

国際契約マネージメント・セミナー 報告書

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国際契約マネージメント・セミナー

最終報告書

目 次

第1章 セミナー企画・準備

1.1	セミナーの背景	1-1
1.2	セミナーの目的	1-1
1.3	セミナー企画・準備	1-2
1.3.1	受講者の選定	1-2
1.3.2	FIDICとの企画・調整	1-2
1.3.3	セミナー実施のための諸準備.....	1-2

第2章 セミナー開催

2.1	セミナープログラム	2-1
2.2	セミナーの概要	2-2
2.2.1	FIDIC モジュール1..... FIDIC契約約款の実務的使用方法	2-2
2.2.2	FIDIC モジュール2	2-3
	クレームのマネージメントと紛争解決	
2.2.3	FIDIC契約約款と円借款事業	2-5
2.2.4	FIDIC契約約款と紛争解決（汚職防止機能）	2-6

第3章 質疑応答

3.1	FIDIC モジュール	3-1
3.2	FIDIC契約約款と円借款事業	3-4
3.3	FIDIC契約約款と紛争解決（汚職防止機能）	3-5

第4章 セミナー分析・評価

4.1	アンケート概要	4-1
4.2	受講者の属性	4-1
4.3	FIDIC契約約款についての事前知識	4-2
4.4	講義内容	4-3
4.5	汚職の原因に対する見解	4-6
4.6	FIDIC契約約款の導入と実施	4-6
4.7	クレーム及び費用増加の原因	4-7
4.8	契約課程での問題点	4-8
4.9	まとめ	4-8

添付資料

- 添付-1 セミナープログラム
- 添付-2 オリエンテーション
- 添付-3 セミナー風景
- 添付-4 アンケート
- 添付-5 アンケート集計
- 添付-6 アンケート記述回答
- 添付-7 FIDIC Certificate
- 添付-8 Copy Right Agreement

セミナー教材

1. FIDIC Module 1
2. FIDIC Module 2
3. FIDIC Contract Documents and JICA ODA Loan Projects
4. FIDIC Contract Documents and Dispute Resolution
Prevention of Corruption

第1章 セミナー企画・準備

1.1 セミナーの背景

円借款事業は、被援助国自身の公共調達・契約管理法令等の各国のカントリーシステムを通じて、円借款調達ガイドラインの範囲内でコンサルタントやコントラクター等の調達・契約管理を実施しており、各国の公共調達・契約管理能力の強化を行うことは、当該国の公共事業の着実な実施という本質的な観点だけでなく、円借款事業の進捗促進という意味でも非常に重要な役割を担うことになる。

特に先進国等の進んだ土木・建設技術等を必要とする大型インフラ事業については、開発途上国自身が、その資金源を問わず、国際的に事業を展開する企業を契約相手方として調達・契約管理を行うケースが多く見られている。こういった複雑な事業の円滑な実施の際に、片務的な契約や偏った契約解釈による紛争等が発生しているケースもあり、その調達および契約後の契約管理過程において、民間企業も含めて国際的に認知度が最も高く、かつ JICA だけでなく世界銀行、アジア開発銀行（ADB）等の国際援助機関がその標準請負契約約款の基礎として採用している「FIDIC 契約約款」のうち、Conditions of Contract for Construction, Multilateral Development Bank Harmonized Edition：建設工事の契約条件書 国際融資機関版（以下「FIDIC MDB 版」という）の内容・管理手法につき被援助国自身、特に調達管理機関や事業実施機関が精通する必要がある。

また、世界の政府予算の約 2 割を占めるとされる政府調達のうち、多くの国においてその 4 分の 1 程度が汚職のために浪費されていると指摘する報告書¹が発表されており、同報告書は、その汚職発生の背景・理由を被援助国側のカントリーシステムにおける複雑な調達手続きや裁量の余地、脆弱な監視体制、実施能力不足等に求めている。従って、被援助国における「FIDIC MDB 版」に基づいた合理的で透明性の高い調達及び契約管理体制の構築は、公共事業における汚職防止に向けて重要な役割を果たしうるものと考えられる。

これを受けて、多くの円借款プロジェクトが実施されている全 JICA 拠点国の JICA 円借款事業の実施機関職員等を対象として、本業務を実施することとなった。

1.2 セミナーの目的

本業務は、被援助国を対象とした「FIDIC MDB 版」を通じたセミナー等を行うことで、被援助国自身のキャパシティ開発を通じて、各国の公共工事における調達・契約管理手法の改善を目指すとともに、円借款事業の円滑な実施を指向し、ひいては汚職防止への貢献を目的とする。

