



RECAP, FIDIC 2017 UPDATES AGAINST 1999 VERSIONS, EDITIONS RELEASED AFTER 2017. FIDIC GOLDEN PRINCIPLES 2019

Prepared By: Rami Ismail, PMP® , SP® , RMP® , ACP® , FCCM, FCT

Senior Contract Manager for Morganti Saudi Arabia

Co-Founder Of Contra Agile for Consultancy.

FIDIC Certified Trainer (FCT)

FIDIC Certified Contract Manager (FCCM)

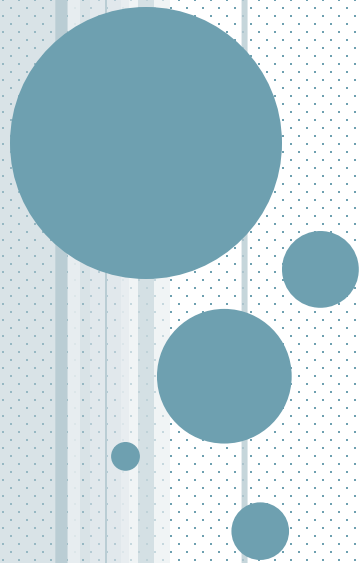
FCCM Committees Member

Principal Drafter for TG23- Guidelines for FIDIC Carbon Management Guidance.

Email: Rismail@morganti.com.sa Mobile: +962798205065, +966548658724

FIDIC 2017 VS FIDIC 1999

General Changes



Subject /Form of Contract	Clause	FIDIC 1999	FIDIC 2017 Change
Total number of Clauses / Red, Yellow, Silver	-	20	21
Order of definition	1	Per topic like contract; dates, tests, periods, ...etc	The definitions are listed in alphabetical order
Particular Conditions/ Red, Yellow, Silver	-	Particular Conditions, Appendix To Tender	-add Part B – Special Provisions, along with Part A – Contract Data in Particular Conditions, no Appendix to Tender
Notices/ Red, Yellow, Silver	1.3	Not defined term	-“Notice” is defined term -Other means of communication must refer to the clause under which it is issued, a Notice does not.
Subcontract / Red	4 and 5	Nominated subcontractors and other subcontractors are governed by two separate Clauses: Clause 4 and 5.	They are integrated in one clause – Clause 5 – Subcontracting.
Advance Warning/ Red, Yellow, Silver	8.3 and 8.4	Part of Clause 8.3 – Penultimate par (red, yellow), last para (silver)	Governed under new Sub-Clause 8.4 [Advance Warning] to minimize and mitigate claims and disputes
Limitation of Liability (Red, yellow, silver	17.6 and 1.15	-Clause 17.6 -No limitation of liability in case of delay damages and indemnity liabilities for breach of intellectual property rights. -gross negligence is defined in Guidance for The Preparation of Particular Conditions	-Clause 1.15 -No limitation of liability in case of delay damages and indemnity liabilities for breach of intellectual property rights and gross negligence. -gross negligence has defined
Meetings (Red, yellow, Silver)	3.8	No Clause for face to face meeting	-added to encourage collaborative working, the Engineer or the Contractor can invite each other (but not the Employer, who may attend voluntarily) to a management meeting.

❑ **Essential Considerations in Selection the Right Construction Contract**

1. Contract administration approach; and
2. Risk allocation.
3. Contract price determination.
4. Design responsibility.



□ Which FIDIC Contract should I use?

- **Re-measured Contracts:**

- a) The Employer is the Designer.
- b) The parties agree the rates of remuneration per unit but not the price of the work as a whole.
- c) Used when design is to be carried out by the Employer, scope is clear, repetitive works, the entity who prepared the BOQ is reliable.
- d) Conditions of Contract: FIDIC **Red** either 1999 or 2017.

- **Lump Sum Contracts:**

- a) The Contractor usually do the majority of the design.
- b) The contractor agrees a fixed price (a lump sum price) for the execution of certain specified construction works.
- c) Used in Electromechanical work, when the work is required to be **‘fit to Purpose’**.
- d) Conditions of Contract: FIDIC **Yellow** 1999, 2017.

