
Is FIDIC-99 Contractor Friendly?



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1.0 BACK GROUND

The FIDIC conditions or its amended versions are the most popular forms of contract used widely in the construction industry in international construction contracts. The International Federation of Consulting Engineers (Federation Internationale des Ingenieurs Conseils or FIDIC) has issued five editions of such forms of contracts since 1957. The latest edition was issued in 1999 after 12 years of successful practice since its previous edition in 1987. The 1999 edition with its 20 clauses, compared to the 72 clauses in 1987 edition, has addressed several contentious issues and some new concepts to deal with in the ever evolving construction industry. Most of those new concepts addressed in 99 editions are benefiting to both the employer and the contractor to safe guards their respective rights. Further, this version has taken every effort to keep the balance of risks between the contracting parties. In the following sections of this paper, it has analyzed in details to what extent FIDIC-99 is contractor friendly (or not).

When you focus closely on some of the key clauses, such as priority of documents, signing of contract agreement within a specified time period, demand for financial arrangement of the employer for the project, formulae for price fluctuation, new rate for increase of BoQ quantity, wide range of possibility to claim extension of time and additional payments, entitlement for loss of profit and release of performance security upon termination by the contractor, introduction of dispute adjudication board, it can be considered to be contractor friendly.

At the same time, from the employer's point of view number of concepts such as no access to the site shall be made without submission of the performance security,

employer's entitlements to claim extension of time for defects notification period and additional payments, removal of FIDIC -87 clause which is related to that the engineer act impartially, claim against performance security without prior notice to the contractor, payments to the contractor within 56 days instead of 28 days in FIDIC-87, in case of no notices for extension of time or for the additional payments claims from the contractor the employer has no liability for them, entitlement to terminate for convenience can be considered to be the employer friendly.

Further to foregoing, it can be concluded that FIDIC-99 is a standard form of contact fair to both parties. It has kept the risk fair between the both parties.

2.0 INTRODUCTION

Several contracts are signed or entered into at a daily basis. These contracts may have an agreement or may not have an agreement. All the contracts should have an agreement but all the agreement may not fall under the contract. Out of all these contracts, the construction contracts are peculiar and they have their own characteristics, in terms of the form of the contracts upon which parties sign an agreement, and duration of contracts, etc. The duration of construction contracts generally takes a longer period compared with the other commercial contracts. In addition to the main two parties to the contract it would have domestic sub contractors, nominated sub-contractors, domestic suppliers, nominated suppliers, design and supervision consultants, project manager, local authorities, project financier etc. To deal with this complex nature of construction contracts, in particular in the international construction contracts, it needs sophisticated and well drafted conditions of contract

to execute the contract until the final account has been signed or until all the disputes have finally been resolved. To deal with this, several international conditions of contract have been issued by various professional institutions, world bodies, and financial institutions etc. Few of them are:

- The International Federation of Consulting Engineers (Federation Internationale des Ingenieurs Conseils, (FIDIC)),
- Institute of Civil Engineers, (ICE) in Great Britain ,
- World Bank,
- United Nations, etc.

The meaning of international construction contracts may have different forms; (i). the law of the country where the contract is made differs to one party, or (ii). the project is constructed in a different country from another party, (iii) two different nationals signed a contract for a construction. Following the formation of FIDIC with

three national associations of consulting engineering in Europe in 1913, FIDIC has invented its first Conditions of Contract (International) for Works of Civil Engineering Construction in August 1957. Since then for the last 41 years FIDIC has issued five such editions; second edition in July 1969, the third in March 1977, fourth edition in September 1987, and the current edition in 1999 to be used in the international constructions contracts. The fourth edition in 1987 has not been revised for 12 years until the new version was issued in 1999. The fourth edition, unlike other first editions, has been used extensively in the international construction industry. With the issuance of the 1999 edition, industry professionals, and employers were in a dilemma when selecting the form of contracts that should be used for their developments. FIDIC 1999 has published four new standard forms of contract designating from the designers point of view. The FIDIC 4th edition in 1987 has also published four forms of contracts. The table-1 below gives the forms of these two editions.

Table 1
Forms of Contract in FIDIC 1987 and 1999

FIDIC 1987	FIDIC 1999
Conditions of Contract for Works of Civil Engineering Construction – 4th edition (Commonly referred as the Red Book).	Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer. (Commonly referred as the Red Book).
Conditions of Contract for Electrical and Mechanical Works – 3th edition (Commonly referred as the Yellow Book).	Conditions of Contract for Electrical and Mechanical Plant, and for Building and Engineering Works Designed by the Contractor (Commonly referred as the Yellow Book).
Conditions of Contract for Design-Build and Turnkey – 1st edition in 1995 (Commonly referred as the Orange Book).	Conditions of Contract for Engineering, Procurement, and Construction and Turnkey (Commonly referred as the Silver Book).
Works of Civil Engineering - Subcontract- 1987	Conditions of Contract for Short Form of Contract (Commonly referred as the Green Book).

For this paper, the Conditions of Contracts for Construction of Engineering Work Designed by the Employer (red book) issued in 1999 is selected. It has attempted to explore to what extent this conditions of contract are friendly to the parties to the contract. The exploration has been specifically carried out with reference to the FIDIC 1987 and generally with New Engineering Contracts, Third Edition, (NEC-3) which is commonly used in the international construction contracts. The arguments have been compiled in general aspects and on the specific core areas of the industry as follows:

- General aspects
- Variations
- Payments
- Extension of time
- Suspension and termination
- Claims and disputes

The conclusion to “Is FIDIC 99 Contractor Friendly?” may be subjective depending on the parties to the contract. The strength of arguments will depend on how other forms of contract share, or allocate the risk between the parties. The distribution of risk of the parties and user friendliness of the conditions of contract to the parties would be the central pivot of the final tender sum. Therefore, every effort has been made to have an independent approach to the subject matter in view of reaching an open conclusion.

