

FIDIC Contract Administration

Dr Leighton Ellis PE

PhD, MBA, CEng, MICE, ACIArb

Signature

NOTTAC



<u>Outline</u>

- Contract Definition
- Contract Elements
- Summary of the Engineers Roles and Limitations
- Type of Contract
- Structure of FIDIC Contracts (1999)
- FIDIC Golden Principles
- Contract Administration
- Risks in Construction Projects
- Claims
- Q&A



Contract Definition

- Agreement having lawful object entered voluntarily by two or more parties, each of whom intends to create one or more legal obligations among them.
- Contracts needs a legal system to support and enforceable Contracts as:
 - Recognize Contract.
 - Enforce Contract as written subject to mandatory rules that may have not been observed.

Purpose of Contracts is to define relations between parties and reallocate the risk among them.





Contract Elements

- Agreement: this letter is made base on the result of offer and acceptance.
- **Capacity**: Competent having legal capacity (Power of Signature and terms of reference).
- **Consideration**: agreement contains an element of value known as consideration. Some benefit whether given or promised.
- Mutuality of Obligation: Parties to the Contract intend to create legal relations.



Engineer role can be summarized as below:

- I. Inform the Employer of his contractual duties and other related issues like permits, delay payments, Site right of Access
- 2. Design
 - a) Tender documents,
 - b) Drawings,
 - c) Specification,
 - d) BOQ,
 - e) Estimation cost,
- 3. Quality control,
- 4. Cost accountancy,
- 5. Administration,

Alvair

Contract Documents

Contract Documents	Red Book	Yellow Book	Gold Book	Silver Book
Contract Agreement	Х	Х	Х	X
Memoranda Annexed			Х	Х
Letter of Acceptance	X	X	Х	Х
Letter of Tender	Х	X	Х	Х
Addenda	X	X	Х	X
Conditions of Contracts	Х	Х	Х	Х
S pecifications	Х			
Employer Requirements		X	Х	Х
Drawings	Х	Х		
Schedules	Х	Х	Х	Х
Contract Proposal		Х	Х	X
Operation License			X	

Schedules may include: BOQ, time frame, method of measurements, questions and answers during procurement.



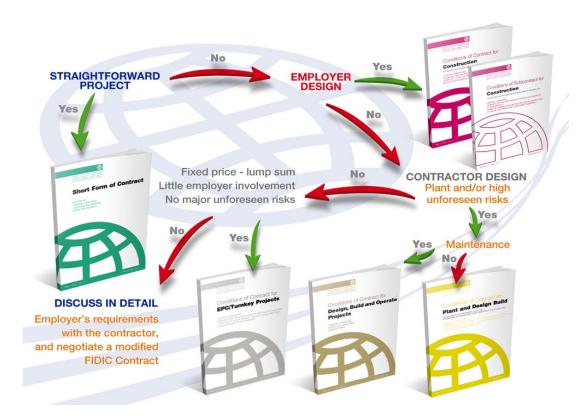
Engineers Limitations

- Engineer CAN NOT CHANGE ANY OF THE BELOW CONTRACTUAL DOCUMENTS:
- I. Contract Agreement,
- 2. Conditions of Contracts,
- 3. Specifications,
- 4. Employer requirements,
- 5. Unit rate



Type of Contract determine the type of Book to be used:

- Construction Contract-Design-Bid-Built (Red Book)
- Plant and Design-Build Contract (Yellow Book)
- EPC/Turnkey Contract (Silver Book)
- Design, Build Operate Contract (Gold Book)
- MDB Harmonized Edition of the Construction Contracts (Pink Book)
- Short Term (Minor Work) (Green Book)





(GREEN BOOK) Short Form of Contract

- This type of Contract is simple and straight forward,
- Re-measured Contract,
- Simple general conditions 10 pages,
- Suitable when the work is not complicated,



- Engineering work or building relatively small within \$500,000 USD and Construction time <u>6</u> <u>months</u> and does not need specialized Contractor.
- For Contracts which have repetitive works,
- Can be used for **\$10,000,000 USD** if the work is repetitive and simple,
- Can be used when there is limited duration of construction time, Contract sum will remain FIXED without allowance of escalation and other cost, these type of Contract remains constant for <u>12 or</u> <u>18 months</u>,



(GREEN BOOK) Short Form of Contract

Under this type of Contracts:

- - Employer provides finance and may appoint individual firm to carry out the Work, Employer can issue Variations,
- - Work can include electrical and mechanical work,
- - Employer may wish to order variations,
- Contractor can construct without having design by Employer and can be done by Contractor.



