

## CDR-4285

# Claim Avoidance Emphasis in FIDIC Construction Contracts and Selection of ADR Neutrals

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**Abstract**—FIDIC construction contracts used globally in many jurisdictions are frequently updated with improvements and contributions from users. Recent forms for *Design-Bid-Build (Red Book)*, *Plant and Design-Build (Yellow Book)* and *EPC/Turnkey (Silver Book)*, called the *2017 Rainbow Suite*, aim to have fewer disputes and more successful projects, with emphasis on dispute avoidance. A collaborative approach requires prevention and anticipation, with current information developed during execution of the contract. A standing dispute board is mandatory in the FIDIC 2017 Rainbow Suite and should be constituted at the beginning of the contract, with regular meetings and site visits, in order to prevent a claim from becoming a dispute. This type of dispute board is called a dispute avoidance/adjudication board (DAAB), utilizing three qualified members, who are independent and impartial. Other alternative dispute resolution ADR models include DAABs as a consensual method, designed to diminish adversarial behavior. Selection of qualified neutrals to become members of a DAAB panel is important for the success of prevention of disputes. This paper presents the importance of avoidance and identifies some critical factors and characteristics of professionals to be selected and appointed as DAAB members.

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## 1. Introduction

Use of construction contract forms is recommended for many reasons: standardization and consistency; balance in risk allocation between the parties; clarity and transparency in clauses; facilitates contract management and provide international recognition, among different countries.

FIDIC (Fédération Internationale Des Ingénieurs-Conseils) publishes a set of fundamental construction contracts (models), that are used globally in many jurisdictions and are frequently updated with improvements and contribution from users (owners, contactors, and financial institutions). The FIDIC contract forms are prepared by engineers for engineers, with simple language.

Recent FIDIC forms for Design-Bid-Build (Red Book or RB), Plant and Design-Build (Yellow Book or YB) and EPC/Turnkey (Silver Book or SB), called together 2017 Rainbow Suite (RS) [1], aim to have fewer disputes and more successful projects, with an emphasis on dispute avoidance in comparison of previous editions of such forms.

A mechanism for avoidance of claims is the use of a mandatory standing dispute board in the FIDIC 2017 Rainbow Suite that should be constituted at the beginning of the contract, with regular meetings and site visits, in order to prevent a claim from becoming a dispute. This type of dispute board is called a dispute avoidance/adjudication board DAAB, with a panel of three qualified members who are independent and impartial.

Other alternative dispute resolution ADR models include DAABs as a consensual method, designed to diminish adversarial behavior. Selection of qualified neutrals to become members of a DAAB panel is important for the success of prevention of disputes.

This paper presents the FIDIC Rainbow Suite of contracts, emphasizing the importance of claims avoidance in construction contracts and identifies some critical factors and characteristics of neutral professionals to be selected and appointed as DAAB members.

## 2. FIDIC

AACE and FIDIC started cooperation in 1978, to discuss why some major projects contractor's bids exceeded the estimate of cost prepared by consulting firms. The conclusion of this collaboration was a Guideline and Terms of Reference for the Preparation of Project Cost Estimates [2], to achieve costs at an acceptable range, with the assumption that FIDIC forms will apply.

### 2.1. FIDIC History

FIDIC was founded in 1913 by national associations of consulting engineers from 3 countries (Belgium, France, and Switzerland). Headquartered in Switzerland, FIDIC currently has members from more than 100 countries. It is the voice of the consulting engineering sector in a globalized world, promoting training and partnerships and publishing several standardized contract drafts.

FIDIC values are Quality, Integrity and Sustainability.

FIDIC has cooperative agreements with important multilateral development banks (MDBs), such as the World Bank (IBRD), Inter-American Development Bank (IDB), Asian Development Bank (ADB), European Investment Bank (EIB), to use its contract models. Some models are prepared specially for MDBs, such as the Design-Bid-Build (Pink book) 2010.

FIDIC contract models, available in 12 languages, are currently used all over the world, with emphasis on infrastructure markets in Africa, Asia, the Middle East, Eastern Europe, and Latin America.

