for Design-Build and Turnkey" in 1995, for which no new other editions were issued and, finally, by the four new forms issued in 1999 differing basically in their drafting from the forms previously issued. For that reason, they are referred to as the first edition. We will focus on the FIDIC Contract for Works of Civil Engineering Construction (The Red Book and its four editions until 1987) and the Contract for Construction (New Red Book, first edition, 1999), which did not differ much with regard to the bases of drafting.

The first part of the article deals with the claims, as well as their merits, grounds and procedures and the rôle of the engineer in trying to settle these during the execution. The second part deals with the rôle of the dispute adjudication board, if the employer and contractor deem fit to exempt the engineer from playing the rôle of the arbitrator in settling these claims, and limit the arbitrator's role

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to working for the employer. The third and final part deals with the FIDIC conditions in settling disputes and the rôle of arbitration in reaching a final settlement.

The "Conditions of Contract for Works of Civil Engineering Construction", set up by the FIDIC are considered the only typical form of conditions set up for international use but are also suitable for use on domestic contracts subject to minor modifications.

In spite of the criticism addressed to these conditions and the amendments introduced upon their effective implementation, and the big diversification in the claims and consequently in the disputes arising from their implementation, they remain the standard to which all the other contracts used internationally are compared. These conditions are the most widely used and represent the most modern contractual drafting and the most accepted in the construction industry field, especially after the improvements introduced thereto in 1999 through their redrafting and issuance of a new edition on the bases of the allocation of the risks of works contracted for and not on the bases of quality.

The engineer and the law

Upon their drafting for the very first time in 1957, the "Conditions of Contract for Works of Civil Engineering Construction" were, and still are, influenced by the method followed in the "Conditions of Contract for Works of Civil Engineering Construction", set up by the Institution of Civil Engineers (ICE) in the United Kingdom. Therefore, the traditional Anglo-Saxon aspect of the contract still prevails over these Conditions. The contract gives the engineer supervising the works on behalf of the employer, being the engineer as per these Conditions, wide supervision authority and power, as well as a main quasi-arbitrator role when settling or issuing a decision with regard to any claim (during the period of execution of the project and any extension thereof), or with regard to any dispute that might arise as a result thereof between the contractor and the employer or between the contractor and the engineer himself.

This form has gone through several editions, the second in 1969, the third in 1977 and the fourth in 1987. In 1999, this form was re-drafted and named on the basis of allocation of the risks of works contracted for and not on the basis of quality. The first, not the fifth, edition was issued under the name "Contract for Construction" being the most realistic name given; all the projects, whether on an important scale or not, include all kinds of engineering, be it civil, mechanical, electrical, telecommunications, etc.

Several conditions of this form entitle the contractor to claim additional amounts or time, or both, to complete the execution of the works if the execution circumstances turn out to be different from the ones previously known or could have been foreseen when the tender was under study until 28 days prior to its submittal, while only few conditions give this right to the employer.

Consequently, all the FIDIC forms of contract preserved the authority of the engineer in this regard.

The main work of the engineer is summarised by taking account of any of the following decisions while managing the project:

- approval;
- check;
- certificate;
- inspection;
- instruction;
- notice;
- proposal;
- request;
- delegations;
- test; and
- determination.

The engineer's decisions will entail rights and/or obligations to the parties. Note that the engineer takes its decisions in the management of the engineering projects based on its technical and legal information, as well as his understanding of the contract.

Contrary to the fixed-price contracts, the FIDIC conditions of contract allow and even request the contractor to submit claims based on several clauses, or upon the occurrence of unforeseeable events such as in the case of unforeseeable site conditions, the delay in handing over the site and so on. Given the fact that the contracting contract is considered a long-term contract, it is subject to several risks, mainly those related to the increase of prices and wages. Whereas the contractor can only overcome such risks by taking precautions like probable increases in his prices, the drafting of this contract allowing the contractor to submit claims pertaining to risks that might occur during the execution of the works contracted for is considered the ideal draft for the benefit of the employer. And whereas the contractor who is contracting pursuant to any of these forms knows ahead that it will not be obliged to bear the risks of such cases, then the contractor will not need to presume increases in the prices and take them into consideration when determining his prices for the tender, because if it did, it may be left out of the competition.

The contractor may, pursuant to the FIDIC conditions of contract, submit two main kinds of claim against the employer, being:

- claiming additional amounts or extending the period of execution or claiming both; or
- claiming compensation pursuant to the applicable law, such as the compensation resulting from the termination of the contract by the employer.

In general, the contractor usually prefers to submit its claim during the execution of the works based on one or more clauses of the contract, so that the engineer can directly assess such claim at the time. However, the engineer will not be able to assess the claim based on the law without referring to a legal consultant, thus leading to the delay in the payment of the contractor's dues. This is why

the contractor often prefers to avoid claims based on the law unless in cases of extreme necessity. In this case, the contractor often resorts to arbitration as required by the contract.

The FIDIC Conditions of Contract for Works of Civil Engineering Construction and the Contract for Construction (New Red Book, 1st edition, 1999) include 35 clauses entitling the contractor (or the employer in some of them) to submit claims in order to obtain additional amounts (compensation) or extend the period of execution of the works, or both.

In view of the fact that The Red Book, since the FIDIC issued its first edition in 1957, followed by the second edition in 1969, then the third in 1977 and the fourth in 1987, was used in an uncountable number of works for almost 50 years, many experiences were gathered either with regard to the methods of implementation thereof or to the disputes, arbitrations or cases arising therefrom.

Whereas the concept based on which the Contract for Construction was drafted did not differ from the concept based on which the FIDIC "Contract for Works of Civil Engineering Construction" (The Red Book and its four editions until 1987) was drafted, even though the contracts issued in 1999 were drafted based on the allocation of the risks and not on the quality of works contracted for, these experiences gathered as a result of the use of The Red Book are still used under the new form in spite of the different drafting.

Therefore, we clarify in Table 1 the clauses and sub-clauses relating to the claims in the four forms of The Red Book issued before 1995 and their corresponding clauses and sub-clauses in the Contract for Construction issued in 1999.

In this article, we will strictly indicate such clauses in the following table:

Is it necessary to have claims?. . . Yes and no

In almost all projects, claims cannot be avoided, although many projects end up without any claims. The latter can be achieved when all the project documents have been set up with utmost care and the contractor who is appropriate for

Table 1 Bases of claims and corresponding clauses pursuant to the Contract of 1987 and the Contract for Construction of 1999

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
1.	6-4	1-9	Delay and cost resulting from the delayed issuance of instructions or drawings. Delayed drawings or instructions.	Contractor.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
2.	12-2	4-12	Delay and cost resulting from industrial obstructions, unforeseeable natural physical conditions and man-made conditions including sub-surface and hydrological conditions but excluding climatic conditions. Unforeseeable physical conditions.	Contractor.
3.	17-1	4-7	Cost of rectifying errors in the levels, dimensions and alignment of works: the contractor is responsible for the correct setting out of positions, levels, dimensions and alignment of works. The employer will be responsible for any errors in the items of reference notified to the contractor. Setting out.	Contractor or employer.
4.	18-1	13-1	Value of the boreholes and exploratory excavation works the contractor is entrusted with (considered as a variation order). Soil investigations done by the contractor.	Contractor.
5.	20-3	17-4	Value of rectifying loss or damage resulting	Contractor

