



ADB

# Introduction to FIDIC Contracts

Islamabad Day 1 (Part I) – 28 August 2023

**James Perry**

BSc Civil Engineer, Juris Doctor,  
FIDIC President's List Adjudicator,  
FIDIC Accredited International Trainer  
Partner, PS Consulting, Paris

This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.

# 1. General

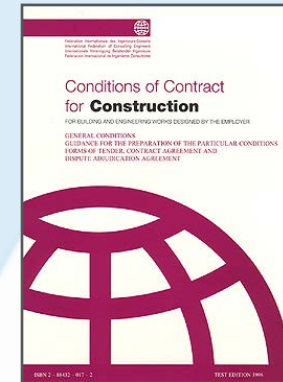
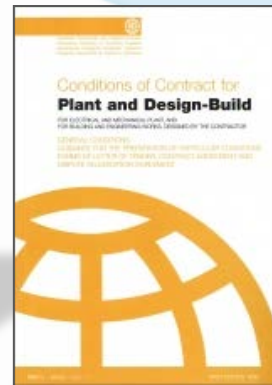
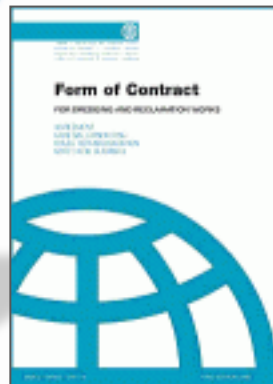
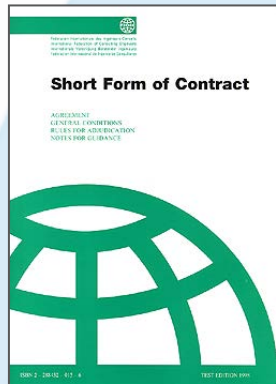
- FIDIC represents Consulting Engineers.
- Founded in 1913 by French, Swiss & Belgium firms.
- A federation of 100 national engineering associations such as CEAI.
- Affiliated firms and individuals in excess of 100.
- Members must comply with statutes and by-laws.
- FIDIC develops and promotes best practices in international consulting industry.

## 2. FIDIC Contracts

- FIDIC Contracts are drafted by Consulting Engineers.
- FIDIC Contracts have developed since 1957 in response to demands from international industry.

|      |                                     |                         |
|------|-------------------------------------|-------------------------|
| 1957 | Red Book 1st Edition                | Construction            |
| 1963 | Yellow Book 1st Edition             | Electrical & Mechanical |
| 1969 | Red Book 2 <sup>nd</sup> Edition    | Construction            |
| 1977 | Red Book 3 <sup>rd</sup> Edition    | Construction            |
| 1980 | Yellow Book 2 <sup>nd</sup> Edition | Electrical & Mechanical |
| 1987 | Red Book 4 <sup>th</sup> Edition    | Construction            |
| 1987 | Yellow Book 3 <sup>rd</sup> Edition | Electrical & Mechanical |
| 1995 | Orange Book                         | Design-Build & Turnkey  |

FIDIC currently publishes 6 standard Works Contracts & distributes 40 000 copies each year



## 2. FIDIC Contracts

- In 1999, FIDIC totally redrafted all three contracts:

**Red Book** – Construction of Works designed by Employer

**Yellow Book** – Plant & Design-Build

**Silver Book** – EPC/Turnkey

- Since then FIDIC has added:

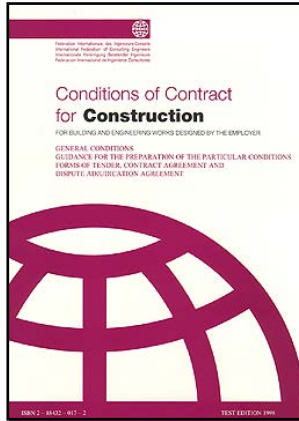
Green Book – Short Form of Contract

Gold Book – Design, Build & Operate

Blue-Green Book – Dredgers' Contract

Pink Book – MDB Harmonised Edition of RB

## 2. FIDIC Contracts

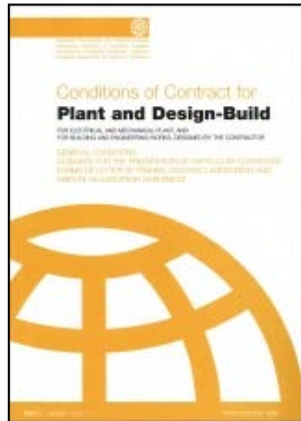


### RED BOOK:

### Conditions of Contract for Construction

- Detailed Design given to Contractor;
- Payment based on re-measurement (rates and prices in BoQ applied to “actual” quantities);
- Supervision & contract administration by the “Engineer”.