## 2.2. FIDIC Forms of Contracts

There are FIDIC forms for the great majority of types of construction and plant installation projects, as the Rainbow Suite mentioned, including also a Short Form (Green book), for less complex works, a Dredgers Contract (Blue–Green Book), a Design-Build-Operate DBO Contract (Gold Book) and an Underground Works Contract (Emerald Book).

The selection of appropriate construction form is made by simple questions with “yes-no” answers, starting with size and value of the works, responsibility of design, construction, and operation.

FIDIC also publishes forms for engineering services (design) and for subcontracting in Red book and Yellow book.

## 2.3. FIDIC Contracts Structure

FIDIC conditions of contracts consist basically of 2 parts:

- General Conditions (GC), with clauses that are not modified and stipulate the rights and obligations of each party, owner (employer or client) and contractor (supplier), regarding:
  - Staff and labour,
  - Delays,
  - Defects,
  - Variations,
  - Contract price and payments,
  - Insurances,
  - Claims and disputes.
- Particular Conditions (PC), with project specific clauses, in reference to GC general conditions clauses, such as:
  - Project data (dates, location, sections, communication, subcontracts etc.),
  - Local regulations and applicable law,
  - Priority of documents,
  - Payments conditions, currencies, and a price escalation formula,
  - Liabilities and insurance,
  - Dispute resolution details.

## 2.4. FIDIC Golden Principles

FIDIC noted some contracts where significant changes to the General Conditions were made replacing, changing, or omitting part of the wording of the General Conditions through the Particular Conditions. Some changes were substantial, and the modified contracts no longer comply with FIDIC objectives and principles.

FIDIC published the “FIDIC Golden Principles” (GP) [3] in 2019 with guidance on contractual clauses of each form of FIDIC contract considered to be inviolable when preparing the PC for each contract.

These are the 5 FIDIC golden principles:

Golden Principle GP1: The duties, rights, obligations, roles, and responsibilities of all the contract participants must be generally as implied in the General Conditions, and appropriate to the requirements of the project.

Golden Principle GP2: The Particular Conditions must be drafted clearly and unambiguously.

Golden Principle GP3: The Particular Conditions must not change the balance of risk/reward allocation provided for in the General Conditions.

Golden Principle GP4: All time periods specified in the contract for contract participants to perform their obligations must be of reasonable duration.

Golden Principle GP5: Unless there is a conflict with the governing law of the contract, all formal disputes must be referred to a Dispute Avoidance/Adjudication Board (or a Dispute Adjudication Board, if applicable) for a provisionally binding decision as a condition precedent to arbitration.

An important addition that should be made in the Particular Conditions is to comply with governing law of the contracts, as FIDIC forms are used in different legal systems, both in common law countries (United States, for example) or civil law countries (France, for example).

## 2.5. FIDIC Rainbow Suite

FIDIC Rainbow Suite 1999 is the first edition of the jointly prepared Red Book (RB), Yellow Book (YB) and Silver Book (SB). As mentioned previously, the Red Book is used for building and engineering contracts where the owner has the design responsibility and will pay the contractor per quantities of services at unitary prices. The Yellow Book is used in contracts where the contractor is responsible for design and construction of the works, including related electrical and mechanical installations, with payments by milestones. The Silver Book is used in turn-key or EPC (engineering, procurement, and construction) projects.

The three contracts are structured in the same way, including having the same number of clauses, adjusted for each type of contract, providing consistency and practical use.

In 2017 FIDIC published the second edition of the Rainbow Suite 2017, to increase clarity and certainty, reflecting current best practices that should assure more successful projects with fewer disputes. Major improvements are made regarding claims and disputes, with an emphasis on dispute avoidance. In order to reduce misunderstanding on interpretation, FIDIC made the clauses more prescriptive and introduced a step-by-step project management mechanism. In order to achieve this goal, a single clause 20 (Claims, Disputes and Arbitration) in Rainbow suite 1999 was divided in 2017 edition in two clauses, clause 20 (Employer's and Contractor's Claims) and 21 (Dispute and Arbitration). The intention was to separate the routine claims of daily operations (clause 20) from disputes of the parties (clause 21). Balanced risk allocation is improved with adjustments of some clauses that previously applied to only one party to be reciprocal for owner and contractor, specifically the right to present a claim, based on the principle of reciprocity. Additionally, a major revision of 2017 edition is the introduction of a permanent dispute avoidance/adjudication board (DAAB) to replace a dispute adjudication board (DAB) in 1999 edition, which is discussed in following section.