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
			from any of the risks borne by the employer pursuant to sub-clause 17-3/1999 or 22-2/1987 being the force majeure such as: war, hostilities, commotion, riot, munitions of war and pressure waves; the use or occupation by the employer of any part of the permanent works, the design prepared with his knowledge and any operation of the forces of nature unforeseeable by an unexperienced contractor. Costs incurred as a result of employer's risks.	
6.	22-3	19-4	Insure and protect the contractor from the excluded damages (borne by the employer) determined in clause 3/1999 or sub-clause 22-2/1987 as mentioned earlier. Consequences of *force majeure*.	Contractor.
7.	25-4	18-1	Damages resulting from the default, by the employer, to comply with the conditions of insurance policies. General requirements for insurances.	Employer.
8.	27-1	4-24	Delay suffered and cost incurred from complying	Contractor.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
			with the instructions of the engineer upon discovery of fossils, coins, articles of value, antiquity, structures or other remains of geological or historical importance on the site. Fossils.	
9.	30-3	4-15	Claims submitted by a third party for damages to bridges and roads communicating with the routes leading to the site caused by the contractor's plant and equipment. Access route.	Employer.
10.	31-2	4-6	Cost of granting facilities to the employer or to other contractors employed by the employer or to the competent official authorities pursuant to the engineer's instructions (by virtue of a written request). Co-operation.	Contractor.
11.	36-5	7-5	Delay suffered and cost incurred from the repetition of specific tests found to be defective upon the request of the engineer as a result of examination, inspection, measurement or testing. Rejection.	Employer.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
12.	38-2	7-3	Cost incurred, in specific cases, as a result of uncovering any section of the works, making openings in or through the works due to the failure, by the contractor, to give notice to the engineer prior to covering up any of these works. Inspection.	Employer.
13.	40-2	8-9	Delay suffered and cost incurred from complying with the engineer's instructions to suspend the works or their resumption in specific cases. Consequences of suspension.	Contractor.
14.	42-2	2-1	Delay suffered and cost incurred from the delay, by the employer, to hand over the site to the contractor. Right of access to the site.	Contractor.
15.	44-1	8-4	Extension of time for completion of all or a section of the works. Extension of time for completion.	Contractor.
16.	49-3	11-2	Cost of executing additional works, re-constructing, remedying defects, shrinkage or any other	Contractor.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	**Clause or sub-clause**		
			faults the contractor is not responsible for during the defects liability period (guarantee). Cost of remedying defects.	
17.	50-1	11-8	Cost of search, upon the request of the engineer, for defects, shrinkage or any other faults in the works the contractor is not responsible for prior to the expiry of the defects liability period. Contractor to search.	Contractor.
18.	51	13	Variations initiated at any time prior to issuing the taking-over certificate for the works upon the request of the engineer or based on changes in the legislation or in the cost agreed upon. Variations and adjustments.	Contractor.
19.	52-1	12-3	Variation evaluation. Variation procedure 13-3 and evaluation 12-3.	Contractor.
20.	52-2	12-3	The authority of the engineer in determining the price rates. Evaluation.	Contractor.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
21.	52-3	12-3	Assessment of the engineer in case the value of changes or amendments exceed the estimated quantities in the contract, resulting in the increase or reduction of the contract value by more than 15%. Evaluation.	Employer or contractor.
22.	52-4	13-6	Instructions of the engineer to execute any of the varied works on a daywork basis and the works will be valued in accordance with the daywork wage rates. Daywork.	Contractor.
23.	58-1	13-5	Provisional sums. Provisional sums.	Contractor.
24.	59-4	5-3	Payment to nominated sub-contractors. Payment to nominated sub-contractors.	Employer.
25.	60-10	14-8	Interests on delayed payments based on the previously set rates. Delayed payment.	Contractor.
26.	63-3	15-4	Payment after the termination of the contract by the employer. Payment after termination.	Contractor.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	Clause or sub-clause		
27.	65-3	17-4	Payment following damage to or destruction of works or any materials, plant or equipment resulting from the special risks (employer's liability). Consequences of employer's risks.	Contractor.
28.	65-5	17-3	Increase in the costs of works arising from the special risks (employer's risks). Employer's risks.	Contractor.
29.	65-8	19-6	Payment in case of contract termination due to the declaration of a war hindering the execution of the works. Optional termination, payment and release.	Contractor.
30.	66-1	19-7	Payment in case any circumstance outside the control of both parties arises which renders it impossible or unlawful for either party to perform the contract or in case of being released from the performance of the contract under the law governing the contract. Release from performance under the law.	Contractor.

Table 1 (*Continued*)

	Contract of 1987	Contract of 1999	Basis of claim	Claiming party
	Clause or sub-clause	**Clause or sub-clause**		
31.	69-3	16-4	Payment in case of contract termination by the contractor as a result of the violation, by the employer, of the employer's obligations. Payment on termination.	Contractor.
32.	69-4	16-1	Delay suffered and cost incurred from the suspension of the works by the contractor or the reduction of the rate of work. Contractor's entitlement to suspend work.	Contractor.
33.	70-1	13-8	Changes in labour costs and/or materials or any other matters affecting the cost of the execution of the works. Adjustments for changes in cost.	Contractor.
34.	70-2	13-7	Changes in costs resulting from changes in subsequent legislation. Adjustments for changes in legislation.	Contractor.
35.	71-1	14-15	Delay suffered and cost incurred from imposing restrictions on the currency or on the transfer of the currency or currencies in which the contract price will be paid. Currencies of payment.	Contractor.

the quality of the required works has been chosen based on prequalification, without merely basing the choice on the cheapest prices!

The reasons behind the claims in almost all projects are numerous and the most important are as follows:

- complexity of the projects;
- existence of unforeseeable obstacles;
- the price contracted for is low, thus impairing the contractor from the good performance;
- existence of ambiguity or conflict between some of the contract clauses or project documents;
- unequal allocation of the risks between the parties;
- existence of a cultural difference between the contracting parties;
- the time schedule of execution is very tight and not in conformity with the volume of the works;
- non-availability of liquidity for financing by one or all parties;
- occurrence of events not attributable to any of the contracting parties or outside their control;
- inappropriate choice of the engineer; and
- inappropriate choice of the contractor.

Usually, the claims vary between claims for extension of time for completion, claims for additional payment, claims to recover a cost incurred as a result of the failure, by a party, to fulfill any of his obligation, or claims resulting from the changes in legislation, laws or bylaws 28 days following or prior to the signature of the contract.

Engineer's obligations and rights

The engineer's obligations and rights are as follows:

- The engineer shall have no authority to amend the contract.
- The engineer shall carry out all the duties assigned to it in the contract.
- The engineer shall obtain the approval of the employer before exercising any authority set out in the particular conditions.
- The engineer shall not have the authority to relieve any of the contract parties from any duties, obligations or responsibilities provided for in the contract.
- Any approval, examination, certificate, testing, inspection or instructions from the engineer shall not relieve the contractor from any of his obligations.
- The engineer may control delegation with regard to his personnel, as well as revoke such delegation and assignment. The assignment or delegation shall be in writing and shall be notified to the contractor.

- The engineer's assistants shall be suitably qualified persons.
- The engineer shall have the right to issue instructions to the contractor or additional or modified drawings as the engineer deems necessary.
- The contractor shall comply with any instructions given by the engineer, whether oral or written.

In case of determining any matter or work, the engineer shall take a fair decision pursuant to the contract provided that the engineer takes due regard of all relevant circumstances. Moreover, the engineer shall give notice to both parties of this determination, with supporting particulars.

Rôle of the engineer under the FIDIC contracts

When the employer invites tenderers to submit competitive domestic or international tenders for one of his projects, the employer usually appoints a consultant engineer ahead to work for him and help him in the technical aspects necessary for the execution of the project.

The employer signs an agreement with this engineer, under which the latter sets up the tender documents including the drawings, specifications, bill of quantities, suggested contract draft to be concluded with the contractor, in addition to the preparation of preliminary studies and, in some cases, the participation in feasibility studies. The employer might also delegate the engineer to supervise the execution of the works which are the subject of the tender.

The engineer is not considered a party to this contract for construction, even though the contract he concluded with the employer includes several referrals to the contract concluded between the employer and the contractor in the aim of giving the engineer powers to supervise the work execution. These powers exceed, in the FIDIC contract, the rôle of the employer's representative in many matters.