3.0 GENERAL ASPECTS

3.1 Definitions

The key words used throughout a form of contract give consistency to the meaning of such words. It gives a standard meaning to all parties to the contract. In order to assist the user to understand the document more readily and more clearly and to use easily, definitions have been selected as groups of heading/ topic in FIDIC-99. The FIDIC-87 also has listed out such definitions in a manner of group forms but without separating as distinct group heading or topic. FIDIC-99 has six headings/topics and 58 definitions whereas FIDIC-87 has seven headings/topics with 32 definitions. This is an increase of 82% over the FIDIC-87 (26 new definitions). This is a fair increase after 12 years of industry development since 1987. The industry has faced a number of disputes due to lack of contractual definitions in the contact for some commonly used key words.

New definitions like Letter of Tender would emphasize the fundamentals of Offer and Acceptance theory of the law of contracts with the definition of Letter of Acceptance. The other major shift in the FIDIC-99 definitions is identifying the issues related to disputes and addressing them in the definitions. In this context new definitions like DAB, Base Date, Force Majeure, Unforeseeable, and Variation would give advantage to the both parties.

The definition for contract sum is classified in two forms; Accepted Contract Amount, and Contract Price. This has cleared the issue related to the final contract sum at the submission of the final statement. According to FIDIC-99 the definition of the Accepted Contract Amount is similar to the definition of Contract Price in FIDIC-87 which is the sum stated in the letter of acceptance and it is a fixed sum. However, the definition of Contract Price in FIDIC-99 is a variable price until the agreement at the final certificate upon submission of final statement by the contractor.

NEC-3 has identified 19 definitions under General core clause 11(Identified and defined terms). Most of such definitions are similar to FIDIC versions except sub-clause 11.2. (14) The Risk Register. This is a new feature compared to the FIDIC version.

3.2 Priority of Documents

In a situation of contractual disputes or ambiguities in a contract, the hierarchy between various documents which form the contract documents would greatly help to resolve disputes or ambiguities in an amicable manner to both parties. Identification of more documents in the forms of contract would provide more clarity of order of precedence in the documents that are forming the contract. The FIDIC-99 has clearly identified eight such documents and FIDIC-87 has five such documents, whereas NEC-3 has not identified such a list of priority of documents. NEC-3 has included a core sub-clause 17.1, Ambiguities and Inconsistencies from which the Project Manager has been empowered to resolve such ambiguity or inconsistency. In this situation, the contractor would not have an opportunity to assess the order of precedence of the tender documents and subsequent contract documents until and unless they found ambiguity or inconsistency during the post contract stage. The table-2 below, illustrates the priority of documents set out in both FIDIC-87 and 99. Further the illustration in table 2 reflects that it has cleared the debate in the industry on the order of precedence of specifications and drawings after 12 years.

Table 2- Priority of Documents

FIDIC 1987 – Clause 5.2 Priority of Contract Documents	FIDIC 1999 – Clause 1.5 Priority of Documents
(1) The Contract Agreement (if completed); (2) The Letter of Acceptance; (3) The Tender; (4) Part II of these Conditions; (5) Part I of these Conditions; and (6) Any other document forming part of the Contract.	(a) the Contract Agreement (if any), (b) the Letter of Acceptance, (c) the Letter of Tender (d) the Particular Conditions (e) these General Conditions (f) the Specifications (g) the Drawings, and (h) the Schedules and any other documents forming part of the Contract.

3.3 Contract Agreement

Late signing of contract agreement or in some cases no contract agreement being signed at all by the parties, is a common failure by the parties in construction contracts. Following issuance of the letter of acceptance, parties take their own time to finalize the contract agreement and prolong due to various issues. In many instances, the contractors are taking very negative approach to finalize the contract agreement and sign the same. Most of the standard forms of contract have not given any remedial actions to this issue or a time frame to sign the agreement.

The FIDIC-99, sub-clause 1.6, Contract Agreement, states that 28 days after the contractor receives the letter of acceptance, parties shall enter into a contract agreement. This placed both the parties to fulfill an expressed contractual obligation within a set time limit. In FIDIC-87 sub-clause 9.1, Contract Agreement, does not have such a time period. According to the same, the contractor shall only enter into and execute contract agreement if employer is called upon to do so. This leaves the desecration on the employer and the contractor would be in a vulnerable situation. The provision in FIDIC-99 has relieved the contractor from an open risk.

3.4 Possession of Site

According to FIDIC-99, sub-clause 2.1, Right of Access to the Site, has placed some restriction to the contractor's right to access the site. This is a new development towards the employer's benefit. The employer may withhold access

to the site or possession until the contractor submits the performance security. Thereby, employer can make sure his works have a security in case of early default by the contractor. There is no such prerequisite for possession of site in FIDIC-87, sub-clause 42.1, Possession of Site and Access to Thereto, nor in NEC-3, core clause 33.1, Access to and Use of the Site.

3.5 Employers' Financial Ability

In the construction industry the majority of employers are the government sector, multinational companies and major property developers. With these influential employers, the contractors have little or no bargaining power. The contractors' have no clue of the financial ability of the employers or their financial arrangement to the project on which the contractors have committed contractually. No standard forms of contract have addressed this vital matter in the contract. FIDIC-99 sub-clause 2.4, Employer's Financial Arrangements, has given rights to the contractor to request reasonable evidence of financial arrangement made to pay the contract price. The employer shall submit such evidence within 28 days after receiving any such request from the contractor. This is a very positive provision towards the contractor and would increase the confidence among the contract parties.

3.6 Engineer's duty and Authority

Unlike FIDIC-87, sub-clause 2.6, Engineer to Act Impartially, FIDIC-99 has not given reference to the engineer required to exercise the discretion granted to him/her under the contract impartially within the

terms of contract. The engineer is deemed to act for the employer unless expressly stated in particular applications of conditions.

This is somewhat a wide variance from the original concept of engineer's impartial role in the contract administration. This might expose the contractor to an unknown risk while pricing the tender during the post contract stage.