Structure of 1999 FIDIC Contracts:

- 1- General Conditions-First Part, (These General Conditions and clauses are untouched Copyright intellectual property cannot be modified)
- 2- Guidance for the preparation of the particular condition-Second Part,
- 3- **Forms**-Third Part (letter of Tender, Contract Agreement and Dispute Adjudication Board Agreement)

FIDIC recognized the following Parties:

- Employer
- Contractor
- Engineer
- DAB (Dispute Adjudication Board) or [Dispute Avoidance / Adjudication Board (DAAB), FIDIC 2017]



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.

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

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



FIDIC Golden Principles

GP4:All time periods specified in the Contract for Contract Participants to perform their obligations must be of reasonable duration.

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.



Contract Administration

- Contract Administration is concerned with the state of the agreement between the two parties in the period before the contract has been finalized.
- **Contract Management** is focused on the implementation of the **contract** after it has been finalized.



Contract Administration

- **Contract Administration** is the management of the contract between the **employer**, or client, and the building **contractor**.
- A **Contract Administrator** or employer's agent is required to manage, negotiate, support and execute the contract process.



Engineer Role and Duties:

When Engineer is appointed by Employer he needs to:

I. Review the Contract work's in respect with Engineers responsibilities and obligations to identify any contradiction with his agreement with Employer.

2. Report to the Employer if there is any contradiction is his Contract with Employer and give suggestion to solve this by adding amendment to the Contract.

3. Inform the Employer if there are any other Contractual errors in his Contract with Contractor and make amendment to solve it.

4. Fully familiar with documents of the Contract.

5. Assist/advise the Employer at the Contract awarding stage, assisting is after procurement and advising is before procurement.

6. Check funding agreement if available and compare it with Contractor cash flow.

Project Constraints





RISKS

Risks are categorized in two items under Construction Projects:

Insurable risk:

 Risk of loss, damage or injury occurring during the construction of Contract includes: (Act of god, fire, human error, defective material, accident due to defective design, defected workmanship, and failure to take adequate precaution).

Uninsurable risk:

• Risk leads to financial and time loss with their impact on the project like: (late possession of Site, change in design and variation in original Contract, delay of instructions).



Risks gives financial or time loss on the project:

- Late possession of the Site,
- Delay in instruction and providing any information,
- Change in design,
- Variation in the original Contract,
- Unforeseeable physical conditions,



Improper risk allocation in Contracts will lead to:

- High tender price,
- Tender failure, Contractor may not be interested in this type of conditions under Contract you may have few participants,
- Poor construction quality,
- Frequent dispute will be raised and there is will be so many delay under this Contract,
- Contract may be awarded to tenderer who will not be able to bear this risk,
- Repetition of groundless claims from Contractor.

Alvair

Risk Allocation

Sub-clause	Description	Construction-	Plant-	EPCT-
		Red Book	Yellow	Silver
			Book	Book
I.9Plant	Errors in Employers requirements	NA	E	S
2.1	Right of Access to the Site	E	E	E
4.7	Setting out of original points	E	E	С
4.12	Unforeseeable Physical Conditions	E	E	С
4.24	Fossils	E	E	E
7.4	Testing delayed by Employer	E	E	E
7.5	Rejection of materials	С	С	С
7.6	Remedial of Work	С	С	С
8.4	Extension of time for completion	E	E	С
8.4	Exceptional adverse climate conditions	E	E	С
8.5	Delays caused by authorities	E	E	E
8.6	Rate of Progress delay consequence	V	V	С
8.9	Consequence of Suspension	E	E	E
9.4	Failure to pass Tests on Completion	С	С	С
11.4	Failure to Remedy Defects	С	С	С
12.1Cons	Increase in quantity during construction	E	С	С
12.4	Failure to Pass Test After Completion-	NA	С	С
	Yellow Book			
13.3	Variations Procedure	E	E	E
13.7	Adjustments for Changes in Legislation	S	S	S
13.8	Adjustment for Changes in Cost	C-E	C-E	С
14.8	Delay payment	E	E	E
15.4	Payment after Termination	С	С	С
17.1	Indemnities	S	S	S
17.4	Consequence of Employer`s Risk	E	E	E
19.4	Consequence of Force Majeure	E	E	E
20.1	Contractor`s Claims	E	E	E

E: Employer Risk, C: Contractor Risk, S: Shared Risk

Checklist of how to choose FIDIC Contracts:

- Type of project to be procured.
- Type of design.
- How payment is made.
- Certainty of final cost.
- Method of tendering.
- Control during construction.
- Possibility or portability of having Variation or change in the work after entering into the Contract.





