



# **Design – Build – Operate** The New FIDIC Form of Contract

Tuesday, 26th September 2006

Michael Mortimer-Hawkins Special Adviser FIDIC Contracts Committee Chairman DBO Task Group





## **Contracts Committee and DBO Task Group**

#### **Contracts Committee**

Geoff French Axel Jaeger Chris Wade Philip Jenkinson Nael Bunni Chris Seppala Michael Mortimer-Hawkins EC Representative Chairman

Legal Adviser Special Adviser

#### **DBO Task Group**

Michael Mortimer-Hawkins Axel Jaeger Des Barry Christoph Theune Toni Bauer Erica Lund





## **FIDIC DBO Format**

Design - Construction - Long-term Operation One Contract and One Contractor One Performance Security, reducing (pro rata) at the end of the Retention Period

"green field" scenario :

a sequence of **Design – Build – Operate** 

20 year Operation period





## **Advantages of DBO**

- **Time**: Minimizing delays and optimizing construction activities
- Financial: Single point responsibility and long-term commitments
- Quality: Fitness for purpose and long-term reliability
- **Optimization of life-cycle costs**





## **DBO Format of Document - 1**

20 clause layout Same terminology and definitions (where appropriate)

General Conditions Particular Conditions Flow Charts Sample Forms Guide





## **DBO Format of Document - 2**

**Principal Parties:** 

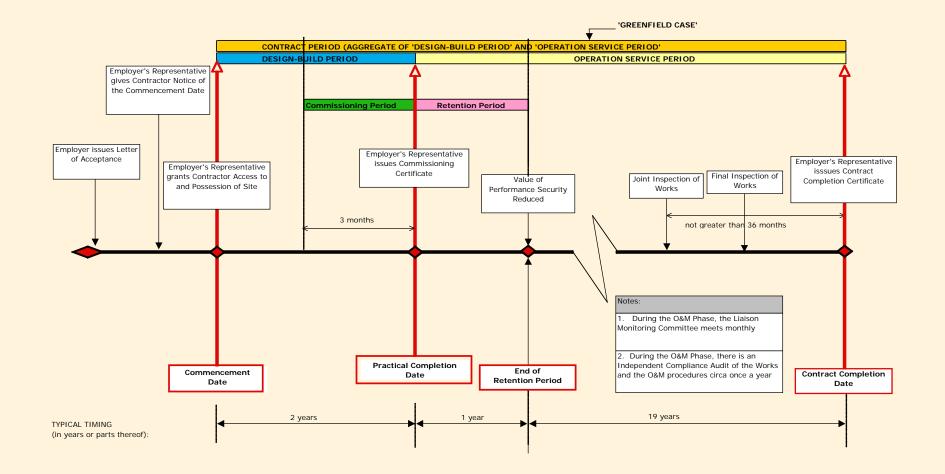
Employer Contractor Employer's Representative

**Principal Stages:** 

**Design** and Planning**Build** and Construction**Operate** and Maintain



## **DBO FLOW CHART** (Principal Events)







**Clause 1 - New Definitions** 

"Design-Build" and "Operation Service" "Cut-Off Date" "Cost plus Profit" "Financial Memorandum" "Licence Agreement" "Auditing Body"

"Commissioning Certificate"





**Clause 8 - Time-Related provisions for the whole project** 

- Commencement Date
- Time for Completion
- Programme
- Delay Damages
- Contract Completion





**Clause 9 - Provisions relating to Design-Build** 

Very similar to provisions in the Yellow Book Plus:

- 9.12 Completion of Design-Build
- 9.13 Failure to Complete





**Clause 10 - Provisions relating to Operation Service** 

- General Requirements
- Commencement
- Licence Agreement
- Independent Compliance Audit
- Delivery
- Training
- Delays and Interruptions
- Failure to reach Production Outputs
- Completion of Operation Service





#### **Licence Agreement**

- The licence given to the Contractor to allow him to operate the Plant.
- Signed within 28 days of LoA
- Effective upon issue of Commissioning Certificate
- Remains in force until Contract Completion Certificate