Among these powers, we mention:

- issuing drawings for the contractor, including shop drawings;
- re-measuring the quantities of as-built works and calculation of their value for the purposes of the periodic payments and the final payment for the contractor;
- approving the monthly periodic payments (or according to what the employer and contractor agree upon);
- issuing variation orders when necessary;
- suspending or terminating the execution of all or part of the works (for a determined period);
- issuing taking-over certificates for the works;
- taking decisions with regard to the claim of the contractor to obtain additional payment or extension of time; and
- taking decisions the engineer deems appropriate to settle claims that might arise between the employer and contractor, after due consultation

> with both of them, while preserving their right to refer any of these decisions in case of non-consent to arbitration (domestic or international as per the contract provisions).

In exercising these powers, the engineer plays a double rôle—the engineer represents the employer in supervising the construction works and making sure that the contractor is executing these works in such a manner as to meet the contract conditions on the one hand and, on the other hand, whenever the engineer is required under the contract to exercise his discretion (as stipulated in the contract), he should take into consideration the impartiality and all circumstances while exercising this discretion pursuant to the contract conditions.

While the condition for the engineer to play an impartial rôle was implicit in the third edition of these Conditions (issued in March 1977), it became an explicit condition in the fourth edition (issued in 1987), where sub-clause 2-6 stipulated the following:

> "Wherever, under the Contract, the Engineer is required to exercise his discretion by:
>
> giving his decision, opinion or consent, or
>
> expressing his satisfaction or approval, or
>
> determining value, or
>
> 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 the circumstances."

The FIDIC contract requires the engineer not to consider itself as a representative of the employer only, but also to act in a professional, impartial and totally independent manner whenever he has to give a decision, opinion or consent, to express his satisfaction or approval or otherwise take action which may affect the rights of the employer or contractor.

Consequently, FIDIC contracts are based on the fact that the engineer is the main centre for the contract execution. By the mere signature of the contract concluded between the employer and contractor, the engineer is granted the absolute power to take the decisions he deems appropriate, either in his capacity as the employer's representative (or agent in some cases), or as a quasi-arbiter in case any dispute arises between the employer and the contractor and also in case a dispute arises between the engineer and the contractor. The engineer's decisions are binding on both parties throughout the whole period of execution of the works and any extension thereof regardless of consent or objection of any of them thereon.

Another addition introduced by FIDIC through the fourth edition is represented by the fact that whenever the engineer has to decide on the right of the contractor to any claim, whether a time extension or an amount of money or both, he has at first to consult with the parties to the contract and take his decision "after due consultation with the Employer and the Contractor".

Even though the drafting did not determine when the consultation is considered due or not, the consultation with the employer does not mean at all that the latter directs the engineer towards taking a specific decision because if he does so, he would have breached the contract just like the engineer in case of responding to the same. For this reason, it is important for the contract to stipulate the independence and total impartiality of the engineer.

The contract also set up the means and method to object to or have recourse against the decisions of the engineer in clause 67 of the fourth edition 1987 and clause 20 of the first edition 1999. It stipulated that these decisions remain binding on both parties until they are brought up, amended, changed or revoked before the engineer, if he deems it appropriate, through amicable settlement between both parties or through resorting to arbitration pursuant to the two abovementioned clauses (or to the courts in case of exclusion of the arbitration clause by the two parties).

In order for this rôle to be successful, it is necessary that the parties to the contract, i.e. the employer and the contractor, have faith that the engineer will act with total independence and impartiality.

Whereas in many cases the reason behind the claim is attributed to the act of the engineer, such as the delay in issuing or approving drawings or samples or in taking-over works, etc. some contractors consider it naïve to expect, to a certain extent, that the decision of the engineer, just like the contract, will be impartial and fair to the contractor, thus resulting in the engineer condemning himself. Consequently, the effective performance of the methods of settlement of the contractor's claims relies heavily on the sincere performance, by the engineer, of its impartial professional role.

Glyn Jones said in his book[2]:

> "The efficiency of the system set forth in the FIDIC Contract for the settlement of all the claims and disputes heavily relies on the strict compliance, by the Contractor, with the claim pursuant to its clauses and also the strict compliance, by the Engineer, with his role to settle the claims."

The contract imposes on the contractor to submit all its claims to the engineer through which all the communication between the employer and contractor are also expected to be made. In all cases and throughout the whole period of execution of the works and any extension thereof, the engineer is the highest arbitrator when evaluating the rights and claims pursuant to the contract conditions, save in case of resorting to arbitration.

Arbitration (domestic or international) is the last resort against the decision of the engineer. In order to maintain good relations with the employer, the contractor usually tries to avoid resorting to arbitration unless as a last solution, or if the sums of money which are the subject of the dispute are considerable sums that he cannot bear. Even in this case, the contractor usually hesitates in resorting to arbitration when the works are still under execution or not completed, or when

[2] Glyn Jones, *A New Approach to the International Civil Engineering Contract* (Construction Press, 1979), para.4.

the employer is regularly paying the periodic payments in spite of not being sufficient from the contractor's point of view.

Resorting to arbitration is generally undesirable by the contractor on a commercial level and might also put the bonds and retention money the contractor submitted to the employer at risk. Moreover, the contractor has almost all the time several claims it wishes to submit to arbitration in one dispute after obtaining the taking-over certificate in case of failure of the amicable settlement and after the total amounts which were the subject of dispute were accurately determined. Consequently, it is rare for the contractor to initiate arbitration prior to the completion of the works.

For these reasons and others, when a project is to be executed based on the FIDIC contract, the qualifications and reputation of the person who will be entrusted with the work of the engineer under the contract constitutes a crucial factor in the evaluation, by the contractor, of the quantity and quality of the risks foreseeable for the project, mainly the possibility of fairly and promptly evaluating his claims with the knowledge of the engineer without the need to resort to arbitration. The possibility that the employer has the ability and wishes to allow the engineer to perform his contractual role also constitutes a crucial factor. In view of the crucial role of the engineer, the FIDIC restricted the replacement of the engineer to the employer only. The last drafting reached in the first edition of 1999 of the Contract for Construction is as follows:

> "Sub-clause 3-4:
>
> 'If the Employer intends to replace the Engineer, the Employer shall, not less than 42 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer. The Employer shall not replace the Engineer with a person against whom the Contractor raises reasonable objection by notice to the Employer, with supporting particulars.'

We will treat now, in detail, the main claims:

"Physical Obstructions" and "Physical Conditions"

All the editions of the FIDIC Conditions stipulate as a condition that all these physical obstructions or conditions should be of a nature that cannot be foreseen by an experienced contractor. So, when can we say that this condition is met?

Reasonableness to foresee

The contingency of a specific event to occur can be determined by referring to the following points—the information (if available) on sub-surface (boreholes, soil report, foundations and plans) and hydrological conditions of the site, submitted by the employer within the tender documents, and the information the contractor should have obtained from investigations undertaken during the period of preparation of the tender:

> "The Employer shall have made available to the Contractor, before the submission by the Contractor of the Tender, such data on hydrological

> and sub-surface conditions as have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof.
>
> The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Tender, as to:
>
> > the form and nature thereof, including the sub-surface conditions,
> >
> > the hydrological and climatic conditions,
> >
> > the extent and nature of work and materials necessary for the executions and
> >
> > completion of the Works and the remedying of any defects therein, and
> >
> > the means of access to the Site and the accommodation he may require
>
> and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.
>
> The Contractor shall be deemed to have based his Tender on the data made available by the Employer and on his own inspection and examination, all as aforementioned."

The sentence between parentheses *(so far as is practicable, having regard to considerations of cost and time)* determines the extent of the examination and testing the contractor should have made to make sure of the correctness of the information submitted to it in the tender documents, or to obtain any information the contractor deems necessary to obtain to submit its tender.