具体的には円借款事業実施機関を中心とするセミナーの受講者に対して FIDIC のカリキュラムに準拠したセミナーを実施し国際契約マネージメントに対する理解を増進することで、被援助国における円借款事業実施が促進されることを目的とする。

1.3 セミナー企画・準備

1.3.1 受講者の選定

当該セミナーは東京にて開催し、セミナーの参加者は JICA 拠点国の JICA 円借款事業の実施機関職員及び JICA 在外事務所職員を対象とした。

JICA 円借款事業実施機関からの受講者の選定は、東南アジア第一・太洋州部と連携し JICA 在外事務所をとおして実施した。JICA 円借款事業実施機関で 契約業務の担当者あるいは、契約業務に関わっている職員の中から英語に堪能な方々を選定した。

また、JICA 在外事務所からの受講者の選定は、東南アジア第一・太洋州部が実施、それに係る選定支援を行った。

選定後、渡航用ビザ取得、航空券手配、ホテル予約などに資するため受講者リストを作成した。

1.3.2 FIDIC との企画・調整

業務の最優先事項として、FIDIC MDB 版に準拠したカリキュラム、FIDIC モジュール（教材）作成のため、FIDIC 本部（スイス・ジュネーブ）に認定講師の選定を依頼した。

添付-2 に示すとおり、土木技術者及び弁護士として建設マネジメント、契約マネジメント、紛争の裁定や仲裁分野で豊富な経験を有し、FIDIC MDB 版の解説用教材である「FIDIC モジュール」の講師を務める Geoffrey Smith 氏と James Perry 氏を紹介頂き、講師とした。

FIDIC モジュール 1 及びモジュール 2 の詳細は第 2 章で述べるが、教材の内容（カリキュラム）は 1 週間に亘るセミナープログラムを勘案し、受講者にとって分かりやすく、質疑応答を含め理解を深める構成・内容になるよう講師と事前に調整を図った。

1.3.3 セミナー実施のための諸準備

(1) 来日手続き

① 査証手配

本セミナーの査証手配に関しては、セミナー受講者決定後の手続きとなり時間的制約が極めて大きく、関係部署（JICA 本部及び各国 JICA 事務所担当者）との迅速な対応が求められた。特に、本部における身元保証書、招へい理由書の作成と送付、各国事務所における査証申請のサポートといった作業については、各担当者の迅速な対応がなければ、全員の発給は難しかったと思われる。実際に現地の出発日前日に査証が発給された受講者も数名いた。

事務局では、それぞれの受講者への申請書類の送付、申請についてのアドバイス及び個人的に渡航準備に関する照会があった際の支援を行った。受講者の照会事項は査証申請から日本での衣服など様々であり、各照会事項に対しメール・電話等で回答した。

今後の対応案は、以下のとおり

- ・受講者の選考プロセスをできるだけ前広に行う。
- ・選考が遅れてしまう場合もあることから、少なからず応募要件には旅券を持っている者を対象にする。
- ・査証申請に係る手数料や現地の国内移動（査証申請や地方から首都の空港までの移動）に係る経費の取扱いについては予め明確にしておく。

② フライト手配

フライトに関してもセミナー受講者が決定してからの手配となったため、手配に十分な時間がとれず困難を要した。また、この時期は例えばベトナムが旧正月（テト）と重なってしまうなど、時期的にも難しい点があった。最終的には全ての受講者のフライトを手配することができたが、上述事由により、一部の受講者についてはフライトの調整（別航空会社での手配）が発生した。

(2) 会場・宿泊先手配

年度末でかつ一週間続けてのセミナー開催、60名を超える受講者、利便性や経済性などを勘案し、会場は宿泊先から徒歩圏内の「TKP 虎ノ門ビジネスセンター」とした。宿泊先に「新橋愛宕山東急イン」を確保した。同会場は同宿泊先より徒歩約5分である。

食事面については、受講者の嗜好や宗教上の制約を踏まえ、事務局側で特別なものは準備せずに会場近郊のレストランマップを配布することとした。各受講者はそれぞれに好みのレストランを見つけては食事を楽しんでいただいていたようである。

(3) セミナー運営

セミナー運営に関しては、受講者側に JICA のナショナルスタッフが参加しており、セミナーの円滑な運営への協力があつた。サイト視察の際の点呼などについては、国ごとの集合状況などについて確認して頂いた。