#### **Auditing Body**

- Appointed by Employer
- Active during Operation Service
- Totally independent
- Monitor performance of both parties
- No power to 'instruct' or make 'decisions'





Clause 14 Payment

Payment during Design-Build:Similar to the Yellow Book provisions10% Retention5% repaid on issue of<br/>Commissioning Certificate<br/>5% repaid 12 months later (at end of<br/>Retention Period)

**Payment during Operation Service:** 

**Based on fee installments given in the Schedule of Payments** 





## "Asset Replacement Fund"

To provide funds for essential replacements during the Operation Service.

Based on an agreed schedule prepared by Contractor Does not include items which are the responsibility of the Contractor:

- Regular maintenance and correction of defects
- Replacement of spares
- Other items identified in the Contract





## "Maintenance Retention Fund"

The "Maintenance Retention Fund" is required to provide an incentive to the Contractor to ensure that the Works are in proper condition at the end of the Operation Service Period.

Any money not used is returned to the Contractor at the end of the Contract.





## **Termination by the Employer - Clause 15**

#### **During Design-Build**

- For Contractor's Default
- For Employer's Convenience

#### **During Operation Service**

- For Contractor's Default
- For Employer's Convenience

**Employer cannot continue with Operation after termination for convenience.** 

**Contractor receives full compensation** 





# Suspension and Termination by the Contractor Clause 16

#### **Suspension during Design-Build**

- If Employer's Rep. fails to issue payment certificate
- If the Employer fails to pay

#### **Termination during Design-Build**

Listed defaults of the Employer

#### **During Operation Service**

• The same rights as during Design-Build





The flow from Risk to Insurance is:

- » Risk
- » Responsibility
- » Liability
- » Indemnity
- » Insurance





**New Approach in DBO Document** 

- Different Risks during Design-Build and Operation Service
- Risks of Physical Loss or Damage
- Risks of Financial or Time Loss
- Unidentified Risks
- Both Employer's Risks and Contractor's Risks are addressed





**New Simplified Terminology** 

Clause 17 General Risks Clause 18 Exceptional Risks then comes Clause 19 Insurance





#### Clause 17 General Risks

- 17.1 Risk Allocation
- 17.2 Employer's Risks of Loss or Damage during the Design-Build Period
- 17.3 Contractor's Risks of Loss or Damage during the Design-Build Period
- 17.4 Employer's Risks of Loss or Damage during the Op. Service Period
- 17.5 Contractor's Risks of Loss or Damage during the Op. Service Period
- 17.6 Unidentified Risks
- 17.7 Consequences of Employer's Risks
- 17.8 Consequences of Contractor's Risks
- 17.9 Risk of Infringement of Intellectual and Industrial Property Rights
- 17.10 Limitation of Liability
- 17.11 Indemnities by the Contractor
- 17.12 Indemnities by the Employer





#### Clause 18 Exceptional Risks

- 18.1 Definition of Exceptional Risks
- 18.2 Notice of an Exceptional Risk
- 18.3 Duty to Minimise Delay
- 18.4 Consequences of an Exceptional Risk
- 18.5 An Exceptional Risk Affecting a Sub-Contractor
- 18.6 Optional Termination, Payment and Release
- 18.7 Release from Performance under the Law





#### Clause 19 Insurance

- 19.1 General Provisions
- 19.2 Insurances to be Provided by the Contractor during the Design-Build Period
- 19.3 Insurances to be Provided by the Contractor during the Operation Service Period





## **Claims, Disputes and Arbitration - Clause 20**

**During the Design-Build Period:** 

Similar to other FIDIC Documents, but based on Standing DAB with appointment from Commencement to issue of Commissioning Certificate

During the Operation Service Period: Appointment of an 'ad-hoc' DAB as each dispute arises

**Role of Auditing Body:** 

To monitor performance of both parties, but with no 'decision making' role



## **DBO FLOW CHART** (Principal Events)