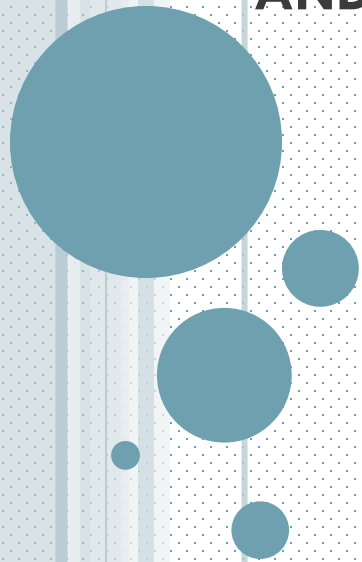


- **EPC/Turn Key Contracts:**

- a) The Contractor is the Designer, The Employer only express objectives (Employer Requirement)
- b) The Contractor responsible for implementation whatever the circumstances are.
- c) Suitable, where the Contractor takes total responsibility for the design and execution of the project, with little involvement of the Employer.
- d) The Employer will only pay the Contractor's Price.
- e) The project is required to fulfil an outline or performance specification prepared by the Employer.



**DUTIES AND AUTHORITIES OF THE CONTRACT PARTIES
AND THE ROLE OF THE ENGINEER.**



❑ **The Employer's Duties and Authorities-FIDIC Contracts**

- Give Right of Access to the Site.
- Assist the Contractor in Obtaining Permits, Licenses or Approvals.
- Give information regarding Site Data during the Tendering Stage.
- Employer's Personnel to cooperate with the Contractor.
- The Employer shall appoint the Engineer or Employer' Representative.
- Show his Financial Arrangements
- The Employer shall pay to the Contractor his amount due.
- The Employer shall take over the works .

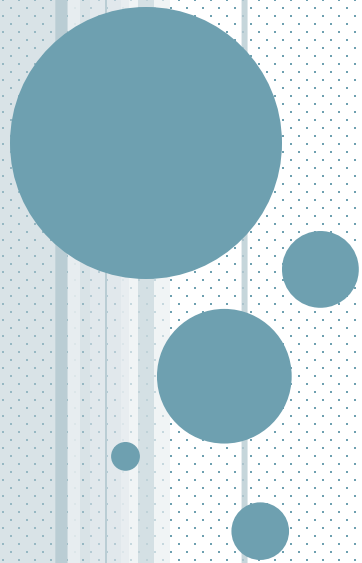


❑ **The Contractor's Duties- FIDIC Contracts**

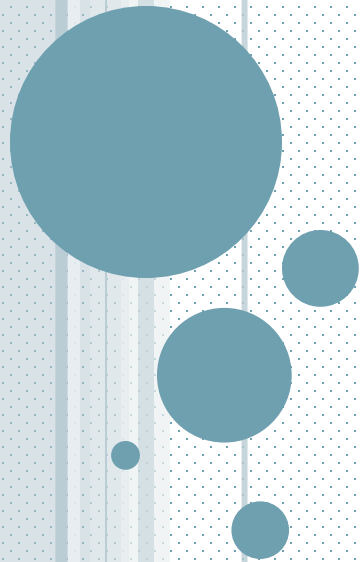
- Set out the Works in relation to original points, lines and levels of reference
- Submit a detailed time schedule
- Obtain a Performance Bond (at his cost).
- Submit the required samples of Materials.
- Comply with Statutes, Regulations and Laws .
- Maintain the health and safety of the Contractor's Personnel.
- Insurance for Works and Contractor's Equipment, Contractor's Personnel and against Injury to Persons and Damage to Property.
- Co-operation with the Employer's Personnel



The Role of the Engineer



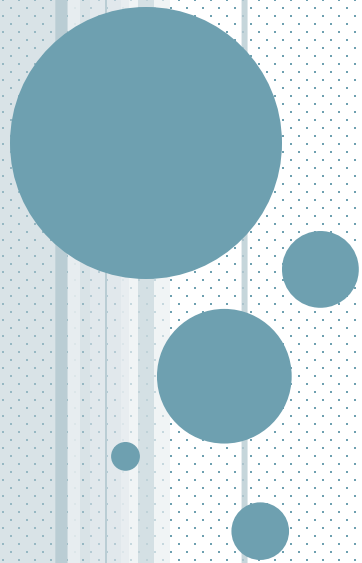
Who is the Engineer?