多くの受講者から、セミナー後にメール等を通じて評価を頂き、全ての日程・工程を順調に終えることができ、セミナー後には多くの受講者から評価・謝辞のメールがあつた。

(4) 受講者の構成

今回のセミナーにおいては、当初応募予定定員を 30 名（応募状況により最大で 50 名）としていたが、カウンターパート機関及び関係省庁から 35 名、JICA のナショナルスタッフが 27 名の計 62 名が参加した。その他、日本からもコンサルタントや総合建設業の関係者の参加が 12 名あった。国別の内訳は以下の通りである。

受講者の構成

カウンターパート機関及び関係省庁			
国名	受講者数	国名	受講者数
1) ベトナム	15 名	4) タイ	5 名
2) インドネシア	6	5) ラオス	2
3) カンボジア	6	6) パキスタン	1
JICA ナショナルスタッフ			
地域	受講者数	地域	受講者数
1) 東南アジア	11 名	4) アフリカ	2 名
2) 東・中央アジア	3	5) 中南米	4
3) 南アジア	3	6) 中東・欧州	4

第2章 セミナー開催

2.1 セミナープログラム

セミナーは2010年2月22日から26日に亘る5日間の集中コースとし、JICAの工事用標準入札図書（Sample Bidding Documents under Japanese ODA Loan-Procurement of Works, June 2009）の一般条件書に採用されているFIDIC MDB版を中心としたセミナーを実施した。

セミナー3日目に「円借款事業とFIDIC契約約款」と「国際契約法とFIDIC契約約款」を組み入れ、FIDIC MDB版がJICA円借款事業に深く関わっていること、FIDIC MDB版で義務付けている裁定人（アジュディケーター）や裁定委員会（DB, Dispute Board）の役割、やDBが汚職防止に有効に機能するとのプレゼンも実施した。

同日午後には、現在工事中の羽田D滑走路や科学未来館の視察を企画し、日本における先端事業や先端科学技術に触れる機会を設けた。FIDIC契約約款は海外の同様な事業で基本的な契約約款として使用されており、講義で議論された地質設計条件、設計変更、工事敷地の確保、環境影響評価・モニタリング等につき、実際の現場でこれらを再度確認できたことは大変意義深いと考える。

最終日（5日目）午後は、アンケートの記入後、評価会において、セッションで説明が不足した仲裁裁判(Arbitration)の仕組みや、FIDIC契約約款で義務付けている裁定委員会（DB）との相違につき解説及び質疑応答が交わされた。

評価会の最後で各講師によるセッションの総括が行なわれ、受講者からはセミナー全体を通じた意見や評価のコメントが出された。

受講者全員へのFIDIC修了証授与に続き、JICAの閉会挨拶があり、全プログラムを終了した。

セミナーのプログラム

	午 前	午 後
1日目（月）	<ul style="list-style-type: none"> ・開会式 ・オリエンテーション ・FIDICモジュール1(その1) 	<ul style="list-style-type: none"> ・FIDICモジュール1(その2)
2日目（火）	<ul style="list-style-type: none"> ・FIDICモジュール1(その3) 	<ul style="list-style-type: none"> ・FIDICモジュール1(その4)
3日目（水）	<ul style="list-style-type: none"> ・円借款事業とFIDIC契約約款 ・国際契約法とFIDIC契約約款 ・FIDICモジュール2(その1) 	<ul style="list-style-type: none"> ・現場視察
4日目（木）	<ul style="list-style-type: none"> ・FIDICモジュール2(その2) 	<ul style="list-style-type: none"> ・FIDICモジュール2(その3)
5日目（金）	<ul style="list-style-type: none"> ・FIDICモジュール2(その4) 	<ul style="list-style-type: none"> ・評価書の作成 ・評価会 ・修了証授与 ・閉講式及び

2.2 セミナーの概要

2.2.1 FIDIC モジュール1 FIDIC 契約約款の実務的使用方法

FIDIC 認定講師である Geoffrey Smith 氏から英語でモジュール1の解説が行なわれた。各セッションにおいては活発な質疑応答が行なわれ受講者と講師間の理解とコミュニケーションが図られた。

(1) セッション1 FIDIC 契約約款の概要と理念

FIDIC 契約約款の概要とそのルーツを解説。なぜ FIDIC 契約約款は現在のような構成になったのか。プロジェクトの種類に応じてどのような契約約款を使用すればよいか。FIDIC 契約約款をどのように組み立ててゆくのか。セッション1ではこのような基本事項について以下の項目について解説が行なわれた。