3.7 Replacement of the Engineer

This is a new provision in the FIDIC-99 form of contract. The engineer has a major role in the contract administration. Similarly, depending on the status, and credibility of the engineer, it has a considerable impact on the tender price of the contractor. Therefore, any subsequent replacement of the engineer may have an impact on the contract price. The sub-clause 3.4, Replacement of the Engineer, provides a fair and reasonable compromise between the parties. If the employer intends to replace the engineer, the contractor must receive 42 days notice with details of the newly nominated engineer. Further, it has given the opportunity for the contractor to notify his/her reasonable objection for such a replacement.

3.8 Performance Security

In a construction contract, the employer may anticipate the potential problems related to the performance of the contractor and possible default by the contractor. It is a common requirement of the employer to request a performance security from an approved and recognized bank or financial institution. FIDIC-99 sub-clause 4.2, FIDIC-87 sub-clause 10, and NEC-3 Optional clauses X13 have identified the requirement of Performance Security and Performances Bond respectively. NEC-3 has identified insurer as an institute to provide a performance bond. The FIDIC-99 has specifically identified that the employer shall not make a claim under the performance bond/security except at a defined event in the sub-clause. This gives sufficient time to the contractor to remedy any default. Further according to FIDIC-99, the employer shall return the performance security within 21 days after receiving a copy of the performance certificate whereas according to the FIDIC-87 the employer shall return the performance security within 14 days after of the issue of the defects liability certificate. In accordance with the sub-clause 10.3 of FIDIC-87, Claims under Performance Security, prior to making a claim the employer shall notify the Contractor stating the nature of the default. No such provisions have been made in both FIDIC-99 and NEC-3.

In overall, both the clauses have their own merits and demerits with regards to apportion of risks towards to the contractor. One of a salient feature in FIDIC 99 is that it does not require giving prior notice to the contractor for claims under performance security. In the meantime, the employer is not entitled to claim against security unless in specified events in the sub-clause. The events which are entitled to claim against the security are not specified and it is open to the employer's discretion. Considering these aspects, FIDIC-99 provision is more moderate and the risk has been identified to an extent which can be assessed by the contractor.

3.9 Records of Contractor's Personnel and Equipment

In order to facilitate the evaluation of the claims and variations, it is necessary to have established a basic contemporary record-keeping from the commencement date of the contract. In accordance with the FIDIC-99 sub-clause 6.10, Records of Contractor's Personnel and Equipment, the contractor shall keep-on submitting such records in each calendar month until the completion of all snags works and until the issuance of the taking over certificate. FIDIC-87 is less rigorous on this requirement. The Sub-clause 35.1, Returns of Labour and Contractors' Equipment, needs to be delivered from time to time if required by the Engineer. Further, as per the FIDIC-99, no period for payment stated in sub-clause 14.7, Payment, commences until the relevant report is submitted under sub-clause 4.21, Progress Report, including the records of contractor's personnel and equipments as described in sub-clause 6.10.

Sub-clause 6.10, of FIDIC-99 has imposed onerous work on the contractor in order to comply with the site records submitted to the Engineer. No such requirement had been placed with the engineer.

3.10 Force Majeure

Most of the countries don't recognize the force majeure for the contract parties to relieve from their contractual obligations. In the meantime, most of the standard forms of contract have not specified the provision of force majeure. FIDIC-87 has identified some risks from which both parties, in particularly, the contractor is released from his/her obligations. Most of the special risks identified in FIDIC-87 under sub-clause 65.2, Special Risks, and, 65.4, Projectile, Missile have been recognized as force majeure in the FIDIC-99 clause 19.1, Force Majeure.

This is a positive step to address the industry ambiguity in respect of force majeure. The parties now are aware of the circumstances to which their risks are exposed under the pretext of force majeure. A part of employer's risks stated in FIDIC-87 sub-clause 20.4, Employer's Risks, also are categorized as force majeure. It has however qualified that events leading to force majeure beyond the clause 19.1 stated in the sub-contractor's agreement does not fall under the clause 19.1.

There is no defined force majeure clause in NEC-3. However, similar events which leads to the force majeure defined in FIDIC-99 have been identified in core clause 80.1, Employer's Risks, which is somewhat similar to the provision set-out in FIDIC-87.

Clearly defined force majeure under sub-clause 1.1.6.4 and identifying events leading to force majeure, describing its limitation for application and procedure to be applied in sub-clause 19.1 of FIDIC-99 give an easy opportunity to the contractors to assess their risks whilst the tender is being priced.

4.0 VARIATIONS

Unlike most of the forms of contracts, FIDIC-99 has defined variations under sub-clause 1.1.6.9. This is a constructive step to avoid the ambiguities and disputes that frequently arise between the parties. The boundaries of the variations have always been debatable. Variations are frequently a source for potential disputes in a contract. Therefore, the employers have no choice but include a variation clause to the contract in order to change the works and to add additional work to the project from time to time during the project period as they wish.

Similar to FIDIC-87 clause 51, Variations and 52, Valuation of Variations FIDIC-99 has compiled two clauses. Under the clause 12, Measurement and Evaluation variations are evaluated and under clause 13, Variations and Adjustments variations can be instructed. The events and circumstances leading to the variations are almost similar in both FIDIC editions. FIDIC-99 has elaborated in a more comprehensive manner the events leading to variations. Under sub-clause 13.1, Right to Vary, of FIDIC-99, the Engineer can either instruct variation or request a proposal from the Contractor. Unlike FIDIC-87, the contractor can serve notice to the engineer in case he/she is unable to carry out the variation instruction or proposal. In that case engineer shall cancel, confirm, or vary the instruction.

A further improvement of FIDIC-99 is the inclusion of clause 13.3, Variation Procedure. The parties, in particular the contractors are fully aware of the procedure to be adopted for the variation instructions and variation proposals unlike in an ad-hoc procedure adopted for the other situations. Under sub-clause 13.2, Value Engineering, contractor can also submit proposals which could ultimately construe as variation if the proposal is accepted by the Engineer. The valuations of variations are defined in clause 12.3, Evaluation and it has been listed along with the provisions given in FIDIC-87 in the table 3 below with some emphasize.