Sub- Clause No	Sub-Clause	FIDIC Contract Type			
		RED		Yellow	
		99	2017	99	2017
3.1	Shall be appointed by the Employer, Shall carry out the duties assigned to him in the Contract.	<	<	<	<
3.2/3.4	The Engineer's staff shall include suitably qualified engineers, and other professionals who are competent to carry out these duties.	<	<	<	<
3.2/3.4	The Engineer staff /assistants shall be fluent in in the language for communications.	<	<	<	<
3.1	The Engineer can be a natural person or a legal entity.		<		<
3.1	If legal entity, the Engineer shall appoint/authorize a natural person to act on its behalf under the Contract.		<		<
3.1	The Engineer shall be a professional engineer having suitable qualifications, experience and competence to act as the Engineer under the Contract; and fluent in the ruling language.		<		<
3.3	The Engineer may appoint an Engineer's Representative , who shall remain at the Site for the whole time		<		<



The Engineer's Duties and Authorities



Sub-Clause	Sub-Clause	FIDIC Contract Type			
		RED		Yellow	
		99	2017	99	2017
1.5	Clarify ambiguity or discrepancy is found in the Contract Documents	<	<	<	<
3.3/3.5	Issue instructions necessary for the execution of the Works.	<	<	<	<
13	Initiate or Instruct Variations.	<	<	<	<
1.9	Issue the notified drawing or instruction within a reasonable time	<	<		
5.2	The Engineer shall review / approve the Contractor's Documents, if so specified			<	<
12	Measure Works.	<		<	
7.3, 7.4, & 9	Inspection /Testing of works at site.	<	<	<	<
4.8, 4.9 & 8.3	Carrying out project management services.	<	<	<	<
14	Certify/Issue Payment Applications.	<	<	<	<
10	Issue Taking Over certificate of the Works and Sections.	<	<	<	<
11.9	Issue the Performance Certificate.	<	<	<	<
3.5/3.7	Agree or Determine any matter or Claims including EOT	<	<	<	<
12.3	Evaluating each item of work, and determine new rates and all other adjustments to the Contract Price	<	<		
13.3	adjustments to the Contract Price and the Schedule of Payments, for variations			<	<

CLAUSE 3.3/3.5 ENGINEER'S INSTRUCTIONS (RED, YELLOW 2017, 99)

- The Engineer can issue instructions to the Contractor (at any time) necessary for the execution of the Works. (1999, 2017)
- **Who can Issue Engineer's Instructions ?**

The Engineer, or the Engineer's Representative (if appointed) or an assistant to whom the appropriate authority to give instruction has been delegated.
- **Compliance By the Contractor:**

The Contractor shall comply with the instructions given on any matter related to the Contract.
- **Variations Instructions:**

99 : If an instruction constitutes a Variation, Clause 13 [Variations& Adjustments] shall apply.
2017: If an instruction states that it constitutes a Variation, Sub-Clause 13.3.1 [Variation by Instruction] shall apply.
- **Questioning the Engineer's Instruction, if not stated that it constitute Variation.**

99: Not allowed, the Contractor can pursue the rejection under clause 20.1
2017: allowed, but he final word for the Engineer.
- **Verbal Instructions**

99: Allowed under red contracts only.
2017: Not allowed.



Clause 3.5 Determination (Red, Yellow 1999) :

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances. The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars.

Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [*Claims, Disputes and Arbitration*].

Clause 3.7 Agreement or Determination (Red, Yellow 2017):

Sub-Clause 3.7 describes in detailed procedures as well as additional time limits on the Engineer when agreeing or determining any matter or Claim.