- FIDIC の概要
- FIDIC 契約約款の背景
- FIDIC 契約約款の構成
- 契約条件書の準備
- リスク分析
- どの契約約款を使用するか
- Conditions of Contract for Construction, 1999 Edition:
建設工事の契約条件書 1999 年版（以下「FIDIC レッドブック」という）の概要
- FIDIC MDB 版の概要

(2) セッション2 主要な当事者間の責任

FIDIC MDB 版における主要な当事者の役割と責任を理解することは、プロジェクトを成功裏に遂行する上で必須事項である。役割や責任の誤解はいざこざや紛争の原因となる。これらを以下の項目につき解説された。

- 一般規定
- 発注者
- 請負者
- エンジニア
- 指定下請者
- 設計 (Conditions of Contract, Plan and Design Built:
プラント及び設計施工の契約条件書（以下「FIDIC イエローブック」という）

(3) セッション3 プロジェクトのマネジメント

契約当事者間で合意した基本事項を設定すると共に、FIDIC MDB 版はプロジェクトを効率的に遂行するための詳細な義務や手続きについて記述している。これらにつき、以下の項目から解説が行なわれた。

- 要員及び労務者
- プラント、資材及び施工技術
- 工事の開始、遅延及び中断
- 完成試験
- 発注者への引渡し
- 欠陥補償責任
- 設備契約：完成後試験

契約価格の条項と手続き

FIDIC MDB 版は一方の当事者から他方への契約額の支払いに関し、詳細な手続きや工程が示されていることについて、以下の項目から解説された。

- 検測と費用算定
- 変更と調整
- 契約価格と支払い
-

(4) セッション4 リスク、不可抗力及び工事中断

建設工事にはリスクが伴うものであるため、リスクの適正な分担は重要事項である。セッション4ではプロジェクトに問題が生じた場合の対処方法も含め、以下の項目につき解説が行なわれた。

- リスクと責任
- 発注者による工事中断
- 請負者による工事中断と契約終了
- 瑕疵責任と保険
- 不可抗力
- クレーム、紛争及び仲裁

2.2.2 FIDIC モジュール 2 クレームのマネジメントと紛争解決

Module 2 は、FIDIC 認定講師である James Perry 氏から英語で解説が行なわれた。各セッションにおいては活発な質疑応答が行なわれ受講者と講師間の理解とコミュニケーションが図られた。

(5) セッション5 変更のマネジメント

FIDIC 契約約款の手続きを理解し、正しく適用されるならば、多くのクレームは回避可能である。このセッションでは条項 13 の役割、及び他の副条項との関係を見る。また、いつ、いかなる方法で条項を変更できるのか、エンジニアが契約のもとで持ちうる権限について解説された。

- 契約の定義

- 変更のタイミングと権限
- 条項 13 及び関連条項によって網羅される変更
- 変更の開始と指示
- 請負者の権利と義務
- 実用的なマネージメントへの助言
- 変更に伴う典型的なクレームの回避

(6) セッション 6 クレームの処理

① 通知とクレームの手順

クレームの発生が予想される場合は、請負者と発注者はきちんと定められた手順に従う必要がある。これらの手順は当事者が契約の展開を正確、かつリアルタイムでフォローすることを可能にする。手順に従えば、双方の当事者にとって先の見通しがよくなり、クレームを減らせる。

- 請負者の通知が必要な条項
- 発注者またはエンジニアのクレーム，副条項 2.5

② 請負者のクレーム 副条項 20.1

FIDIC MDB 版は追加払いや完成工期の延長など、請負者のクレームにつながる多くの事象(event)について詳述している。このセクションでは請負者によるクレームの範囲と手順に加えて、クレームをサポートするために必要な文書、及びエンジニアの役割について解説された。

- クレームの通知
- 事象の記録
- クレームの準備
- エンジニアの審査とクレームの考え方
- エンジニアの変更
- エンジニアの決定，副条項 3.5

③ 遅延のクレーム

遅延に関するクレームが最も複雑である。このセクションでは完成工期の延長を FIDIC MDB 版でいかに処理しているか、また損害をどのように見積っているか、以下の項目から解説された。