Sub-clause 13.5, Provisional Sum, permits the process to be adopted for the use of provisional sums. This described process is similar to the one in the FIDIC-87. The major difference is that provisional sums are categorized under variations. This will facilitate to classify the final adjustment of provisional sums under variation section of the final account statements.

The sub-clause 13.8, Adjustments for Changes in Cost in FIDIC-99, and sub-clause 70.1, Increase or Decrease of Cost in FIDIC-87, deals with the fluctuation of costs of the project. FIDIC-87 has not elaborated the methods or means of calculation of such rises or falls in the costs of labour, goods and other inputs to the works. It is left to the part II of the conditions to deal with them in an ad-hoc manner. The sub-clause 13.8 of the FIDIC-99 has comprehensively illustrated the method and procedure to be followed by the parties in case of fluctuation of costs. As the formula for adjustment of fluctuation cost is given in the sub-clause itself it will relieve both parties in a potential dispute to agree in method calculation.

The secondary option clause X1, Price Adjustment for Inflation of NEC-3 has given a fairly detailed mechanism for the adjustment of contract price in case of fluctuation of cost of work.

In overall, the dealing of variations has been addressed in a balance manner in the FIDIC-99. Introducing of value engineering, variation procedure, adjustment of contract rates in case of quantity variance, definition to variations, formulae for adjustment of cost of fluctuations are to be considered as positive steps and most of these steps have created an ambiguity free environment for the contract administration to all parties.

Table 3
Valuation of Variation in FIDIC- 87 and 99

	FIDIC 1987 Clause 52 –Valuation of Variation	FIDIC 1999 Clause 12.3 Evaluation
1	At the rates and prices set out in the contract. (contracted rates and prices)	At the rates and prices set out in the contract. (contracted rates and prices)
2	If the contract does not contain any rates and prices applicable to the varied work, rates and prices set out in the contract shall be used as the basis for the valuation. (pro-rata to the contract rates and prices)	If the contract does not contain any rates and prices applicable to the varied work, rates and prices set out in the contract shall be used as the basis for the valuation. (pro-rata to the contract rates and prices)
3	Failing to above 1 and 2, the engineer with due consultation with the employer and the contractor, suitable rates or prices shall be agreed upon between the engineer and the contractor.	If above 1 and 2 is failed, a new rate or price shall be appropriate for an item of work if; (a) (i) the measured quantity of the item is changed by more than 10% from the quantity of this item in the bill of quantities or other schedules, (ii) this change in quantity multiplied by such specified rate for this item exceeds 0.01% of the accepted contract amount, (iii) this change in quantity directly changes the cost per unit quantity of this item by more than 1%, and (iv) this item not specified in the contract for as a “fixed rate item” Or (b) (i) the work is instructed under clause 13, Variations and Adjustments, (ii) no rate or price is specified in the contract for this item, and (iii) no specified rate or prices is appropriate because the item of work is not of similar character , or is not executed under similar conditions, as any item in the contract.
4	In the event of disagreement to above item 3, the engineer shall fix such rates and prices as are, in his opinion, appropriate and shall notify the contractor with copy to the employer.	If no rates or prices are relevant for the derivation of a new rate or price, it shall be derived from the reasonable cost executing the work, together with reasonable profit.
5	If the nature or amount of any varied work relative to the nature or amount of whole of the Work or any part thereof, in the opinion of the engineer, the rate or prices contain in the contract rendered inappropriate or inapplicable, with due consultation by the engineer with the employer and the contractor, a suitable rate or price shall be agreed upon between the engineer and the contractor subject to serve notice by either party as described in the sub-clause 52.2.(a) and (b).	

5.0 PAYMENTS

5.1 Advance Payment

The sub-clause 14.2, Advance Payment, has clearly identified the requirement of advance payment and a comprehensive procedure for the process of advance payment. Annex E of the FIDIC-99 has given a specimen form of advance payment guarantee. The recovery of the advance payment mechanism has been clearly laid down in the sub-clause. Frequent uncertainty for the requirement of performance guarantee prior to the advance payment has now been clarified explicitly and in detail in the sub-clause. The expressed provision of advance payment requirement has not been addressed in the FIDIC-87.

In the core clause 5, Payment, of NEC-3 there is no provision given for the advance payment. However, in

the secondary optional clause X14, Advance Payment to the Contractor, has given the provision for the advance payment. However, the mechanism and the procedure set out in the FIDIC-99 can be considered to be superior.

5.2 Interim Payment Certificate

The term “interim payment certificate”, very commonly refers to the contractor’s payment mechanism compared to monthly statements referred in FIDIC-87. The contractor him/herself shall include those additions and deductions which may be applicable to the interim payment unlike FIDIC-87. In the case of FIDIC-87 the contractor shall include only the items for which payments are due to him. The table-4 below illustrates the comparison of both sub-clause 14.3, Application for Interim Payment Certificate of FIDIC-99 and sub-clause 60.1, Monthly Statement of FIDIC-87.

Table 4
Interim Payment Certificates in FIDIC 87 and 99

FIDIC 1987 Clause 60.1 Monthly Statements	FIDIC 1999 Clause 14.3 Application for Interim Payment Certificates
(a). the value of the Permanent Work executed	(a). the estimated contract value of the Works executed and the Contractor’s Documents produced up to the end of the month including Variation.
(b). any other items in the Bill of Quantity including those for Contractor’s Equipment, Temporary Works, dayworks and the like,	(b). any amount to be added and deducted for changes in legislation and changes in cost.
(c) the percentage of the invoice value of listed materials and Plant delivered to the Site for incorporation in the Permanent Work but not incorporated in such Works,	(c). any amount to be deducted for retention.
(d) adjustment under Clause 70, Changes in Cost and Legislation (e) any other sum to which the Contractor may be entitled under the Contract or otherwise,	(d). any amount to be added and deducted for advance payment and repayment (e). any amount to be added and deducted for Plant and Materials intended for the Works (f). any other addition or deduction which may have become due under the Contract or otherwise including Claims. (g). the deduction of amounts certified in all previous Payment Certificates.