## 2. FIDIC Contracts

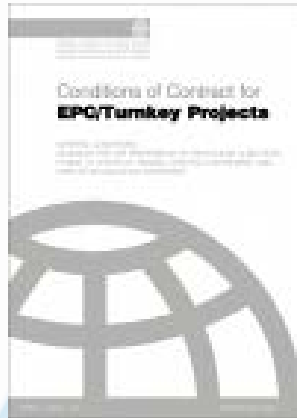


### YELLOW BOOK:

### Conditions of Contract for Plant and Design-Build

- Detailed Design done by Contractor;
- Payment based on lump-sum;
- Design reviewed/approved and Works supervised by the “Engineer”.

## 2. FIDIC Contracts



- **SILVER BOOK:**
- Conditions of Contract for EPC/Turnkey Projects
- Design done by Contractor;
- Payment based on lump-sum;
- Supervision by the Contractor – but Employer maintains presence through “*Employer’s Representative*” (if appointed).





## GOLD BOOK:

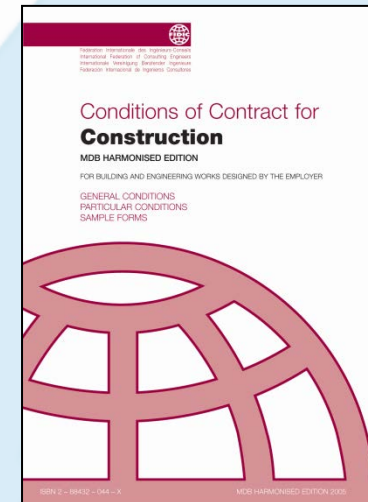
### Conditions of Contract for Design, Build & Operate Projects

- Design done by Contractor;
- Payment based on three lump-sums – one for Design & Build; one for Operation and one for Asset Replacement ;
- Supervision by the Contractor – but Employer maintains presence through "*Employer's Representative*";
- Operation phase is supervised by Auditing Body.

## AND THE PINK BOOK?

### MDB Harmonised Edition of the FIDIC Construction Contract

- Since 2005, Multilateral Development Banks have a licence to use own version of Red Book. (3rd Edition published 2010)
- Based on Red Book: design given to Contractor; Re-Measurement; supervision by Engineer.
- There is also a Guide available.



- The main areas of difference between the Red Book & the Pink Book include:
  - the Pink Book is more balanced with respect to periods for taking action;
  - the Pink Book includes a role for the Bank;
  - the Pink Book has a much greater emphasis on “social issues”;
  - the Pink Book has a much greater emphasis on anti-corruption measures.
- The Pink Book has been replaced with the 2017 Red Book with the ADB COPA

## 2. FIDIC Contracts

- In 2017, FIDIC totally published revised versions of the 1999 contracts:

**Red Book 2<sup>nd</sup> Edition** – Construction of Works designed by Employer

**Yellow Book 2<sup>nd</sup> Edition** – Plant & Design-Build

**Silver Book 2<sup>nd</sup> Edition** – EPC/Turnkey.

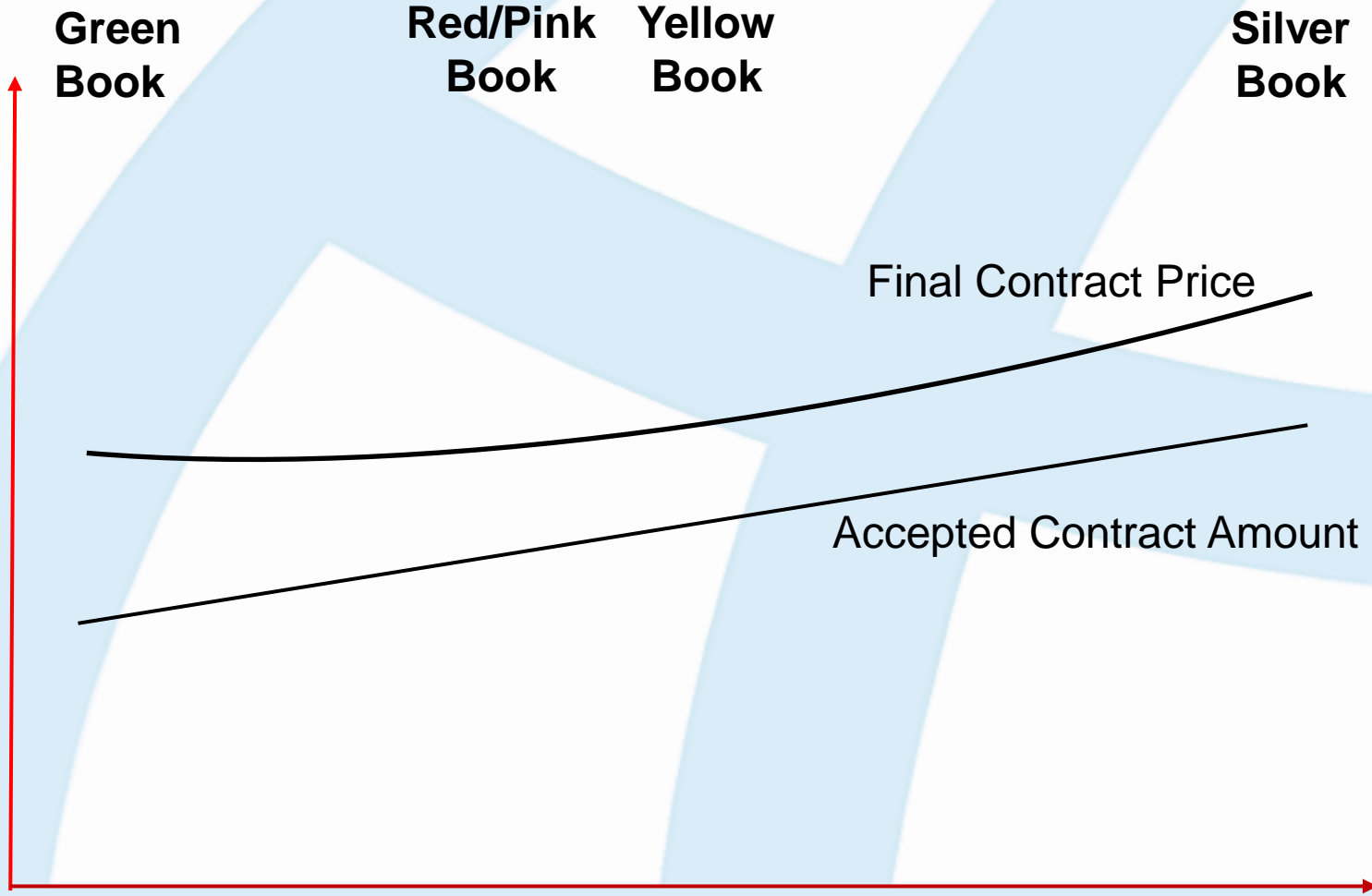
- These are often referred to as “FIDIC 2017”

# Risk Allocation under the FIDIC Contracts

|                                 | Red/Pink | Yellow     | Gold       | Silver     |
|---------------------------------|----------|------------|------------|------------|
| Employer's Requirements         | Employer | Employer   | Employer   | Contractor |
| Detailed Design                 | Employer | Contractor | Contractor | Contractor |
| Quantities                      | Employer | Contractor | Contractor | Contractor |
| Ground Conditions               | Employer | Employer   | Employer   | Contractor |
| Delay by Authorities            | Employer | Employer   | Employer   | Employer   |
| Exceptional Climatic Conditions | Employer | Employer   | Employer   | Contractor |
| Damage by natural events        | Employer | Employer   | Employer   | Contractor |