- 工期延長，副条項 8.4 及び 8.5
- 不可抗力，副条項 19.4

(7) セッション 7 クレームの処理

④ 追加払いのクレーム

工事の遅延が生ずると、請負者側から最も頻繁に出されるクレームは地質条件、建設用地確保の

遅延、それに未払いである。このセクションではこれらのクレームに対処するための FIDIC の手順を以下につき詳細に解説された。

- 地質条件, 副条項 4.12
- 建設用地確保の遅延, 副条項 2.1
- 契約不履行

⑤ 発注者の金銭(financial)クレーム

請負者側の履行違反によって発注者はもちろん損害を受ける。これらの損害とその結果生じる発注者の典型的なクレームは、工事の遅延、及び工事の欠陥に関するもので、請負者の成果と安全保持に対する評価(call)に反映される。このセクションでは発注者とエンジニアがこれらの事象にいかに対処すべきか解説された。

- 遅延損害
- 欠陥工事と欠陥設計
- 安全保持とボンド

(8) セッション 8 紛争の解決

⑥ 紛争裁定委員会 (DAB)

紛争裁定委員会は初期の段階で紛争を解決する有効な手段である。FIDIC レッドブックと FIDIC MDB 版では既存の紛争裁定委員会を使って早期に調査し、紛争の効率的な解決を図るとしている。このセクションでは紛争裁定委員会の目的、役割、費用、意思決定、実践について解説された。

- 紛争裁定委員会の考え方
- 紛争裁定委員会の役割
- 紛争裁定委員会解散後の決定プロセス

⑦ クレームの仲裁

当事者がどのような契約を結んでも、工事の期間中あるいは工事終了後に訴訟が起きないと保証することはできない。FIDIC MDB 版は紛争の最終的な解決メカニズムとして仲裁をあげている。モジュール 2 の最終セクションでは、国際商業会議所 (ICC) 規則に基づく仲裁プロセスについて解説された。

- 国際商業会議所 (ICC) 規則
- 仲裁者の選定
- エキスパートの活用

2.2.3 FIDIC 契約約款と円借款事業

日本工営（株）林氏が英語で「FIDIC 契約約款と円借款事業」についてプレゼンテーションを行なった。プレゼンテーションの趣旨は以下のとおりである。

FIDIC 契約約款と JICA 円借款事業の調達書との関連を説明し、FIDIC MDB 版において実現されている発注者と請負者間のバランスのとれたリスク分担を維持することの重要性を説くことが、本講義の目的である。

FIDIC は 2005 年に、1999 年版 FIDIC レッドブックをベースとした「FIDIC MDB 版」を世銀を始めとする MDB（国際融資機関）と共同で開発し出版した。JICA では、調達業務の調和化の一環として土木工事用の工事用標準入札図書改訂を 2009 年 6 月に行い、その一般条件書に「FIDIC MDB 版」を採用した。JICA は旧標準入札書類においても FIDIC レッドブックを採用しているが、これは FIDIC レッドブックが 1957 年の初版以降、絶間ない更新と改良が続けられており、発注者が設計を行う国際建設プロジェクトにおいてデファクトスタンダードとして位置付けられているからである。

建設プロジェクトは、その特性より不確実性が付きまとうが、FIDIC レッドブックでは工事の過程で遭遇する予見不能事項に適切に対処するために、1) 発注者と請負者間の公平なリスク分担、2) 変更条項の規定、3) 契約管理者としての独立性あるエンジニアの配置、4) クレームや紛争の解決プロセスの詳細な規定、を備えている。円借款事業の従事者は、これら FIDIC レッドブックのコンセプトをよく理解する必要がある。

JICA は 2006 年に、FIDIC レッドブックの一般契約条件書の不適切な書き換えにより契約当事者間の公平なリスク分担が阻害されることを防止する目的で、「片務契約チェックリスト」を編纂した。本チェックリストでは、契約の片務性を助長する要素を、1) 請負者の契約上の権利の不合理な制限、2) 請負者の契約上の責任の不合理な拡大、3) エンジニアに付与された権限の制限、の 3 つのカテゴリーに分類し事例を挙げている。契約の公平性の担保が、円滑なプロジェクトの遂行のために極めて重要であるとの観点より、本講義では「片務契約チェックリスト」の紹介も行なった。

2.2.4 FIDIC 契約約款と紛争解決（汚職防止機能）

京都大学大本俊彦教授が英語で「FIDIC 契約約款と紛争解決（汚職防止機能）」についてプレゼンテーションを行なった。プレゼンテーションの趣旨は以下のとおりである。