Unlike FIDIC-87, the contractor shall submit the payment statements with supporting documents and this shall include the report on the progress of the work of that particular month. Further, the employer shall pay to the contractor the amount certified in the interim certificates within 56 days after the engineer receives the statement and supporting documents (not from the date receipt by the employer). Whereas in FIDIC-87, the payment shall be made within 28 days after such interim payment certificates delivered to the employer by the engineer. The onerous of application for interim payment in terms of degree of information to be provided (in FIDIC-87, it was five items and in FIDIC-99, it has seven items, refer table 4 above), supporting documents to be submitted and payment period compared to FIDIC-87 is now on the Contractor's side. In a way, this will facilitate the engineer to certify the interim payment based upon the submitted information and supporting documents. Further it is a practically difficult task for an employer who has internal bureaucracy to settle an interim payment certificate within 28 calendar days which is nearly 20 working days. Therefore, the increase to 56 days is a reasonable step towards the practicability provided that engineer has certified it within less than 28 days.

Most of the Contractors are concerned about receiving payment within due date. In the case of delayed payments, there should be a remedy for the same. Both FIDIC-87 and 99 have provided the remedy for the delayed payments. FIDIC-87 has not specifically stated the rate of interest in the general condition but has stated to insert in the appendix to tender. However, FIDIC-99 has spelled-out the ways and means to calculate the applicable rate for finance charges. In case no such rate has been specified, an annual rate of three percentage points above the discount rate of the central bank in the country of the currency of payment would be taken to claim finance charges for delayed payments. Further, the sub-clause has strengthened the contractor's rights stating that the contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy. This is a remarkable improvement in the payment related clauses where most of the time the contractors are suffering from delayed payments from the employers.

6.0 EXTENSION OF TIME

The both editions of 87 and 99 of FIDIC have clauses related to the extension of time to the time for completion.

However, there are significant differences of application in both versions as to the notices procedure, and events leading to extension of time. With regard to the notices procedure, under sub-clause 44.2, Contractor to Provide Notification and Detailed Particulars, of FIDIC-87, the engineer is not bound to make any determination unless the contractor has served the notices within 28 days after such event has first arisen. This is commonly a debatable clause as it has been worded in way that the engineer has been given enormous discretion in case of failure to comply by the contractor. Whereas, FIDIC-99, sub-clause 20.1, Contractor's Claim, has expressly stated that if the contractor fails to give notice of claim for extension of time within such period of 28 days, the time for completion shall not be extended and the contractor shall not be entitled to additional payments and further, the employer shall be discharged from all liability in connection with the extension of time claim. This is a considerable improvement in condition precedence for the notices requirement for extension of time in FIDIC-99. This has benefited both parties; it will safeguard the risks and liability of the employer to avoid ambush by claims from the contractors. At the same time, it has removed the engineer's discretion over the notice procedure. Consequently, contractors will pay more attention to extension of time claim notices and would employ competent contract administrators to deal with such cases. The events leading to extension of time claims have been increased in FIDIC-99 compared to the 87 editions as illustrated in the table -5 below.

The sub-clause 8.4.(d) is a new invention in FIDIC-99 (refer Table 5) which would greatly reduce the contractors' risk and would consequently reduce the tender sum as well. Sub-clause further has explicitly stated that the total of all extension of time cannot subsequently be decreased. This is so even if many omissions are instructed as variations. This is a positive move in FIDIC-99 to clear some grey area of this aspect.

The sub-clause 8.5, Delay Caused by Authorities, is another new clause and it has categorically identified the means and ways to deal with such delays occurred due to Authorities, which is very common in the construction industry. The ambiguity as to who is responsible for such delays has now been cleared to the parties, thus the risk to the contractor and impact to the final tender sum are also reduced.

Table 5
Extension of time clauses

FIDIC 1987 –	FIDIC 1999 –
<p>Sub-clause 44.1 – Extension of Time for Completion</p> <p>(a) the amount or nature of extra or additional work, (b) any cause of delay referred to in these conditions, (c) exceptionally adverse climatic conditions, (d) any delay, impediment or prevention by the employer, or (e) other special circumstances which may occur, other than through a default or breach of contract by the contractor or for which he is responsible.</p>	<p>Sub-clause 8.4 – Extension of Time for Completion</p> <p>(a) a variation or other substantial change in the quantity of an item of work (b) a cause of delay giving an entitlement to extension of time under a sub-clauses of these conditions (c) exceptionally adverse climatic conditions (d) unforeseeable shortage in the availability of personnel or goods caused by epidemic or governmental action, or (e) any delay, impediment or prevention caused by or attributable to the employer, the employer’s personnel, or the employer’s other contractors on the site.</p>

The table-6 below lists the provisions relevant to extension of time and its financial implication. There are 12 instances in FIDIC-99 from which the contractor can claim for extension of time and out of which seven have explicitly

stated the instances where the contractor entitlement for reasonable amount of profit. FIDIC-87 has expressly identified seven instances where the contractor is entitled for the extension of time.

Table 6
Extension of time and its financial implication – FIDIC-99

Sub-clause	Sub-clause	Costs	Profits	Remarks
1.9	Delayed Drawings or Instructions	Costs	Profits	
2.1	Right to Access to the Site	Costs	Profits	
4.7	Setting out	Costs	Profits	
4.12	Unforeseeable Physical Conditions	Costs	---	
4.24	Fossils	Costs	---	
7.4	Testing	Costs	Profits	
8.4	Extension Time for Completion	----	----	Contractor may claim extension time under this sub-clause.
8.5	Delays Caused by Authorities			Contractor may claim extension time under this sub-clause, and no mention of the financial consequences. It may be depend upon the particular circumstances.