- 3.7.1 Consultation to reach agreement
- 3.7.2 Engineer's Determination
- 3.7.3 Time limits.
- 3.7.4 Effect of the agreement or determination
- 3.7.5 Dissatisfaction with Engineer's determination



The Engineer's Enhanced Role under FIDIC 2017

▪ General Enhancements:

- ✓ The selection of the Engineer is based on Qualifications.
- ✓ Assignment of an Engineer's Representative.
- ✓ The Contractor may object on the Engineer's Instructions if they were not specified as Variation.

▪ Improvements on the Engineer Agreement or Determination Clause:

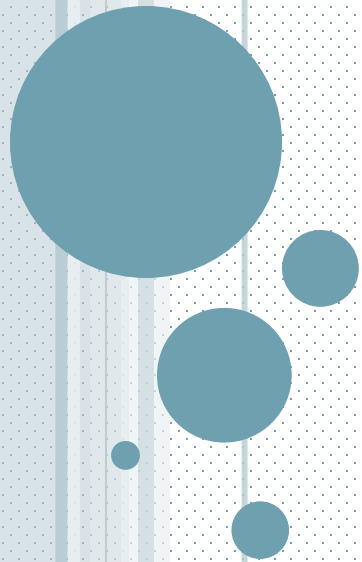
- ✓ The Engineer to act neutrally and not be deemed to act for the Employer.
- ✓ No requirements to obtain the Employer's Prior Consent.
- ✓ Detailed procedure.
- ✓ The Engineer to provide record of the consultation.
- ✓ Double periods.
- ✓ Either Party can issue NOD within specific time, if not, Determination become final and binding.
- ✓ If an agreement or determination concerns an amount to be paid by one party to the other, the Engineer shall Consider this amount within the next Payment Certificate.
- ✓ Failure to comply with binding agreement or final and binding determination by the Employer may lead to suspension or termination by the Contractor- Material Breach.
- ✓ Parties cannot recourse to the DAAB clause while the Engineer acting under this Clause.

▪ Improved DAAB

- ✓ Full Term **Disputes Avoidance and Adjudication Board**
- ✓ Avoidance of Disputes: In-writing jointly request, Informal assistance and not binding to the DAAB and the Parties.



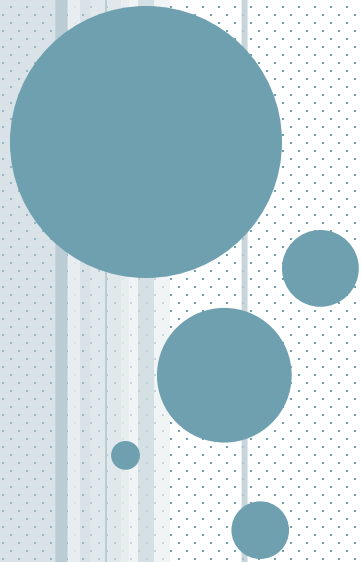
TIPS FOR DISPUTE AVOIDANCE



- Activate the Engineer Determination Clause.
- Adaption of FIDIC 2017 Contract.
- Activate the DAAB Clauses and in particular Clause 21.3- Dispute Avoidance.
- Agile approach :
 1. Co-located Team.
 2. Face to Face communications.
 3. Boost the Performance through Group Accountability for the results and shared responsibility.
 4. Training and team building activities.



Risk in Construction



○ What is the definition of risk ?

▪ **Project Risk**

A uncertain event that, if it occurs, will negatively or positively affect one or more project constraints.

▪ **Project Constraints:**

1. Schedule
2. Cost.
3. Quality.
4. Scope.
5. Resources.
6. Customer satisfaction.

▪ **Definition of Uncertainty:**

- Variability and Ambiguity.
- Uncertainty is conditional for a risk to occur



○ Sources of Uncertainty in construction projects :