If the period during which the tenders should be submitted is short (6 to 10 weeks for example), it may be practically difficult for the contractor to conduct thorough investigations or examinations. It is even impossible to ask the contractor to determine the extent of correctness of the information it is supposed to obtain by himself.

> "The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Tender."

Nature and extent of works necessary for execution by the contractor

When the contractor plans to build bridge foundations in a water stream during the season where the water level is low and, for conditions taking place outside the site, the water level did not decrease to the level set forth in the historical information pertaining to previous water levels and mentioned

in the tender documents, the change in the water level is considered in this case as an unforeseeable physical condition. The issue differs if the contractor had planned the construction of the foundation not based on the seasonal water level. Therefore, to prove that a physical obstruction or condition was unforeseeable, the contractor should prove that, at the date of submission of the tender, it could not have foreseen such obstruction or condition as an experienced contractor in spite of the aforementioned points.

Experienced contractor

Proving the existence of the unforeseeable condition cannot be based on what the layman can deduce from the previous data and information, but from what such information can clarify to an experienced contractor. Consequently, failure to take into account some of the physical obstructions or conditions by the employer will not entail the right of the contractor to claim if it becomes obvious that these obstructions and conditions could have been foreseen by an experienced contractor.

Nevertheless, if the engineer should have foreseen the occurrence of these obstructions or conditions (during the preparation of the tender documents for example) but did not, then the latter may sometimes be enough to justify the fact that an experienced contractor would not have claimed the same.

Extension of time and/or additional cost claim

In order for the contractor to have the right to claim in this regard, the contractor should prove that these physical obstructions or conditions caused the delay of the contractor's works situated on the critical path or made the contractor incur additional cost or both. The word cost here means all amounts spent by the contractor either inside or outside the site, including the administrative expenses but excluding any profit. The delay in some of the works not situated on the critical path does not necessarily entail an equal delay in the completion of the works.

Notification of the engineer with a copy to the employer

The contractor shall, immediately when he encounters physical obstructions, or unforeseeable bad climatic conditions, give notice to the engineer with a copy to the employer. The engineer shall make an inspection and immediate examination of the climatic condition, or physical obstruction, to specify whether it would have been foreseen by an experienced contractor, or not.

Moreover, the contractor shall, no matter what the other provisions of the contract might be and in case the contractor has the intention to claim any additional amounts, notify the engineer with a copy to the employer within the 28 days following the occurrence of this climatic condition or physical obstruction. The notice and the claim can be included both in one correspondence as long as the requirements of both clauses are met.

Pursuant to The Red Book, the contractor shall, upon the occurrence of the physical obstruction or the bad climatic condition, keep contemporary records to determine his costs and substantiate its claim.

Any instruction issued by the engineer to the contractor might give the contractor, in specific cases, the opportunity to claim based on independent additional bases. For example, if the engineer issues a written instruction to the contractor to suspend the works under sub-clause 40-1, agrees on a time extension pursuant to cl.44, or asks him to execute works not included in the contract which are unnecessary to overcome these conditions or obstructions, then the contractor can consider this instruction as a *variation order pursuant to cl.51*. If the instruction included a variation increasing the quantity of the works, the contractor will be entitled to a profit for these additional works. Consequently, when the engineer issues an instruction to the contractor pursuant to sub-clause12-2, the contractor shall be entitled, if appropriate, to take into consideration its rights entailed by the other clauses in addition to cl.12 or in accordance with the corresponding clauses in the Contract for Construction.

Although the engineer, after due consultation with the employer and the contractor, does not declare whether these obstructions or conditions could not be foreseen by an experienced contractor or that any instructions issued in connection therewith entails the right, for the contractor, to claim any compensation or time extension under cll.12, 40-1, 51, 44 or others or under the corresponding clauses in the Contract for Construction, the latter does not have any effect on the legal position of the contractor who can ask, as it is the case of all the other decisions of the engineer, the re-opening, reviewing, and reversing thereof in the arbitration. Usually, the award of the arbitrators is issued pursuant to the applicable law settling and ending all the disputes brought to arbitration unless they are amiable compositeurs.

Most frequently, following the signature of the Contract for Construction, events or variations may occur obliging the employer or engineer to make or request variations in the scope or nature of the works set forth in the drawings (particularly those set up at the time of submission of the tender or even at the time of concluding the contract), specifications or other documents of the contract based on which the invitation to the tender was released and the tender was submitted or other for causes attributed to any of them.

For example, the design might be inaccurate or incomplete, the specifications might be preliminary and inaccurate, the budget of the employee allocated for the project might change, or unforeseeable climatic conditions might occur, requiring variations in the volume or nature of the works based on which the contract documents were submitted.

Article 147 of the Egyptian Civil Code, or equivalent, stipulates the following:

> "The contract is the law of the parties. It cannot be cancelled or amended except by their mutual consent or for reasons admitted by the law."

So, what if the contractor does not accept to make these variations when requested by the employer or engineer? How can the variation requested by one party, the employer, be made especially since the works will be determined in the contract signed by both parties at least on the level of the concept and scope? Consequently, any variation in these works cannot be made unless following the mutual agreement of both parties. The contractor can take advantage of his strong position resulting from its possession of the site due to the performance of the main contract and refrain from agreeing on the variation unless for

a high price, or unacceptable time extension. To prevent the need for new negotiations with the contractor every time such variation is required or wished by the employer and the subsequent difficulties and delays, the contracts usually stipulate the right of the employer or his representative to introduce any amendments or variations to the works, thus obliging the contractor to execute them while preserving its right to a time extension and material compensation.

The contractor might wish to introduce some changes which might facilitate its work or better suit the resources it can procure to execute the works. In this case, the contractor is the party requesting the consent of the employer.

Authority of the engineer in issuing the variation order

The engineer, just like the employer, shall make any variation in the form, quality or quantity of the works or any part thereof (and not the whole contract), pursuant to cl.51 of The Red Book or cl.13 of the Contract for Construction. The contractor shall comply with the engineer's instructions in this regard as is the case for the engineer's authority related to the works.

The FIDIC Conditions grant the engineer wide authority in amending the works and issuing variation orders (VOs) since they stipulate the following:

> "The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:
>
> > increase or decrease the quantity of any work included in the Contract,
> >
> > omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor),
> >
> > change the character or quality or kind of any such work,
> >
> > change the levels, lines, position and dimensions of any part of the Works,
> >
> > execute additional work of any kind necessary for the completion of the Works,
> >
> > change any specified sequence or timing of construction of any part of the Works.
>
> No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 52. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor."

Clause 51 included two important amendments in comparison with the third edition (issued in 1977) of this contract, being as follows:

First amendment: Addition of the following expression in para.51-1(b), "(but not if the omitted work is to be carried out by the Employer or by another contractor)".

What is imposed by the law in some countries is included here in the contract itself, i.e. it forbids the employer or his representative from omitting or withdrawing any part of the works from the contractor to be executed either by the employer himself, or by entrusting them to another contractor. This action is considered a breach of the contract because it cannot be achieved by issuing a variation order.

Second amendment: Addition of para.(f) considering the order of the engineer to, "change any specified sequence or timing of construction of any part of the Works" as a variation order as set forth in the tender documents.

The tender documents may stipulate the execution of the works in a specified sequence. So, when the contractor studies its tender, he calculates it based on a specified time schedule to provide the liquidity, on the good exploitation of the manpower, equipment and resources and supposes specified execution methods suitable for the time sequence set forth in the tender documents. Therefore, the issue of a variation order, by the engineer, to change this sequence is considered a variation for which the contractor shall be entitled to compensation for any additional costs he incurred or to a time extension in consideration of any delay resulting therefrom.

Nevertheless, the authority of the Engineer in changing the works is not absolute. It is worth mentioning here the difference between the variation and the extra work. The variation only concerns works actually contracted for, while the extra work concerns works falling outside the scope of the contract although the financial and procedural dealing is one in both cases.