FIDIC 条件書を学ばせるに当たり、まず建設契約の基礎を教えることが重要である。建設契約は他の産業の契約と比べて非常に複雑で、不確定要素に満ちており、契約内容を完全には記述し切れない。状況や契約内容が変わっていくので当事者間で再交渉が必要なことから、建設契約が「不完備契約」であることを教える。不完備契約の典型である建設契約は 1) リスクの分担ルール、2) 変更ルール、3) 紛争解決ルールが不可欠である。FIDIC などの標準契約約款はこの 3 つのルールを備えている。これらを教えることで FIDIC の契約条件を学ぶときの理解を大いに助ける。

上述の理由により建設契約では意見の相違が紛争にまで発展することがまれではない。今回の講義では、最近国際融資機関が FIDIC と協同して開発した FIDIC MDB 版 (JICA は 2009 年 6 月に「工事用標準入札図書」に採用) で採用されている「紛争裁定委員会 (DB: Dispute Board)」の実務を紹介し、建設紛争の予防と早期解決の手続を教える。DB は完全に当事者やエンジニアから独立しており、不偏な助言や裁定を与える。DB の採用によって紛争の予防と早期解決の実績が上がっていることが多く報告されている。

ところで ODA プロジェクトにおける汚職は入札・落札時に多く発生するが、契約の履行時においてはクレームに対する追加支払い時にも発生する可能性がある。DB は独立性・不偏性を持ってプロジェクトの契約上の問題を常時観察し、ヒアリングをし、また要求があれば助言までするので、契約履行の内容がオープンで透明になる。このような過程の中で不透明で不正な取引をすることは難しくなり、減少するものと期待される。DB 導入の「汚職防止」に対する間接的機能をセミナーで扱う意義は大きい。

第3章 質疑応答

セッション1からセッション8の各講義において、活発な質疑応答があった。質疑応答の内容は基本的なものからかなり細かなものまで多種多様であった。本章では、FIDIC MDB版に関する基本的な事項に関する質疑応答を中心に報告した。

3.1 FIDIC モジュール

Q1: FIDIC MDB版における「当事者」(parties)は誰か。

A1: 「当事者」は、事業主である発注者 (Employer) と工事を実施する請負者 (Contractor) である。発注者の代理人であるエンジニアは事業の当事者ではない。

Q2: 「基準日」 (Base Date) とは。

A2: 入札書類提出期限の 28 日前である。「基準日」は入札価格の積算基準として採用される日である。入札価格の修正は「基準日」における法改正や労賃の変更、材料費の変更などを加味して行われる。

Q3: 「変更」 (Variation) とは何か。

A3: 「変更」は契約書に記載された工事に対する変更で、エンジニアが請負者に変更を指示する。変更は数量、品質や他の仕様に関するもの、所有の変更、工事のタイミングや手順、必要な追加工事、工事の削除部分等がある。

Q4: 「暫定金額」 (Provisional Sum) とは。

A4: 「暫定金額」は発注者が入札書に許容額として含めるよう指示するもので、入札時には明確に費用が積算できないものであるが、工事において必要な費用 (例えば史跡埋設物に遭遇した場合の調査費など) を指す。この許可はエンジニアの指示がある場合のみ適用される。

Q5: 「開始日」 (Commencement date) は。

A5: 契約書に基づき請負者が工事を開始する日。工事完了日 (Time for Completion) は工事開始日を基準に決定する。

Q6: 「工事完了日」 (Time for Completion) は。

A6: 「工事完了日」は請負者が工事を完了する日。工事完了日は、工事開始日から請負者が工事を完了するのに許される期間を設定する。工事が区間 (section) 毎の契約の場合、工事完了日は各区間ごとに設定される。

Q7: 「欠陥通知期間」 (Defects Notification Period) とは。

A7: 「欠陥通知期間」は、工事完了日から契約書で記載された欠陥通知期間終了日までで、常工事完了日から 12 ヶ月間を指す。但し、この期間に欠陥修復が未完の場合は、期限が延長される。欠陥通知は発注者が請負者に行うもので、設計、使用材料、工事品質等に起因する問題の修復を通知する。

Q8: 工事現場へのアクセス確保は誰の責任か。

A8：発注者は隣接する敷地を横切り、工事現場へのアクセス権を請負者に付与しなければならない。
また、工事用地の確保も契約書に記載した日までの完了しなければならない。契約書に用地確保の期限が明記されていない場合は、請負者が工事計画（Programme）に従い工事が実施できるよう、十分な余裕をもって用地の確保を行う責任を有する。