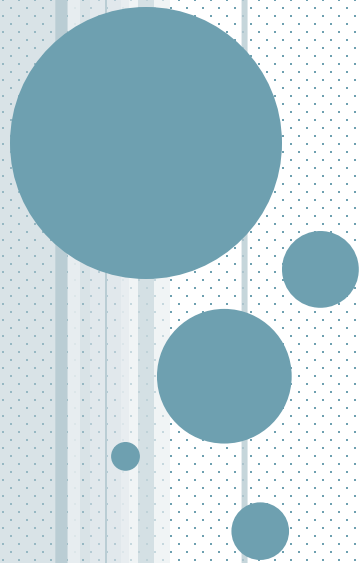
1. Design.
2. Poorly prepared contract documents including specification, drawings, ..etc.
3. Disproportionate risk
4. Long duration and aggressive schedules.
5. Changing environment.
6. Instability and Lack of Resources including material, labor, fuel.
7. Changing regulatory requirements.
8. Act of God

○ Construction Project Risk Management- Important issues :

- Are all construction projects risky?
- Risk Management is the process of identifying, evaluating, and planning responses to uncertain events that might occur through out a project.
- When is the best time to address the risk in Construction Project?
- Tailoring of Construction Project Risk Management.
- Outcome of Construction Project Risk Management.



Risk allocation in FIDIC contracts-Version 2017.



○ General Principles in Risk Allocation:

1. Risk shall be allocated to the party that best able to Manage and control the risk.
2. FIDIC Golden Principles:

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.

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

3. تجنب الغرر

عَنِ ابْنِ مَسْعُودٍ قَالَ: قَالَ رَسُولُ اللَّهِ ﷺ: لَا تَشْتَرُوا السَّمَكَ فِي الْمَاءِ فَإِنَّهُ غَرَرٌ

وَعَنِ ابْنِ عَبَّاسٍ رَضِيَ اللَّهُ عَنْهُمَا قَالَ: نَهَى رَسُولُ اللَّهِ ﷺ أَنْ تُبَاعَ ثَمَرَةٌ حَتَّى تُطْعَمَ، وَلَا يُبَاعَ صُوفٌ عَلَى ظَهْرٍ، وَلَا لَبَنٌ فِي صَرَعٍ. رَوَاهُ الطَّبْرَانِيُّ فِي "الْأَوْسَطِ"، وَالِدَارَقُطْنِيُّ.



• Examples for Risk Allocation under FIDIC 2017-General:

Ser	Risk description	Risk Allocation			Relevant Clauses	Remarks
		Red	Yellow	Silver		
1	Design	Employer	Contractor	Contractor		
2	Execution	Contractor	Contractor	Contractor		
	Contract Price					
	Unit Rates	Contractor	Contractor	Contractor		
	Variation or differences in measured quantities	Employer	Contractor	Contractor		
3	Employer's or its Personnel Faults تقصير or act of God.	Employer	Employer	Employer		Sanctions : Variations, Claims (Times, Cost, Profit- in case of blame worthy), interest, suspension and might lead to termination.
4	Contractor's Fault تقصير	Contractor	Contractor	Contractor		Sanctions : -Deduction from Payment. -Revised Programm, -Delay Damages, -Rduction in the Contract Price by the additional costs incurred by the Employer (Like in case of defective works). -Notice to Correct. -Termination. -Common mistake



- Examples for Risk Allocation under FIDIC 2017-Specific Clauses:

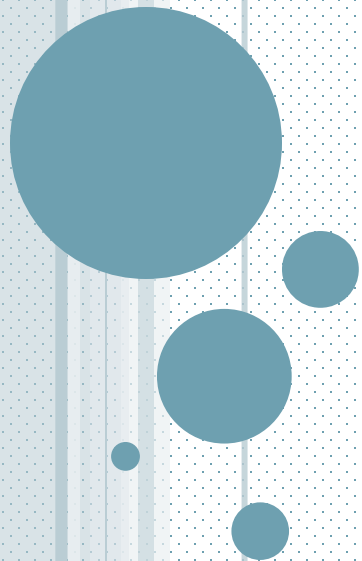
Ser	Risk description	Risk Allocation			Relevant Clauses	Remarks
		Red	Yellow	Silver		
1	Delayed right of access to the Site	Employer	Employer	Employer	2.1	
2	Suitability/availability of access routes to the Site	Contractor	Contractor	Contractor	14.15	
3	Errors in the Employer's Requirements				5.1/1.9	Explain the Role of the Engineer
	Preparation of Employer's Requirement	N/A	Employer	Employer		
	Examination of the Site and carrying out a detailed review of the Employer's Requirements (including the design)	N/A	Contractor	Contractor		
	Error in Employer's Requirement	N/A	Depend on discovery period	Contractor		
	Notification	N/A	Contractor	Contractor		
4	Errors in setting out the Works				4.7/2.5	-The Contractor is responsible for the correct positioning of all parts of the Works. -Explain the Role of the Engineer
	Item of reference specified in the Contract or issued to the Contractor by a Notice from the Engineer	Employer	Employer	Employer		
	Verify the accuracy of those items of reference before using them	Contractor	Contractor	Contractor		
	Error in item of reference	Employer	Employer	Contractor		
	Notification	Contractor	Contractor	Contractor		