Table 6 contd.

Table 6 contd.

Extension of time and its financial implication – FIDIC-99

Sub-clause	Sub-clause	Costs	Profits	Remarks
8.9	Consequences of Suspension	Costs	---	
10.3	Interface with Tests on Completion	Costs	Profits	
13.7	Adjustments for Changes in Legislation	Costs	---	
16.1	Contractor's Entitlement to Suspend Works	Costs	Profits	
17.4	Consequences of Employer's Risks	Costs	Profits for sub-clause 17.3.(f) & (g) only	
19.4	Consequences of Force Majeure	Costs for sub-clause 19.1 (i) to (iv)		

7.0 SUSPENSION AND TERMINATION

The suspension has been addressed in sub-clause 8.8, Suspension of Works, of FIDIC-99. Unlike FIDIC-87, it has not identified the reasons for which the employer is not responsible for extension of time and its associated costs due to suspension. However, in accordance with the sub-clause 8.8, the engineer may notify the cause for the suspension. If and to the extent that the cause is notified and to the cause he may not get extension of time and cost is similar to the provisions in FIDIC-87. This has been further emphasized in the sub-clause 8.9, Consequences of Suspension. FIDIC-87 has not clearly identified the contractor's entitlement for other costs as a result of suspension other than the associated cost of extension of time. In FIDIC-99, under sub-clause 8.10, Payment for Plant and Materials in Event of Suspension, has clearly identified the contractor's entitlement for payment.

Both FIDIC-87 and 99 have given opportunity for contractor's entitlement to suspend the work. In accordance with sub-clause 16.1, Contractor's Entitlement to Suspend Work, of FIDIC-99 and sub-clause 69.4, Contractor's Entitlement to Suspend Work, of FIDIC-87 it has described the procedure to be followed and events leading to suspension. The FIDIC-87 has identified only one reason for the contractor's entitlement to suspend the work which is due to delayed payment by the employer. Whereas, FIDIC-99 has identified three reasons: i. if the

engineer fails to certify in accordance with sub-clause 14.6 - Issue of Interim payment Certificates, ii. or the employer fails to comply with sub-clause 2.4 - Employer's Financial Arrangements or iii sub-clause 14.7 - Payments which entitles the contractor to suspend or reduce the rate of progress of the work. According to the FIDIC-99 it should give lesser notice period of 21 days compared to 28 days in FIDIC-87. This will give some seven day early relief to the contractor to reduce his sufferings.

The termination clause in both version of FIDIC-87 and 99 is almost similar except a new sub-clause is added in 99 editions. The sub-clause 15.5, Employer's Entitlement to Termination, establishes that the employer is entitled to terminate the contract at any time for his/her own convenience by giving notice of such termination to the contractor provided that no such work was carry out by him/herself or someone else. However, such termination shall not be effective unless the employer returns the performance security to the contractor. There is no such provision of termination on convenience given to the contractor. However, express provision has been given for compensation due to such termination under sub-clause 16.3, (Cessation of Works and Removal of Contractor's Equipment) and vide sub-clause 19.6 (Optional Termination, Payment and Release).

The termination of contract by the contractor has been addressed in both FIDIC-87 and 99 under different

headings. The FIDIC-87, under sub-clause 69.1, Default of Employer, and FIDIC-99 under sub-clause 16.2, Termination by Contractor have described the ways and means which entitles the contractor to terminate the contract. FIDIC-99 has identified seven such reasons whilst FIDIC-87 has identified four reasons leading to termination of the contract by the contractor as illustrate in the table 7 below with added emphasize.

After giving 14 days notice to the employer, contract can be terminated by the contractor. However, no notice is required for sub-clause 16.2.(f), and (g) of FIDIC-99, for which the contractor may by noticed the termination of the contract immediately. There are no such provisions like sub-clause 16.1.(a), (b), (d), and (e) in FIDIC-87. However, in FIDIC-87 there is a provision that contractor is entitle to terminate the contract under sub-clause 69.1 (b), Employer interfering with or obstructing or refusing any required approval to the issue of any certificate, and sub-clause 69.1.(d), Employer giving notice to the contractor that for unforeseen economic reasons it is impossible for him to continue to meet his contractual

obligation. These two provisions are vital to both the parties to continue the contract. Nevertheless, FIDIC-99 has identified more practical grounds which influence the contractor's entitlement to terminate the contract.

Further, in accordance with the sub-clause 16.4, Payment on Termination, after the expiry of notice for termination given by the contractor under sub-clause 16.2 (Termination by Contractor) the employer returns the performance security to the contractor. This is a new positive move taken in FIDIC-99. This has cleared the long time ambiguity with regard to the fate of contractor's performance security following the termination of the contract by the contractor. The sub-clause 16.4, Payment on Termination has further specifically identified that the contractor is entitled for any loss of profits or other loss or damage sustained as a result of termination of contract by the contractor or in other word, due to default of the employer. These specific clarifications would avoid the lengthy disputes and save time and money of the contacting parties to concentrate on their other core activities.

Table7

Termination of Contract due to default of the Employer

FIDIC 1987 –	FIDIC 1999 –
<p align="center">Sub-clause 69.1 – Default of Employer</p> <p>(a) Employer failing to pay the certified amount by the Engineer within the specified time to the Contractor,</p> <p>(b) Employer interfering with or obstructing or refusing any required approval to the issue of any certificate,</p> <p>(c) Employer becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or</p> <p>(d) Employer giving notice to the contractor that for unforeseen economic reasons it is impossible for him to continue to meet his contractual obligation</p>	<p align="center">Sub-clause 16.2 – Termination by Contractor</p> <p>(a) The contractor does not receive the reasonable evidence within 42 days after giving notice under sub-clause 16.1(Contractor's Entitlement to Suspend the Work) in respect of a failure to comply with sub-clause 2.4 (Employer's Financial Arrangements),</p> <p>(b) The Engineer fails, within 56 days after receiving a statement and supporting documents, to issue the relevant payment certificate.</p> <p>(c) The contractor does not receive the amount due under an interim payment certificate within 42 days after the expiry of the time stated in sub-clause 14.7 (Payment),</p>

Table 7 contd.