In case of a contract to build a 10-storey hotel, for example, the engineer may issue a variation order (or variation orders) to the contractor to amend the dimensions of the pillars, not to build walls, or change types of finishing, materials used or distribution of lighting or air conditioning. He cannot order him to add more floors, or build a small structure next to the hotel to be used as an accommodation for the labourers since they are considered as extra works.

The authority of the engineer ordering extra works is implicitly restricted to the quality and price of the works in the contract. If the engineer issues an order to execute extra works outside this scope, then they will not be subject to the contract. Consequently, the contractor may refuse to execute them, may execute them through an appendix to the contract, or may sign a new contract with regard thereto.

If the engineer usually refers to the Civil Code, which stipulates in art.148-2 of the Egyptian Civil Code, or the equivalent in other codes, the following:

> "A contract binds the contracting party not only as regards its expressed conditions, but also as regards everything which, according to law, usage and equity is deemed, in view of the nature of the obligation, to be a necessary sequel to the contract."

The authority of the engineer in issuing the variation orders is also restricted on the timing level since the engineer cannot issue variation orders during the

defects liability period (year of guarantee) after the completion of the works and if the engineer does issue orders, the latter will be outside the scope of the contract. Consequently, the contractor may refuse the execution of the orders, may execute them through an appendix to the contract, or may sign a new contract with regard thereto.

Two kinds of variation

The conditions include two types of variation orders related to the works from the contractor's point of view:

- *Type 1:* The engineer orders the contractor by means of a formal variation order to execute a work that includes a variation requested and determined by the engineer in writing and consequently confirmed by the engineer and approved by the contractor. For this reason, this variation order is considered as a new contract or an appendix to a site contract.
- *Type 2:* The engineer orders the contractor to execute a work including, in the opinion of the contractor, a basic variation without the engineer confirming it.

Clauses 51 and 52 of The Red Book and cl.13 of the Contract for Construction cover the first type of variation orders only. The clauses were drafted under the presumption that the engineer will identify the required variations and will issue an order therefore when required.

These two clauses did not take into consideration the fact that the engineer may issue an order to initiate other works without confirming that it is a variation order entitling the contractor to obtain additional payment or time. Nevertheless, the decision of the engineer of whether the order it issued is a variation or not is not considered final since the contractor still has the opportunity to challenge it and resort to arbitration.

Type 1: variation ordered and confirmed by the engineer

The variation order given by the engineer should be in writing: The FIDIC imposes as a condition that the variation shall be issued by the engineer by means of a written order and stipulates the following:

> "The Contractor shall not make any such variation without an instruction of the Engineer."

It adds:

> "Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within seven days, confirms in writing to the Engineer any

> oral instruction of the Engineer and such confirmation is not contradicted in writing within seven days by the Engineer, it shall be deemed to be an instruction of the Engineer."

Consequently, the issue of the order in writing, by the engineer, is a basic condition for payment in consideration of any works considered a variation. However, it is not required that the written order follows a specific form, it is sufficient, for example, to have the signature of the engineer on an amended drawing or minutes of a meeting or his acceptance of the written confirmation letter issued by the contractor in this regard within seven days of its receipt. Moreover, he can order the variation orally then confirm it in writing in the interim payment certificate (monthly statement) by paying the value of the works to the contractor.

Valuation of variations

The contract stipulates that the variations shall be valued at the prices and rates set out in the contract if, in the opinion of the engineer, the same shall be applicable. If the contract does not contain any rates or prices applicable to the varied works, the prices and rates in the contract shall be used as the basis for the valuation so far as may be reasonable, failing which, "after due consultation by the Engineer with the Employer and the Contractor", suitable rates or prices shall be agreed upon between the engineer and the contractor. In the event of disagreement, the engineer shall fix such rates or prices according to which are, as are in his opinion, appropriate and shall notify the contractor accordingly, with a copy to the employer.

It is worth mentioning that the prices and clauses set out in the bill of quantities in the contract include a profit for the contractor. For this reason, it is beneficial for the contractor to claim pursuant to cll.51 and 52 and not pursuant to other clauses entitling the contractor to claim the cost only without the profit, such as in cl.12, for example, or its equivalent in the Contract for Construction.

When entrusted with the execution of the variation orders or initiation of the additional works, the contractor shall be entitled to a time extension from the engineer in case these variation orders or additional works cause a delay in the execution of all or part of the works, thus exceeding the scheduled time agreed upon in the contract, in addition to financial compensation in consideration of being obliged to remain on the site for a period exceeding the time limit determined in the contract.

Condition of notification

Regarding the varied works and execution of the instructions issued by the engineer, the contractor shall, prior to the initiation of the varied work, give notice to the engineer of its intention to claim extra payment or rates or prices for the varied works which differ from the contract's prices or rates (excluding the case of work omission).

The non compliance, by the contractor, with the notice condition shall deprive the contractor of the submission of its claim pursuant to cll.51 and 52 and of the valuation of the varied works pursuant to sub-clause 52-2.

The contractor shall also comply with another condition stipulated in cl.53, being the keeping of the contemporary records mentioned therein and with what is stipulated in sub-clause 68-2 pertaining to the notices to both the employer and the engineer being as follows:

> "Any notice to be given to the Employer or to the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the respective addresses nominated for that purpose in Part II of these Conditions."

Type 2: Variation not confirmed by the engineer

Clause 67 of The Red Book and cl.20 of the Contract for Construction cover the method of final settlement of disputes through arbitration (international or domestic). There mentions that in case of resorting to arbitration:

> ". . . The said arbitrator/s shall have full power to open up, review and revise any decision, opinion, instruction, determination, certificate or valuation of the Engineer related to the dispute."

We deduct from the aforementioned that the contractor considers the instructions issued to it by the engineer to be a variation that the engineer refuses to confirm. These instructions, like any other decision or opinion of the engineer, are subject to review, revision and amendment when resorting to arbitration. Arbitrators are the final interpreters of the contract and the ones who decide, upon the request of the parties to arbitration, whether or not the instructions issued by the engineer are, in reality, a variation.

If the arbitrators decide that the works requested by the engineer to be carried out by the contractor fall outside the original scope of the contract and consequently represent additional works, then the contractor shall be entitled to extra payment and compensation in consideration of the execution of these additional works, as if the engineer issued a variation order by virtue of its authority.

A question arises about the possibility, for the contractor, to submit a claim whenever the works include works for which the contractor requires a variation order from the engineer who refuses the issue thereof.

Can the contractor in this case submit a claim in spite of the absence of a written order from the engineer? The answer is yes. Pursuant to the FIDIC Contract (originally based on English law), if the contract contains a comprehensive arbitration clause (such as in the case of cl.67 of The Red Book or cl.20 of the Contract for Construction), the arbitrators can in this case issue an award ruling extra payment and/or compensation for the contractor in spite of the absence of a written order from the engineer.

On the other hand, if the arbitrators think that this work falls outside the scope of the contractor's works contracted for, then there is often a letter, or another written correspondence from the engineer, such as a document signed by the engineer, or a written confirmation sent by the contractor following the issue of oral instructions by the engineer that was not refused by the engineer: all this can be explained as representing the required written order.

In case of a conflict of opinion between the contractor and the engineer about whether the order of the engineer is a variation order, or not, the contractor shall promptly give notice to the engineer of his intention to claim, along with the determination of the additional work he claims he carried out and the keeping of the contemporary registers to substantiate his claim.

The practical difficulty that the contractor might face in the claim based on a variation not confirmed by the engineer, is usually represented by the fact that the value of the claim itself, as well as the other claims which are the subject of dispute, might be insufficient to cover the expenses and time needed for the settlement of the dispute through arbitration with the aim of correcting the engineer's point of view (presuming that the dispute could not be settled amicably). The same difficulty arises in all the contractor's claims refused by the engineer. The latter reinforces the importance of the supervision of the execution of the FIDIC Contracts by an impartial engineer and by an employer who understands the nature of the contract and respects the role of the independent engineer.