FIDIC contracts are recognized by precise time periods for actions by the owner or the contractor, considering that "time is the essence" in construction projects, and Rainbow Suite 2017 presents additional time bars.

The table shows the 21 clauses of each of the Rainbow Suite 2017 contracts and should be noticed that 18 clauses have exactly the same subject in all three contracts:

Red Book 2017	Yellow Book 2017	Silver Book 2017
1 General Provisions		
2 The Employer		
3 The Engineer		3 The Employer's Administration
4 The Contractor		
5 Subcontracting	5 Design	
6 Staff and Labour		
7 Plant, Materials and Workmanship		
8 Commencement, Delays and Suspension		
9 Tests on Completion		
10 Employer's Taking Over		
11 Defects after Taking Over		
12 Measurement and Evaluation	12 Tests after Completion	
13 Variations and Adjustments		
14 Contract Price and Payment		
15 Termination by Employer		
16 Suspension and Termination by Contractor		
17 Care of Works and Im indemnities		
18 Exceptional Events		
19 Insurance		
20 Employer's and Contractor's Claims		
21 Dispute and Arbitration		

**Table 1—FIDIC Rainbow suite 2017 clauses**

### 3. Claim Avoidance in FIDIC Rainbow Suite 2017

The FIDIC approach to claims and dispute avoidance mechanism is one of the hallmarks of Rainbow Suite 2017.

#### 3.1. Construction Claims

As per FIDIC definition, a “claim” means a request or assertion by one party to the other party for an entitlement or relief under any clause of these conditions otherwise in connection with, or arising out of, the contract or the execution of the works [1, p. 6]. A dispute means any situation after a claim was rejected during the execution of a contract.

In general, claims are related to additional compensation (quantum) and/or extension of time (delay). A claim related to a fixed duration contract can be, from an owner's perspective, a delay due to contractor's fault, liquidated damages, gross negligence, lost profits, and acceleration to offset contractor's delay, while from the contractor's

perspective, can be an extension of time, prolongation costs, no gross negligence, and acceleration costs. In a fixed scope of work for a fixed price a claim can be, from an owner's perspective, included in the scope of work, no change in law, no change in costs, defective work of non-conformity, and from a contractor's perspective, a variation, change in law, change in costs, no defects or defects caused by owner. In addition, claims can be incomplete works or documentation, access or differing site conditions, late payments, late approval of documents, disruption costs and taking over, for both parties.

AACE documentation on claims avoidance was found in 1990, with an interesting analysis of claims submitted for arbitration, the reasons for claims and contractual provisions to minimize claims, which could be incorporated into contract documents [4]. In 1997, high cost of litigation and lost time introduced ways to increase trust, cooperation and sharing information within parties, fostering an environmental of prevention [5]. Several recommendations and best practices for claims avoidance were suggested some years later including document management, schedule analysis, cost control and negotiation [6] and proper project management fundamentals, as knowledge of the contract, understanding roles and responsibilities, plan the work, communicate the plan, work the plan and document changes [7] and use of dispute boards [8].

### *3.2. FIDIC Novelities*

As part of a project management procedures enhancement, FIDIC introduced in Rainbow Suite 2017 a requirement of "advance warning" or "early warning" that a party should give to the other party of any event that may have an adverse effect on the work, affect the performance of the work, increase costs, or delay the execution. This advance warning is exactly the guidance provided in 1993 by Feldman [9], to identify potential areas of disputes and save resources from the parties. The parties can work together to resolve a potential difficulty at an early stage when it could be relatively small and avoiding the issue to escalate in more serious consequences. Additionally, an advance warning could bring the attention of the parties for some possibilities and alternatives, to be discussed and resolved in an efficient manner.

Rainbow Suite 2017 deals with claims from the owner and the contractor the same way, which could be a claim for time or for money and also for a relief or remedy that is not time or money.