Q9：エンジニアの決定(determination)とは。

A9：エンジニアの決定は契約書に規定された事項に関し、当事者の一方からクレームが提出されたときにエンジニアや下す正式な決定をいう。エンジニアは決定を下す前に、両当事者と協議し合意が成立するよう調整を試みる。合意が得られない場合は、全ての関連するデータや状況を勘案し、公正な決定(fair determination)を下さなければならない。エンジニアは関連（判断）資料を添えて、両当事者に決定通知を送付する。

Q10：エンジニアの承認や同意は請負者の瑕疵責任を軽減できるか。

A10：エンジニアによるいかなる承認、同意、検査等であっても、請負者のミス、怠慢、欠陥などを軽減するものではない。請負者は欠陥通知期間に修復を終えた後に発行される履行証明書を持って最終承認を得る。

Q11：「履行保証」(Performance Security)とは。

A11：「履行保証」は請負者のミスなどによる損失から発注者を金銭的に保障するものである。「履行保証」は請負者の銀行が銀行保証として発行するものであり、銀行と発注者間の契約となる。請負者が発注者に損失を与えた場合、銀行は保証額に応じ発注者に損害額を支払う。

Q12：「予見不可能」(unforeseeable)とは。

A12：「予見不可能」とは、入札時に経験豊富な請負者が合理的に予見できない事象をいう。

Q13：「指定下請者」(Nominated Subcontractor)に誰が支払いをおこなうか。

A13：「指定下請者」は発注者が指名するものであるが、請負者が合意した段階で、請負者は指定下請者の責任を負う。FIDIC 契約約款では、請負者はエンジニアが承認した額を指定下請者に支払うとしている。また、発注者は指定下請者に自前で追加支払いを行う。MDB 版では、指定下請者の支払いには請負者の承認が必要であると規定している。

Q14：請負者はいつ「工期延長」(extension of time)を要求できるか。

A14：請負者は契約書に記載されているいずれかの理由により「工期延長」を要求できる。但し、工事における最短行程(critical path)において工事完了日に影響が及ばない範囲で延長が認められる。

Q15：「例外的な悪天候」(exceptionally adverse weather condition)とは。

A15：FIDIC 契約約款では「例外的な悪天候」を、工事期間の 5 倍を超えた期間に一度発生するような異常気候としている。例えば 2 年工期の工事において、10 年に 1 度を超える異常気象が発生した場合、請負者は発注者に工期延長を要求できる。

Q16：クレームを要求できる期間は柔軟であるか。

A16：請負者が契約書で認められている工期遅延の通知を送付しなければならない 28 日の期間は、クレームに関する柔軟性はない。もし、この期間に請負者が工期延長の通知を提出しない場合、工期延長は認められない。42 日間に亘る詳細なクレーム要求期間がある。請負者はこの期間に新たなクレーム要求期間を提案できるが、エンジニアの判断に委ねられる。

Q17：「遅延損害」(delay damage)とは。

A17：「遅延損害」は、当事者間の工期延長に関する合意を超えて、請負者が工事完了日までに工事を完了できなかったことによる発注者の損失額を発注者が請負者に請求するものである。通常日毎の損失額を契約額比率で算定する。工事の区間が個別に契約された工事の場合、遅延損害は工事の区間及び工事全体に適用される。

Q18：「工事引き渡し」(taking over)の手続きは。

A18：請負者は工事の完成試験を終了後、工事完了と工事の引き渡しが見込まれる日の 14 日前から、エンジニアに「工事引き渡し」証明書の発行を申請できる。エンジニアは通知受領後 28 日以内に契約所に準拠し工事を終了した日を明記し、引き渡し証明書を発行する。欠陥保障期間に修復可能な欠陥がある場合は、これらの修復を条件に引き渡し証明書を発行する。また、エンジニアはしかるべき理由がある場合は、理由を付して申請を却下することができる。エンジニアが申請後 28 日以内にこれらの措置を講じなかった場合は、最終日(28 日目)に引き渡し証明書が発行されたものとみなされる。