Delay in completion of the works

The contracts usually stipulate that the contractor shall perform the contract within a relevant time. If the contractor fails to comply with the time for completion of the contract, he shall pay to the employer liquidated damages for such delay (delay fines in administrative contracts).

The latter is implemented in the FIDIC Conditions, whereas they stipulate the necessity to complete the works at a specific time previously agreed upon or to complete sections of the works at specific times previously agreed upon, otherwise, the contractor shall pay the employer compensation for the delay (liquidated damages).

However, circumstances often occur in contracts for construction, mainly international ones, hindering the contractor from completing the works on time. These circumstances may be attributed to the employer (such as being late in handing over the site to the contractor) or to the subordinates and employees he is responsible for (such as the delay in issuing or approving the drawings and samples by the engineer or non-payment of the contractor's dues at the times agreed upon), to the contractor or the subordinates he is responsible for (such as subcontractors, nominated subcontractors and suppliers) or to events beyond both parties' control (*force majeure*, adverse climatic conditions, natural catastrophes, wars, acts emanating from others, etc.).

When the works or any section thereof shall be delayed as a result of events or circumstances beyond the contractor's control, the contractor shall be entitled to two types of compensation, the first being the extension of time for completion of the works or any section thereof. Consequently, the time limits after the lapse of which the employer will be entitled to liquidated damages as a result of the contractor's delay shall be postponed.

The second type of compensation is the compensation for additional costs the contractor might incur as a result of the disruption to the contractor's time schedule and continuing to work in the site for an additional time.

In many cases, the contractor is entitled to an extension of the time of completion as well as compensation for the additional costs he incurred.

Extension of time for completion

Sub-clause 44-1 of The Red Book or sub-cl.8-4 of the Contract for Construction determines the cases when the engineer shall, either through personal initiative or by virtue of a request from the contractor, *after due consultation with the employer and the contractor*, grant the contractor an extension of time for the completion of all or sections of the works. FIDIC considers that the granting of the engineer of the initiative to grant the contractor an extension of time is necessary for the protection of the right of the employer in collecting the liquidated damages, which may be abated if the contractor is entitled to a time extension but was not granted the same.

The contract determines these cases and stipulates the following:

> "In the event of:
>
> the amount or nature of extra or additional work, or
>
> any cause of delay referred to in these Conditions, or
>
> exceptionally adverse climatic conditions, or
>
> any delay, impediment or prevention by the Employer, or
>
> other special circumstances which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible,
>
> being such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Contractor accordingly, with a copy to the Employer."

The circumstances granting the contractor the right to extension include the amount or nature of extra or additional work, which may include a variation or important increase of the actual quantities of the works in excess of the estimated quantities. Any cause of delay referred to in these conditions, which may include, amongst others, the causes of delay referred to in:

- Sub-clause 6-4 of The Red Book or sub-clause 1-9 of the Contract for Construction (*delays and cost of delay of drawings*); or
- Sub-clause 12-2 of The Red Book or sub-clause 4-12 of the Contract for Construction (*adverse physical obstructions or conditions*); or
- Sub-clause 20-3 of The Red Book or sub-clause17-4 of the Contract for Construction (*loss or damage due to employer's risks*); or
- Sub-clause 40-1 (*suspension of work*); or
- Sub-clause 42-2 of The Red Book or sub-clause 2-1 of the Contract for Construction (*failure to give possession*); or

- Sub-clause 51-1 of The Red Book or cl.13 of the Contract for Construction (*variations*); or
- Clause 65 of The Red Book or sub-clause 17-3 of the Contract for Construction (*special risks*).

Some of these clauses and sub-clauses explicitly refer to cl.44 of The Red Book or cl.8 of the Contract for Construction.

Exceptionally adverse climatic conditions, which include the unusual bad weather conditions whether occurring inside or outside the site.

Any delay, impediment or prevention by the employer. Although this cause was not among the causes set forth in the previous editions of The Red Book authorising the engineer to grant the contractor an extension of the time for completion, it has always been treated in the law taking into consideration that the contracting contract is a contract binding for both parties and consequently, delaying, impeding or preventing the other party from performing their contractual obligations is considered a breach of the contract.

Other special circumstances which may occur, other than through a default of or breach of contract by the contractor or for which it is responsible, including, in specific cases, the actions of the engineer who considers the employer to be responsible therefore and which were not mentioned in the conditions, even if they were included in para.(b) of this clause in addition to other issues not covered by the contract or to issues beyond the control of both parties.

Just as the claims clauses, the engineer shall, here too, observe the *due consultation with the employer and the contractor.*

The conditions of notification became stricter in the fourth edition and the notice became the subject of two new sub-clauses, being 44-2 and 44-3. Sub-clause 44-2 stipulates the following:

> "Provided that the Engineer is not bound to make any determination unless the Contractor has within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time."

Sub-clause 44-3 stipulates the following:

> "Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in Sub-Clause 44.2(b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event."

It is obvious from the foregoing that in the event where the engineer does not take a decision to extend the time after *due consultation with the employer and*

the contractor, the contractor shall do the following in order to be granted the extension:

- demonstrate the occurrence of one of the events set forth in sub-clause 44-1;
- notify the engineer of the same within 28 days of the occurrence of the event with a copy to the employer; and
- submit the claim particulars to the engineer within the following 28 days or any other period of time agreed upon by the engineer following the first notice; or
- when the event has a continuing effect, the contractor shall submit periodic particulars to the engineer at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event.

Moreover, cl.20-1 of the Contract for Construction stresses the fact that the failure, by the contractor, to give notice of a claim within such period of 28 days will lead to the abatement of the contractor's right to claim any additional payment or extension of time and the employer shall be discharged from all liability in connection with the claim.

Contractor's claim as a result of the extension of time

Sub-clause 44-1 determines the cases when the engineer shall, either through a personal initiative or by virtue of a request from the contractor, *after due consultation with the employer and the contractor*, grant the contractor an extension of time for the completion of all or sections of the works.

Although the extension of time discharges the contractor from his liability for bearing the liquidated damages for the delay (or delay fines in administrative contracts) for the extended period, the contractor shall, if he wishes to claim any additional amounts to claim them under the contract clauses or based on the applicable law.

Although cl.44 elaborated on the extension of time in case of delay, there is not a specific clause in the contract stating how to deal with the expenses or additional cost resulting from such delay. Nevertheless, the contract contains specific clauses entitling the contractor to recover additional costs arising from the delay in specific cases, including, but not limited to:

- sub-clause 6-4: *delays and cost of delay of drawings;*
- sub-clause 12-2: *adverse physical obstructions or conditions;*
- sub-clause 40-2: *engineer's determination following suspension;*
- sub-clause 42-2: *failure to give possession.*

In addition, there are other clauses entitling the contractor to obtain additional amounts for additional works, such as the variations ordered by the engineer under cl.51.

Based on these clauses, the contractor shall have the right to claim compensation for the costs incurred in consideration of any additional works if they lead to a delay in the completion of all or any sections of the works and also to claim compensation for the loss of profit as a result of such delay. These additional costs might arise from the administrative expenses during the extension of time whether inside or outside the site, from the decrease in productivity, effect of inflation and cost of expedition of works if the contractor is requested to complete the works at the due time although he was granted an extension of time, etc.

Even in the case of the absence of one or more specific clauses in the contract entitling the contractor to compensation for the additional costs he incurred as a result of the delay, he shall have the right to claim these costs pursuant to the applicable law, whereas the majority of the legal systems give any of the two parties to the contract the right to compensation as a result of the delay in the completion of the works if such delay is caused by reasons attributed to the other party (the case set forth in sub-clause 44-1(d)), or to whoever the other party is responsible for. It is unclear how possible it is for the contractor to get compensation as a result of the delay caused by a third party and this is mainly related to the drafting of the contract.