Termination of Contract due to default of the Employer

FIDIC 1987 –	FIDIC 1999 –
	<ul style="list-style-type: none"> (d) The employer substantially fails to perform his obligations under the contract, (e) The employer fails to comply with sub-clause 1.6 (Contract Agreement) or sub-clause 1.7 (Assignment), (f) Prolonged suspension affects the whole of the work as described in sub-clause 8.11(Prolonged Suspension), or (g) The employer becomes bankrupt or insolvent, goes into liquidation

8.0 CLAIMS, AND DISPUTES

The claims are one of the most contentious areas of the construction industry. Most of the industry professionals have made their prime efforts to avoid claims in the construction sector, thereby minimize the disputes and lengthy arbitration and even litigation. Well defined form of contract with equally and appropriately shared risks between parties can minimize the claims, disputes and arbitration in the construction industry.

Both FIDIC versions of 1987 and 1999 have taken tremendous effort to achieve above described objectives in their previous editions. In this context, FIDIC-99 has introduced several positive measures, most of which are discussed in the previous sections of this paper, to treat the contracting parties equally. Compared to 17 sub-clauses relating to contractor's entitlement to claim in FIDIC-87 edition, there are 22 potential sub-clauses upon which the contractor would be able to submit claims under 99 Edition. Further sub-clause 20.1, Contractor's claim, has expressly stated that if the contractor fails to give notice for a claim, either for extension of time or for additional payments, as soon as practicable, and not later than 28 days after the contractor becomes aware of such claims, the contractor shall not be entitled to the claim and the employer shall be discharged from all liability in

connection with such claims.

In a similar manner, Employer also can submit claims to the contractor. This new provision of FIDIC-99 has been given in sub-clause 2.5, Employer's Claims. Except to claim for extent defect notification period, notices shall be given before the expiry of the defects notification period. No other onerous restriction of notices has been placed on the employer's claims.

The "Engineer's Decision" is one of the effective and mostly debated provisions in the settlements of disputes in sub-clause 67.1 of FIDIC-87 as it has challenged the impartiality of the engineer's role. The Engineer, who has a separate contractual agreement with the employer as the employer's professional advisor/consultant on the same project, his/her role as an independent dispute resolution agent has been questioned in many forums. This has now been effectively addressed in FIDIC-99 by abolishing the engineer's role in settlement of dispute under the Engineer's Decision. The provision of Engineer's Decision is replaced with sub-clause 20.2, Appointment of the Dispute Adjudication Board. Unlike the Engineer's Decision, the process of adjudication has a legal back ground through the Construction, Housing Grant and Re-generation Act, 1996.

9.0 CONCLUSION

The analysis above shows that most of the new clauses introduced in FIDIC-99 has taken maximum care to maintain the balance between the parties. However, some of the new clauses directly benefit the contractor or employer. Summarized below are some of those key clauses identified in terms of how they affect the parties.

9.1 Towards Contractor Friendly

(i) Sub-clause 1.1 Definitions

There are 58 definitions compared to 32 in FIDIC-87. The definitions like Accepted Contract Amount and Contract Price provide clear distinction between original contract sum and final contract sum. Further newly added definitions of Variations, Unforeseeable, Force Majeure, and Contractor's Documents, etc. iron out the ambiguity existing in FIDIC-87. To an extent the employer too would however benefit from a considerable number of definitions in the contract.

(ii) Sub-clause 1.5 Priority of Documents

FIDIC-99 has identified and prioritized eight documents compared to six in FIDIC-87. More importantly, the order of priority of Specifications and Drawings is identified. This was always an ambiguity to the parties and lead to disputes. To an extent the employer too would however benefit from this new detailed priority.

(iii) Sub-clause 1.6 Contract Agreement

This sub-clause has given 28 days for the contractor to upon receive the letter of acceptance entered into a contract agreement. This places both parties to fulfill an expressed contractual obligation within a set time limit. According to the FIDIC-87 clause 9.1, Contract Agreement, the contractor shall only enter into and execute contract agreement if employer is called upon to do so.

(iv) Sub-clause 2.4 Employer's Financial Arrangements

The Sub-clause has given rights to the contractor to request reasonable evidence of financial arrangements made to pay the contract price. The employer shall submit such evidence within 28 days after receiving any such request from the contractor.

(v) Sub-Clause 4.2 Performance Security

The employer shall not make a claim under the performance bond/security except in a defined event in the sub-clause.

(vi) Variations

Variations are dealt in two different clauses, clause 12, Measurement and Evaluation, and clause 13, Variations and Adjustments. These clauses have identified several positive steps which are in friendlier to the contractor. Introduction of variation procedure, a definition for variation, value engineering, formulae for price fluctuation etc. are few of them. Further classifying the provisional sums under variation too is a positive step and it will simplify the preparation of final account.

In the case of quantity of the BoQ changed, contractor may be entitled to a new rate for the respective items. Further, contractor can serve notice to the engineer in the case him/her being unable to carry out the variation instruction or proposal. In such cases, engineer shall cancel, confirm, or vary the instruction.

(vii) Payments

A new detailed clause for advance payment has been included to the conditions with a specimen for advance payment guarantee. The contractor has to prepare and submit his/her payment statement in a fully comprehensive manner identifying the deductions. Further, in the case of delayed payment by the employer, the applicable rate of finance has been given in the sub-clause 14.8, Delayed Payment.

(viii) Extension of Time

Following establishing the conditions precedence for the notices for extension of time, it has diluted engineers' discretionary on the determination of extension of time in case no notices submitted by the contractor. Under sub-clause 8.4.(d), contractor is now entitled to claim extension of time in the case of unforeseeable shortage in the availability of personnel or goods caused by epidemic or governmental action. Further, in accordance with the sub-clause 8.5, Delays Caused by Authorities, the ambiguity is cleared in terms of the responsibility of the contractor when a delay is caused by the authorities. It is further expressly stated that no reduction of time from the time for completion.