Conditions for Profit

Sub-		Cost	Profit	Time
clause				
1.9	Delay Drawings or Instructions	Yes	Yes	Yes
2.1	Right of Access to the Site	Yes	Yes	Yes
4.7	Setting out	Yes	Yes	Yes
4.12	Unforeseeable Physical Conditions	Yes	No	Yes
4.24	Fossils	Yes	No	Yes
7.4	Testing	Yes	Yes	Yes
8.4	Extension of Time for Completion	No	No	Yes
8.5	Delay caused by Authorities	Silent	Silent	Yes
8.9	Consequences of Suspension	Yes	No	Yes
10.2	Taking Over Part of the Works	Yes	Yes	Yes
10.3	Testing on Completion	Yes	Yes	Yes
11.8	Contract or to search (Cause of the Defect)	Yes	Yes	No
12.4	Omissions-Red Book	Yes	No	No
13.7	Adjustments for Changes in Legislation	Yes	No	Yes
16.1	Contractor`s Entitlement to Suspend Work	Yes	Yes	Yes
17.4	Consequences of Employer's Risks	Yes	No	Yes
19.4	Consequences of Forces Majeure	Sometime	No	Yes

Alvair



Sub-Clause 3.3 Instruction of the Engineer

 Engineer may issue instructions and additional or modification on Drawings which may needed for execution, Contractor has to comply with Engineer instruction and if instruction was oral Contractor has to submit in writing within <u>Two working day</u> to confirm such instruction and if Engineer did not replay within <u>Two working</u> <u>days</u> this instruction will be considered active. If Engineer delayed any instruction which may affect the Work progress, the Contractor has the right to Claim under sub-clause 20.1 (Contractor`s Claims) for:

✓ Extension of time under sub-clause 8.4 (extension of Time for Completion),
✓ Cost plus reasonable profit.

• If any the Contractor feels that the given instruction contains Variation, then he should response to sub-clause 13.3 (Variation Procedure)

Sub-Clause 19.1 Definition of Force Majeure



Alwair

- It should be as below:
 - beyond a party's control,
 - such party could not reasonable have been provided against before entering the Contract,
- if arisen, no party can avoid or overcome it,
 - Which is not attributable by any other party.
- Force Majeure can be as Employer risk as act of war (rebellion, riot, invasion, insurrection, terrorism, revolution, hostilities action of foreign, munition of war or explosive materials),



Sub-Clause 8.6 Rate of Progress

- If at any time:
 - 1. Actual progress is too slow to complete the Works as planned,
 - 2. Progress has fallen behind current program under sub-clause 8.3 (Programme),
- Progress may be calculated based on:
 - Time,
 - Money,
 - Effort,
 - Accomplishment of milestones.



Sub-Clause 8.6 Rate of Progress

Engineer has to instruct the Contractor to revise the programme and accelerate the progress to catch up any delays happened due to the Contactor responsibilities at his own cost need to:

- Revise the program,
- Increase the labor,
- Increase Contractor personnel,
- Increase working hours,



Sub-Clause 8.6 Rate of Progress

- If the Employer suffers from any cost due to this delay, claim have to be submitted to the Contractor.
- But if the delay is due to Employer faults Engineer may ask Contractor to accelerate based on Employer request but this cost will be upon Employer cost, Contractor may ask for extra Cost-plus reasonable profit for that action.



Table to summarize termination based on the party

Termination of Contract

By Employer	By Contractor
Contractor sub-contracted the whole Contact	Does not receive reasonable evidence of the Employer ability to pay within 42day from such notice,
Contractor fail to remedy the defects, within 28 days as in sub-clause 7.6 (Remedial of Works), 7.5 (Rejection)	Delay payments more than 42days after 56days mentioned in the Contract
Contractor fail to remedy the defects due Test on Completion	Prolonged suspension of the Work or part of it
Fails to comply with PS as mentioned in sub- clause 4.2 (<i>Performance Security</i>)	Employer do not fulfill his obligation under Contract
Termination for Convenience, notice for 28days to the Contractor	Engineer fails to issue Payment Certificate for interim payments within 56days
Contractor refuses to comply with his obligations and abandon the work	Contractor does not receive any payment after 42days after 56days mentioned for payment,
Contractor becomes bankrupt, direct termination	Employer becomes bankrupted
Gives Bribe, gift or commissions, direct termination	Employer do not fulfill his obligation under Contract

CLAIMS





Claims

• Dispute can be, but not limited to the below items:

- Claims,
- Others,
- I. Understanding of Contract,
- 2. Specifications,
- 3. Type of measurement,
- Proper risk allocation reduces disputes and claims, risks is divided into insurable and uninsurable risks, insurable risk is covered by insurance policy but uninsurable risks that has liability to any party gives to claim on the other party.