Whereas the FIDIC Conditions are nothing but a model drafting that can be amended before being used, either through deletion or through addition, based on Part II thereof called "Conditions of Particular Application" and on the applicable law, circumstances and surrounding conditions of each and every project, we draw attention to the importance of accurately studying these points when using the contract and not rely on the fact that the FIDIC Contract is an international contract used without amendment.

Other claims

Since the contract conditions are shown on the basis of the flexible price and not the fixed price, the contractor who intends to conclude a contract pursuant to the FIDIC Conditions should understand very well his rights to claim under the contract. The contractor should, following the signature of the contract, ensure it:

- identifies the events giving rise to the claims immediately upon their occurrence;

records all the facts entitling him to obtain his claims in detail, as well as all the other relevant facts;

- send notices related to the claims to the engineer (with copies to the employer) and comply with the periods thereof; and
- keep the contemporary records and all that is necessary to secure his rights.

Consequently, the contractor shall train his cadres on the methods of claims, as well as on the methods of keeping files, information and financial documents.

In this edition, the importance of keeping all the contemporary records (minutes of meetings, site reports, on-site meetings, drawings, copies, reports and

financial statements) for the claim increases. The wise contractor should prepare for the claim as if he was preparing for arbitration. His success in obtaining the claim depends on his capacity to prepare the supporting contemporary records.

Procedure for claims and disputes

Procedure for claims

In addition to any notice of claim the contractor has to submit pursuant to the contract conditions, he shall also follow the method of claim set forth in cl.53 of the contract conditions.

Clause 53 covers the claims for additional payments and contains the following five issues to be followed by the contractor:

- condition of giving notice of his intention to claim (sub-clause 53-1/1987 and 20-1/1999);
- condition of keeping contemporary records to substantiate the claim (sub-clause 53-2);
- condition of submitting the claim particulars to the engineer (sub-clause 53-3);
- condition of failing to comply with this method of claim (sub-clause 53-4); and
- method of payment of claims (sub-clause 53-5).

As for claims regarding the extension of time, they are covered independently in cl.44.

Condition of giving notice, by the contractor, of his intention to claim (sub-clause 53-1)

If the contractor intends to claim additional amounts pursuant to these conditions or to other ones, he shall first give notice to the engineer of his intention to claim in implementation of sub-clause 53-1, stipulating the following:

> "Notwithstanding any other provision of the Contract, if the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer, with a copy to the Employer, within 28 days after the event giving rise to the claim has first arisen."

This notice, like all other notices in this contract, shall be issued in writing within 28 days, pursuant to cl.67 (The Red Book) or cl.20 (Contract for Construction). This notice only requires mentioning the event giving rise to the claim and giving notice to the engineer of the contractor's intention to claim by reason thereof. It is not necessary to state the grounds of the claim or any details about its value.

This prompt notice shall have several aims. It enables the engineer to investigate the claim facts and financial results resulting therefrom while the event is

still recent and existing. It is also a tool to notify the employer or his financial administration of the foreseeable amendments in the contract amount and consequently in his financial budget. Finally, the early recognition of the claim and its grounds enables the finding of a prompt solution or its avoidance.

Therefore, if both parties were not able to avoid the grounds of the claim, giving notice of the same within these 28 days is purposeless. An arbitral tribunal, on which the author of this article participated in a dispute between a contractor and an Arab government with regard to a project to construct a seaport, confirmed this principle. Prior to concluding the contract, both parties knew of the possible existence of four mines out of 400 mines that the demining units of the Government were not able to find when clearing the site before handing it over to the contractor. When the contractor submitted the final statement upon the completion of the project 54 months following the initiation of the works, it submitted a claim demanding several millions of dollars under the pretext of performing the works under such conditions, and being fearful of the possible risk of damage to his equipment and/or labourers as a result of the possible presence of these four mines. The Government pleaded, saying that the contractor did not give notice of his intention to claim pursuant to cl.20-1, adding that this risk did not materialise and that it did submit to the contractor, prior to the signature of the contract, a certificate stating the possible explosion of these mines during the battles or being possibly washed away by the ebb and flow of the sea and thus requested the refusal of the claim.

But the arbitral tribunal did not take this plea into consideration and issued an award ruling the right of the contractor to compensation, justifying that the non taking into consideration of the compliance, by the contractor, with the provisions of cl.20-1 and of the non-notification of the employer of his intention to claim at the set period is due to the announcement, by the employer, of the tender in spite of this possibility and consequent wish to execute the project and was not able to take any procedure in this regard whether the notice was submitted within 28 days from the initiation of the work or at a later time.

Condition of keeping contemporary records (sub-clause 53-2)

Upon the happening of the event covered by the contractor's notice of claim, the contractor shall keep contemporary records as may reasonably be necessary to substantiate his claim.

Sub-clause 53-2 stipulates the following:

> "Upon the happening of the event referred to in Sub-Clause 53.1, the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make. Without necessarily admitting the Employer's liability, the Engineer shall, on receipt of a notice under Sub-Clause 53.1, inspect such contemporary records and may instruct the Contractor to keep any further contemporary records as are reasonable and may be material to the claim of which notice has been given. The Contractor shall permit the Engineer to inspect all records kept pursuant to this Sub-Clause and shall supply him with copies thereof as and when the Engineer so instructs."

Contemporary records can include records, invoices, statements of labour costs, appropriate equipment, copies and the like, substantiating the contractor's claim which may vary afterwards as per the case.

The inspection, by the engineer, of the contractor's contemporary records pursuant to this sub-clause aims to protect the contractor. Following the aforementioned and presuming that the contractor complies with the instructions of the engineer with regard to the quality of the contemporary records he must keep, it will be difficult for the engineer or employer to object or refuse the records substantiating the contractor's claim.

Condition of substantiating the claim (sub-clause 53-3)

Within the 28 days following the notice of claim pursuant to sub-clause 53-1 or any reasonable time as may be agreed by the engineer, the contractor shall send to the engineer, pursuant to sub-clause 53-2, an account including the following:

- particulars of the amount claimed; and
- grounds upon which the contractor based his claim.

For example, the contractor should determine the contract clauses on which he based his claim. If the event giving rise to the claim has a continuing effect, the contractor shall submit interim accounts every 28 days in addition to a final account.

Sub-clause 53-3 stipulates the following:

> "Within 28 days, or such other reasonable time as may be agreed by the Engineer, of giving notice under Sub-Clause 53.1, the Contractor shall send to the Engineer an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based. Where the event giving rise to the claim has a continuing effect, such account shall be considered to be an interim account and the Contractor shall, at such intervals as the Engineer may reasonably require, send further interim accounts giving the accumulated amount of the claim and any further grounds upon which it is based. In cases where interim accounts are sent to the Engineer, the Contractor shall send a final account within 28 days of the end of the effects resulting from the event. The Contractor shall, if required by the Engineer so to do, copy to the Employer all accounts sent to the Engineer pursuant to this Sub-Clause."

Penalty of failure to comply with the procedure for claims set forth in the previous sub-clauses (sub-clause 53-4)

In order to achieve the compliance with the new procedure for claims set forth in cl.53, sub-clause 53-4 stipulates that in the event that the contractor does not comply with the provisions of cl.53, then his entitlement to payment in respect thereof will not exceed such amount that can be verified by contemporary records.

Sub-clause 53-4 stipulates the following:

> "If the Contractor fails to comply with any of the provisions of this Clause in respect of any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 67.3 assessing the claim considers to be verified by contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub-Clauses 53.2 and 53.3)."

If the contractor fails, for example, to:

- give notice to the engineer of his intention to claim, with a copy to the employer, within 28 days pursuant to sub-clause 53-1; or
- permit the engineer to inspect the contemporary records substantiating the claim and supply him with copies thereof pursuant to sub-clause 53-2; or
- send the engineer an account or accounts requested pursuant to sub-clause 53-3. The entitlement of the contractor to the payment of the claim's amount will not exceed such amount that can be verified by the contemporary records submitted by the contractor (from the point of view of the engineer, arbitrator or arbitrators).