FIDIC-99 has expressly identified 12 events leading to the entitlement of extension of time by the contractor whereas in FIDIC-87 there are seven events. Further, it has expressly stated in seven instances that the contractor is entitled for a reasonable amount for profits.

(ix) Suspension and termination

In accordance with sub-clause 16.1, Contractor's Entitlement to Suspend the Work of FIDIC-99, suspension can be enforced based upon three events by giving 21 days notice whereas FIDIC 87 has only one event by giving 28 days notice. Further, it is expressly stated that the contractor's entitlement in case of suspension.

The contractor is entitled to terminate the contract based upon seven events whereas as per FIDIC-87 it has only four events upon which the contractor is entitled to terminate the contract. In such cases employer shall return the performance security and the contractor is entitled for loss of profits.

(x) Claims and Disputes

Under FIDIC-99, there are 22 expressed instances to which the contractor is entitled to claim additional payments compared to 17 such expressed instances in FIDIC-87. FIDIC-99 has abolished the "Engineer's Decision" and has introduced Dispute Adjudication Board.

9.2 Towards Employer Friendly

(i) Sub-clause 2.1 Right to Access to the Site

The employer may withhold access to the site or possession until the contractor submits the performance security. Thereby, employer can make sure his/her works have a security in case of early default by the contractor.

(ii) Engineer's duty and Authority

The engineer is deemed to act for the employer unless expressly stated in particular applications of conditions.

(iii) Sub-clause 3.4 Replacement of the Engineer

Unlike FIDIC-87, under this sub-clause the employer is able to replace the engineer.

(iv) Sub-clause 4.2 Performance Security

The employer shall return the performance security within 21 days after receiving a copy of the performance certificate whereas according to the FIDIC-87 it is 14 days after of the issuance of the defects liability certificate. Unlike FIDIC-87, there is no requirement to notify the contractor prior to making a claim against the performance security.

(v) Sub-clause 6.10 Records of Contractor's Personnel and Equipment

The contractor shall keep-on submitting such records in each calendar month until the completion of all snags works upon issuance of the taking over certificate. No period for payment stated in sub-clause 14.7, Payment, commences until the relevant report is submitted.

(vi) Payments

In accordance with clause 14.7.(c) the employer shall pay to the contractor within 56 days after receiving of the interim payment and final payment certificates from the engineer unlike 28 days specified in FIDIC-87.

(vii) Extension of Time

FIDIC-99, sub-clause 20.1, Contractor's Claim, has expressly stated that if the contractor fails to give notice of claim for extension of time within such a period of 28 days, the time for completion shall not be extended and further, the employer shall be discharged from all liability in connection with the extension of time claim.

(viii) Suspension and termination

In accordance with the sub-clause 15.5, Employer's Entitlement to Termination, the employer is entitled to terminate the contract at any time for the employer's convenience by giving notice to the contractor.

(ix) Claims and Disputes

Unlike FIDIC-87, the FIDIC-99, sub-clause 20.1, Contractor's Claim, has expressly stated that if the contractor fails to give notice of claim for additional payments within such a period of 28 days, the contractor shall not be entitled to additional payments and further, the employer shall be discharged from all liability in connection with the claim for additional payments.

In accordance with sub-clause 2.5, Employer's

Claims, if the employer considers he/she is entitled for payments or extension of the defects notification period, the employer or the engineer shall give notice and particulars to the contractor.

10 Conclusion

The above would conclude that both the contractor and the employer are benefited fairly from the new edition of the FIDIC-99. It has addressed all the contentious issues faced in FIDIC-87 during the last 12 years since 1987 in FIDIC-99 edition. Following a close focus on some of the key clauses such as priority of documents, signing of contract agreement within a specified time period, demand for financial arrangement of the employer for the project, formulae for price fluctuation, new rate for increase of BoQ quantity, a wide range of possibility to claim extension of time and additional payments, entitlement for loss of profit and release of performance

security upon termination by the contractor, introduction of dispute adjudication board can be considered to be contractor friendly.

From the Employer's point of view a number of concepts such as no access to the site shall be made without the submission of the performance security, employer's entitlements to claim extension of time for defects notification period and additional payments, removal of clause related to that engineer act impartially, claim against performance security without prior notice to the contractor, payments to the contractor within 56 days instead of 28 days in FIDIC-87, in case of no notices for extension of time or additional payments from the contractor no liability for them, entitlement to terminate at his convenience can be considered to be employer friendly.

Caparo Industries Plc -v- Dickman and others [1990]

The plaintiffs sought damages from accountants for negligence. They had acquired shares in a target company and, relying upon the published and audited accounts which overstated the company's earnings, they purchased further shares.

Held: The purpose of preparing audited accounts was to assist company members to conduct business, and not to assist those making investment decisions, whether existing or new investors in the company. The auditors did not owe a duty of care to the plaintiffs. Liability for economic loss for negligent mis-statement should be limited to situations where the statement was made to a known recipient for a specific purpose of which the maker was aware, and upon which the recipient had relied and acted upon to his detriment. The law has moved towards attaching greater significance to the more traditional categorisation of distinct and recognisable situations as guides to the existence, the scope and the limits of the varied duties of care which the law imposes. The House laid down a threefold test of foreseeability, proximity and fairness and emphasised the desirability of incremental development of the law. The test was if "the court considers it fair, just and reasonable that the law should impose a duty of a given scope upon the one party for the benefit of the other". Lord Bridge of Harwich: "What emerges is that, in addition to the foreseeability of damage, necessary ingredients in any situation giving rise to a duty of care are that there should exist between the party owing the duty and the party to whom it is owed a relationship characterised by the law as one of 'proximity' or 'neighbourhood' and that the situation should be one in which the court considers it fair, just and reasonable that the law should impose a duty of a given scope upon the one party for the benefit of the other."