Claims

- Claims must be based on Contract clause, clear and reasonable, claims have two components:
- |. Principal:
 - ✓ Contractual basis upon which the claim is found
 ✓ Facts behind problem.

• 2. Quantum

✓ Effects evaluation of problem in respect of time and Cost has to be reasonable.

✓ Determine the link between fact and effect



Extension of Time Claim

- Claims asks for EoT, Cost or Cost-plus reasonable profit, profit is allowed for the Contractor when the effect is caused by the Employer (Delay Drawings or instructions. Right of accesses to the Site, Delay Payments). Or any other risks that is not the responsibility of the Contractor.
- So claims should start with contractual clause, claimant should provide all the supporting particulars to proof his case "burden of proof"



Sub-Clause 20.1 Contractor's Claims

If Contractor feels that he is entitled for extension on Time for Completion or additional payment regarding any clause or other related item for the Contract, then Contractor should send a notice to Engineer within <u>28 days</u> from event occurrence.

This notice need to have:

□ Mentioning the timing of the event,

describe the event or the circumstances giving the right to claim,

Refer to contractual clause that entitles him for claim,

Mentioning the reason and sequence of the effect that cause damage and Contractor incurred cost due this,

Has to be sent as specified in **Appendix to Tender**

Send copy to Employer,

Most of Contractor's claims are based on below *Alvair* (Employer risks):

- Delay Drawings or Instructions sub-clause 1.9
- Right of Access to the Site sub-clause 2.1
- Unforeseeable Physical Conditions sub-clause 4.12
- Extension of Time for Completion sub-clause 8.4
- Delay Caused by Authority sub-clause 8.5



S.N.	Record description	Frequency
1	Baseline schedule	Once in the project life cycle. Should be submitted within certain period from the project effective date.
2	Method of construction identifies the	To be submitted with the baseline schedule. Also, should be updated
	works that are intended	and submitted with any new schedule revision.
	to be executed by subcontractors.	
3	Planned manpower and machinery resources	To be submitted with the Baseline schedule and its revisions.
4	Programme updates	Could be weekly or monthly based on the contract requirements ^(*)
5	Notices for delay	Once the contractor knows about the event and within
		certain period as stipulated in the contract documents.
		Should be prepared for each event.
6	Programme revisions indicating changes and	In case of major changes or the current
	its required resources and	programme becomes out dated or misleading.
	the impact on the contract completion date.	
7	Delay analysis	With each programme update. It is recommended to be done weekly
8	Time impact analysis showing the potential impact of	Once the contractor knows about the event.
	the changes prior to carrying out the changes.	Should be done for each delay event.
9	Cause and effect analysis for each delay/disruption event.	Once the contractor knows about the event.
		Should be done for each delay event.
10	Productivity analysis reports	Weekly
11	Minutes of the daily, weekly, and meetings.	Upon request
12	Minutes of any special meeting.	Upon request
13	Change of work notices	Within certain period, as defined in the contract,
		from the date that contractor came to know about the change
14	Daily progress reports	Daily
15	Weekly progress reports	Weekly
16	Monthly progress reports	Monthly
17	Claim register	Monthly
18	Delay events log	Monthly

^(*) It is recommended for the contractor to perform the schedule updates on a weekly basis even when the contract requires monthly updates. This will allow the contractor to keep a highly accurate history that would enable the contractor to prepare a well-supported claim.

List of required records to establish properly substantiated claims



Employer Claims

• If Employer consider himself is entitled for any payment he should send a notice to the Contractor with all the supporting particulars, claims can be due to:

- I- Extend Defect and Notification Period.
- 2- Extra payment due to Contractor faults that forbids Employer from using part or all the works after completion date of Works.
- 3- Contractor using Employer equipment,
- 4- Contractor fails to pay operational cost to the Employer personnel as mentioned in the Contract.

Sub-Clause 20.2 Appointing of the Dispute Adjudication Board (DAB)



- DAB shall be appointed within 28 days from commencement letter or as mentioned in the *Appendix to Tender* and dispute have to be adjudicated by DAB, DAB is responsible to reduce the disputes between Parties.
- DAB is consist as stated in the *Appendix of Tender*, either one or three members and if the number is not stated and not agreed by Parties, DAB is three members.
- Each Parties shall nominate person for DAB member for approval from the other party and these selected members shall nominate a third member who will become a chairman,

Alvair

Sub-Clause 20.2 Appointing of the Dispute Adjudication Board (DAB)

- Sometime there is a list included in the *Appendix to Tender* for selecting DAB members, there is an Agreement between the parties and the DAB members included in the forms.
- Any Party have the right to consult the DAB for any dispute but with agreement from both.