Examples for Risk Allocation under FIDIC 2017-Specific Clauses:

Ser	Risk description	Risk Allocation			Relevant Clauses	Remarks
		Red	Yellow	Silver		
5	Unforceable Conditions and Ground Risk				4.10/ 4.12/ 2.5	-Explain what is the “physical conditions” ? -Explain the Role of the Engineer who will determine whether the Physical Conditions were Unforeseeable or not
	Provision of all relevant information/Site Data in its possession concerning the ground conditions of the Site, clause 4.10	Employer	Employer	Employer		
	Interpreting the Site data under Sub-Clause 4.10	Contractor	Contractor	Contractor		
	Verifying the Site data under Sub-Clause 4.10	N/A	N/A	Contractor		
	Unforceable Physical Conditions Notification	Employer Contractor	Employer Contractor	Contractor Contractor		
6	Care of the Works and Indemnities				17/18/1 9	-Explain Responsibility of Care of Works and Liability for loss and damages to the Works, Goods and Contractor's Documents. -Explain the role of the Engineer.
	<p>The risk for losses and damages to the Works, Goods, and Contractor's Documents</p> <ul style="list-style-type: none"> •Work from the Commencement Date until the issue of the Taking Over Certificate or date of termination (if the Contract is terminated) •Outstanding works. •Any loss or damage caused by the Contractor <p>-Use or occupation by the Employer of any part of the Permanent Works</p> <p>-Fault, error, defect or omission in any element of the design of the Works .</p> <p>-any operation of the forces of nature.</p> <p>-Exceptional Events.</p> <p>-any act or default of the Employer's Personnel or the Employer's other contractors.</p> <p>-After termination.</p>	Contractor	Contractor	Contractor		
		Employer	Employer	Employer		

Risk allocation changes between FIDIC 1999 and FIDIC 2017 contracts (Red/Yellow/Silver Books):



Risk Area	FIDIC 1999 Position	FIDIC 2017 Change	Risk Shift
Unforeseeable Physical Conditions (Sub-Clause 4.12)	Contractor bore risks of "unforeseeable physical conditions" unless proven otherwise. Burden of proof was heavy on the Contractor.	The Contractor is deemed to have foreseen difficulties based on publicly available information, Site inspection, and other data reasonably available before submitting the Tender	-More risk allocated to the Contract. -Fewer valid claims for unforeseen conditions)
Employer's Financial Proof (Sub-Clause 2.4)	No explicit obligation	Employer must provide evidence of financial arrangements within 28 days of request. Failure allows Contractor suspension/termination	Solvency risk formally allocated.
Termination for Convenience Clause 15)	Compensation excluded profit on unexecuted work .	Explicitly includes "loss of profit" in compensation.	Employer Risk (Higher termination cost)
Intellectual Property Clause 17.5/17.3	Not explicitly addressed	-Clear allocation. -Contractor liable for infringement by its design- -Employer liable for its specifications	-Mutual Clarity -Designer bears IR risk.
Insurance (Clause 19)	Prescriptive but less structured	-3-tier structure (Required/Project/Professional) -Joint Names: Mandates all insurances (except PI/PL). -Employer failure to insure allows Contractor recovery.	-Contractor Risk (Compliance burden). -Employer Risk (Cost of failure) -Joint names reduce disputes over coverage beneficiaries.



Thank you

ولا تنسوننا من صالح دعائكم