The most important feature concerning claims in FIDIC Rainbow Suite 2017 is the introduction of a permanent and standing dispute avoidance/adjudication board (DAAB). In contrast to an "ad-hoc" DAB, which starts only after a dispute exists, a permanent DAAB provides consistency of decisions and makes the DAAB part of the "project team," appointed at the start of the contract and in place for the duration of the contract. The main purpose of DAAB is to assist the parties with any disagreements, claims, or issues that may arise and to resolve any and all disputes, with a collaborative approach. It is easier to prevent a claim from becoming a dispute if DAAB and parties have regular meeting and site visits.

### *3.3. Claim Avoidance and Prevention*

An important aspect of a permanent DAAB is the confidence that the parties have concerning the selected professionals for the DAAB, that should not be imposed by one party on the other party.

As mentioned by Jaynes in 2018 [10], during a DRBF International Conference, the fundamental duty of the DAAB is the prevention of formal disputes, wherever possible, done by persuasion, with face-to-face discussion, informal advice, and early and sustained involvement with representatives of the parties that have authority to make binding decisions. Avoidance requires anticipation and the DAAB experience should enable anticipation of problems and early discussion, with full and current information of the contract. Finally, persuasion must be timely, and discussions must be contemporaneous with the appearance of any issue or disagreement.

All these aspects of avoidance and prevention are included in FIDIC Rainbow Suite 2017.

#### 4. Selection of Neutrals

Qualifications and experience of neutrals as DAAB members are very important for the avoidance of disputes. From the neutrality aspects, this professional should be unbiased and agreed to by both parties. Regarding qualifications, the professional should have a large and technical experience on similar projects, in the field, and should be skilled in construction contractual issues, with a strong knowledge of dispute avoidance and resolution procedures in FIDIC forms.

Skills can be enhanced by training, even for professionals with natural temperament for dispute resolution, but skills cannot be acquired by simply reading or assisting classes. The opportunity to practice skills is essential to develop such qualities, specially reflecting upon these skills. In addition to neutrality and impartiality, communication skills of professionals related to listening should be a characteristic of a neutral, in order to improve the two-way communication process.

Research conducted by Evans [11] on selecting neutrals for construction disputes listed personal characteristics in importance: honesty, no conflict of interest, integrity, non-biased, fair, impartial, good judgement, open minded, good listener, good communicator, patient, cool temperament, mature and humble. Additionally, a neutral must have experience of the type of dispute and such experience is more important than technical knowledge.

Recent literature review by Zack [12] listed some desired quality of dispute board members, including experience in the type of construction, methods of construction, type of project delivery method and also types of disputes that can arise on the project.

In addition to intrinsic and obvious characteristics, such as impartiality and neutrality, it is clear that other personal characteristics that contribute to avoiding claims and disputes are highly valued and sought after, helping the parties in the progress of the contract until its completion.

#### 5. Conclusion

Construction contract forms are highly recommended for many reasons, for clarity in clauses, contract management and dispute resolution.

FIDIC, a recognized institution with more than 110 years, publishes contract forms that are widely used in construction contracts around the world, especially when supported by multilateral development banks.

The FIDIC 2017 Rainbow Suite, with forms for Design-Bid-Build (Red book or RB), Plant and Design-Build (Yellow book or YB), and EPC/Turnkey (Silver book or SB), introduced DAAB (dispute avoidance/adjudication board), a permanent dispute board from the beginning of the contract, as a mechanism to emphasize the objective of prevention and avoidance of disputes during the works. The fair and balanced distribution of responsibility between parties, now part of FIDIC Golden Principles, is expressed also by the fact that claims from owners and contractors are in the same clause with same dispositions. Advance warning is also part of avoidance guidance, with anticipation of adverse effects on the contract by parties.

Qualification of neutral professionals to act as DAAB members is of utmost importance, considering that prevention is also done by persuasion, with face-to-face discussion and early involvement of DAAB members with representatives of the parties, contemporaneous with the execution of the contract.

Selection of neutrals should consider personal aspects of professionals, such communication skills, familiarity with legal and technical issues, on site background, with experience of the type of dispute and resolution procedures, more important than technical knowledge. These are some critical factors of the professional to be selected and appointed as a DAAB member.



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