It is unclear here whether sub-clause 53-4 presents a penalty to the contractor as a result of his non-compliance with cl.53. For example, if the contractor keeps contemporary records entitling him to obtain the whole amount of the claim, does the failure to comply with the requirements of cl.53 subject him to any penalty?

Moreover, sub-clause 53-4 does not differentiate between the complete or partial non-compliance with cl.53. For example, if the notice of claim is delayed until the 29th day instead of the 28th day as in sub-clause 53-1, or if the copy giving notice of the intention to claim is not sent to the employer, will the contractor in such case be subject to the same penalty he is subject to when he completely ignores cl.53?

For these reasons which often cause lengthy legal discussion, cl.20-1 of the Contract for Construction was conclusive and stipulated the following:

> "If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance. If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim."

Method of payment of claims (sub-clause 53-5)

In the previous editions of these Conditions, it was unclear whether the payment of the contractor's claims approved by the engineer is done by the employer pursuant to cl.60 or pursuant to other bases not specifically provided for under the contract.

Sub-clause 53-3 notes that the contractor can submit his claim with the other interim payments of the contract in the monthly statement of account, submitted to the engineer pursuant to sub-clause 60-1 that clarifies the amount of the payment he considers himself to be entitled to up to the end of the month in respect of:

> ". . . the value of the Permanent Works executed, any other items in the Bill of Quantities including those for Contractor's Equipment, Temporary Works, dayworks and the like, the materials and Plant delivered on the site for incorporation in the Permanent Works but not incorporated in such Works, adjustments under Clause 70, any other sum to which the Contractor may be entitled under the Contract."

The last para.(e) contains the claims that the contractor may submit pursuant to the conditions of this contract. The contract stipulates that the engineer may not acknowledge or give his opinion about these claims unless *after due consultation with the employer and the engineer.*

(Based on practical experience, we see the necessity in separating these claims in a statement independent from the monthly statement because we consider the variation orders as appendioes to the contract concluded at the site (site contracts) during the execution of the works and according to which the period and price of the contract changes.)

Moreover, sub-clause 53-5, entitled *payment of claims*, stipulates the following:

> "The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to Clause 60 such amount in respect of any claim as the Engineer, after due consultation with the Employer and the Contractor, may consider due to the Contractor provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine the amount due. If such particulars are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment in respect of such part of the claim as such particulars may substantiate to the satisfaction of the Engineer. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer."

This sub-clause is considered to be of great benefit to the contractor because it enables him to include the value of the claim in the monthly statement (current statement), pursuant to sub-clause 60-1 and sub-clause 60-2. The engineer shall, "within 28 days" from receiving such statement as stipulated in sub-clause 60-1, approve it and refer it to the employer stating the amount he considers due and payable to the contractor *after due consultation with the employer and the contractor.*

The engineer shall take his decision with regard to the contractor's claim within a determined period of time. Although the engineer may consider the particulars

submitted by the contractor to be insufficient to substantiate the whole of the claim, the contractor shall be entitled to receive the part of the claim proving the correctness of these particulars as approved by the engineer. If the employer fails to pay any claim approved by the engineer (or part of the claim) within 28 days, the contractor shall have the right to be paid interest on the amounts which payment was delayed in the percentage determined in the appendix to the tender.

Claims deadlines

If the contractor has any claims that were not paid or settled upon completion of the works, he shall include them in his final statement to be submitted within 84 days after the issue of the taking-over certificate by the engineer. As for claims occurring after the final taking-over (during the defects liability period), the contractor shall include them in the statement after the lapse of the defects liability period to be submitted within 56 days after the lapse thereof (year of guarantee). The contractor should be cautious in this regard, otherwise the unsettled claims will be subject to sub-clause 60-9, which stipulates the following:

> "The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.5."

Disputes

Usually, the contractor submits its claims to the engineer's representative who, unlike the engineer, is often on the work site. The engineer appoints the engineer's representative, pursuant to sub-clause 2-4, which stipulates the following:

> "Appointment of Assistants
>
> The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in the carrying out of his duties under Sub-Clause 2.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to carry out their duties and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative."

If the contractor was not convinced of the manner which the engineer's representative dealt with his claim, he can refer the claim to the engineer pursuant to sub-clause 2-3(b), which stipulates the following:

> "The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and the Contractor.
>
> Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that:
>
> > any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof;
> >
> > if the Contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication."

The engineer shall confirm, reverse or vary the decision of the engineer's representative.

If the contractor disapproves of the manner in which the engineer dealt with his claim, this disagreement shall be considered the grounds for the dispute with the employer. In this case, the contractor shall follow the procedures provided for under cl.67 of The Red Book or cl.20 of the Contract for Construction. In summary, the contractor shall refer the claim, once again, to the engineer, taking into consideration that it is this time a dispute in order for the engineer to give a decision with regard thereto.

If the contractor disapproves of the engineer's decision (or if the engineer does not give his decision within 84 days), the contractor shall give notice to the engineer of his intention to start arbitration procedures related to this dispute. Accordingly, if the dispute is not amicably settled within the 56 days following the notice, the contractor can refer the dispute to arbitration.

The FIDIC Conditions stipulate that the arbitration will take place pursuant to the Rules of Conciliation and Arbitration of the International Chamber of Commerce (Paris), unless the parties agree on other rules (such as the United Nations Commission on International Trade Law (UNCITRAL) Rules, for example) or on another place, such as the Cairo Regional Centre for International Commercial Arbitration (CRCICA).

This issue will be covered in detail in another study.

Conclusion and recommendations

As mentioned earlier, the drafting of the FIDIC forms of contract, since 1957 until 1995, is an unsound basis from a legal point of view, where the author considers that the obligations and rights of both contracting parties, being the employer and the contractor, are not related to the quality of the work contracted for. The previous FIDIC contracts were diversified in the drafts related to civil, mechanical and electrical contracting works, while the legal obligations and rights of the parties did not differ with the quality of the works.

The obligations of the contractor, as determined by the Civil Code, are summarised in the following three obligations:

1. Complete the works.
2. Hand over the works.
3. Guarantee the works.

On the other hand, the obligations of the employer, as determined by the Civil Code, are summarised by the following three obligations:

1. Enable contractor to work.
2. Take over the works.
3. Payment.

The author considers that the new contracts issued by FIDIC in 1999 are the rectification of a wrong path they took since the issue of the Contract for Electrical and Mechanical Works in 1969.

Whereas the FIDIC is a non-profit organisation, the author submitted the following suggestions to FIDIC in its conference held with the New International Chamber of Commerce in Cairo on April 9 and 10, 2005, hoping that they will be studied as they should:

- to announce the cancellation of the previous contracts, or at least recommend the use of the editions issued in 1999 as much as possible; or
- to announce at least the cancellation of the Contract for Electrical and Mechanical Works and use the Contract for Construction instead in the normal works, as well as the Contract for Design-Build and Turnkey (New Orange Book).

Appendix

Occurrence of the event giving rise to the claim

28 days
Preparation of a fully detailed claim within 42 days after the contractor became aware, or should have become aware.
Yes.
The contractor has submitted a draft of the claim.
No.
The contractor shall not have the right to claim any compensation for the period, or cost.

42 days
Did the engineer reply?
No.
Refer the issue to the dispute adjudication board.

84 days
Did the board reach a decision?

No.
Were the two parties satisfied?
No.
Yes.
Were the two parties satisfied?

28 days
Yes.
No.

28 days
The damaged party shall give notice to the other party.
Attempt at amicable settlement.
Yes.

56 days
Did any of the parties give notice of non-satisfaction?
Yes.
No.
Did the settlement succeed?
No.
Settlement through resorting to arbitration.
Yes.
The dispute was settled.
Yes.
Clause 20 claims.