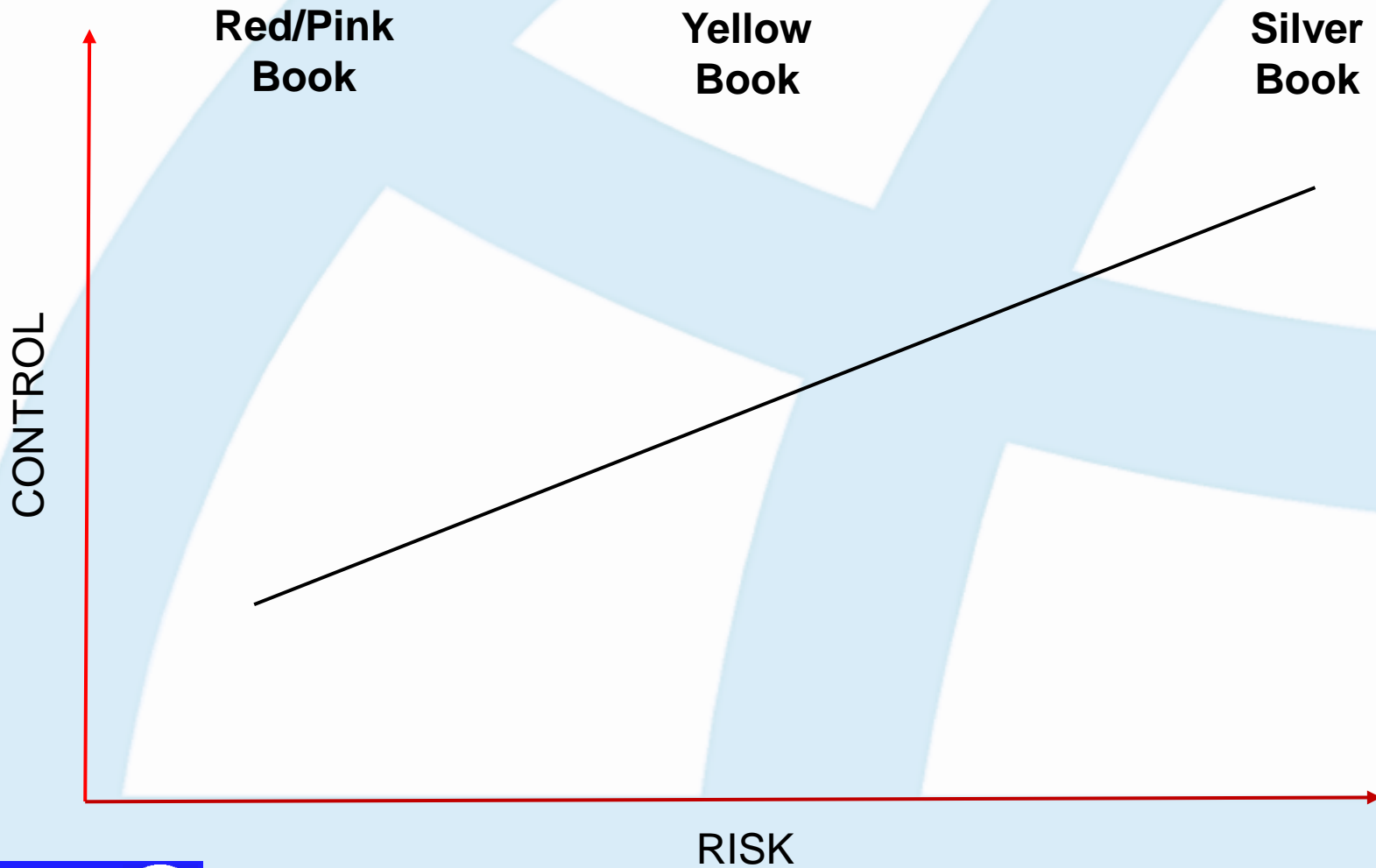
- In addition, the Red, Pink, Yellow & Gold books allow the Contractor to claim extensions of time and/or additional payment in relation to about 20 other circumstances.

# Risk = Cost



# Transfer of Risk = Transfer of Control

From Contractor's Perspective



### 3. Design Responsibility

|              | RED  | YELLOW/ GOLD  | SILVER   |
|--------------|--|---|--|
| BEFORE AWARD | Employer produces design (Specification & Tender Drawings) | Employer produces Employer's Requirements (incl. Concept Design) - ERQS | Employer produces Employer's Requirements (Performance Criteria); Bidders produce Concept Design |
| AFTER AWARD  | Employer produces construction drawings (detailed design)  | Contractor checks ERQS – any mistakes = Variation                       | Contractor checks ERQS – any mistakes = his problem  |
|              |  | Contractor produces detailed design                                     | Contractor produces detailed design  |
|              |  | Contractor finds mistake in ERQS = Variation                            |  |
|              |  | Engineer reviews/approves detailed design                               | Employer reviews <u>some</u> drawings & plant details  |



## 4. Employer's Role

|                 | RED   | YELLOW/ GOLD  | SILVER   |
|-----------------|---|---|--|
| <b>ENGINEER</b> | <p>Engineer is the interface with the Contractor</p> <p>Heavily involved in design issues and QA/QC</p> <p>Decides on defects and taking over</p> <p>Fair determinations (binding) acting neutrally</p> | <p>Engineer is the interface with the Contractor</p> <p>Less involvement in design issues and QA/QC</p> <p>Decides on defects and taking over</p> <p>Fair determinations (binding) acting neutrally</p> | <p>No Engineer</p>   |
| <b>EMPLOYER</b> | <p>Only has key decisions such as termination and calling of Performance security</p>   | <p>Only has key decisions such as termination and calling of Performance security</p>   | <p>Engineer's role performed by Employer's Representative</p> <p>BUT much less involvement in design and QA/QC</p> <p>(2017) Fair determinations (binding) acting neutrally</p> <p>(1999) Fair determinations but not binding if NOD issued within 14 days</p> |



**Thank You!**