Q19：「不可抗力」(Force Majeure)とは。

A19：「不可抗力」は以下の条件に適合する非常に例外的事象をいう

- ・ 当事者がコントロール不可能
- ・ 当事者が事前に対処できない
- ・ 合理的な判断から不可避であり克服不可能
- ・ 当事者に起因しない

Q20：誰が紛争裁定委員会(Adjudication Dispute Board : DAB)を招集するのか。

A20：契約に特記されているか、または当事者間の合意により、一人の裁定人を選定する。3 人による DAB を設立する場合は、当事者が一人ずつ裁定人を選定し、3 人目は 2 人の裁定人が選定し議長に指名する。当事者が裁定人の選定に合意できない場合は、契約書に明記された指名組織(FIDIC や ICC)に裁定人の選定を付託する。

Q21：一方の当事者が DAB の決定に従わない場合は。

A21：一方の当事者が DAB の決定に従わない場合、他方の当事者は直ちに仲裁裁判(arbitral tribunal)に訴えることができる。仲裁裁判では、一方の当事者が DAB の決定に従うよう審議し、DAB の決定に従わない理由は審議しない。一方の当事者が仲裁裁判所に不服申し立てをしない場合、決定は最終となり、DAB の決定に従わなくてはならない。

Q22：DAB、仲裁(Arbitral Tribunal)、裁判(litigation)における決定の相違は。

A22：DAB の決定は拘束力があるが最終決定ではない。当事者は DAB の決定に従わなくてはならないが、契約書に準拠して不服申し立てを行った場合は、裁判に持ち込むことができる。不服申し立てがない場合、DAB の決定が最終となる。

当事者が選定した裁判官による仲裁裁判の決定は、最終で拘束力がある。更に裁判に持ち込むことも可能であるが、仲裁での決定は New York Convention(1958)の合意に基づき、合意に参加した全ての国で有効であるため、たとえ裁判に持ち込んでも覆す可能性は少ない。

当該国での裁判(litigation)での決定は最終で拘束力がある。DAB や仲裁でも不服な場合の措置であるが、国外では決定を担保することが難しいため、国際的な建設訴訟において、裁判は仲裁に比べ評価が低い。

3.2 FIDIC 契約約款と円借款事業

Q1： JICA の「工事中標準入札図書」(Sample Bidding Documents)は強制的なものであるのか。

A1-1： Sample Bidding Documents という名称が示す通り、JICA はその使用を実施機関に強制はしていない。世銀などでは Standard Bidding Documents という名称を使用し、その使用についてかなり強い拘束力を与えている。但し、本日の講義で説明したとおり、「FIDIC MDB 版」は契約当事者間の公平なリスク分担が図られているので、JICA はその利用を強力に推奨している。また、前の版に比べると、特記条件書による書換えの例示が非常に少ないことから、一般条件書の大幅な書き換えは歓迎していないものと考えられる。

A1-2： DB (Dispute Board)のメンバーは契約当事者から完全に中立であることが求められているので、発注者側と融資契約で契約関係にある融資機関が DB のメンバーを務めることはあまり良いアイデアとは言えないと考える。

Q2： JICA の調達ガイドラインは単独の文書として(ハンドブックとの合冊ではなく)入手できるのか。

A2： 単独の文書は存在する。以下のウェブサイトですべての JICA 案件の調達に関わる文書がダウンロード可能である。

<http://www.jica.go.jp/english/operations>

3.3 FIDIC 契約約款と紛争解決（汚職防止機能）

Q1：DBの手続はその国々の法体系と抵触しないか、DBの「裁定」は執行力があるか。

A1-1：殆どの法治国家で仲裁の判断と裁判の判決に法的拘束力を与えている。ニューヨーク条約により仲裁の判断は外国においても承認され執行されるので、国際的取引では一般的には仲裁を最終的法的解決手続として採用している。

A1-2：DB手続は契約的な仕組みであって、契約の自由が保証されている国においては契約当事者がDBの裁定を受け入れて拘束されることに何の問題もない。FIDICや他のDBルールの下では、DBの裁定に不服な当事者には仲裁に行くことが保証されているので、法と抵触することはない。

ただし、DBの裁定には即従わなければならない。仲裁で覆されるまでは当事者を拘束するので、裁定内容に不服の表明をしても内容を実行しなければ契約違反になる。

Q2：DBのコストは工事契約金の0.5%位か。

A2：工事の大きさ、工期等によって一概に何%とは言えない。あえて言えば0.2%~1.0%位。今一般的に受け入れられている月額報酬：US\$3,000、日額報酬：US\$3,000を用いて、たとえば3年の工期、その間の現場訪問が9回として旅費などの実費も入れて概算することを奨励する。

Q3：DB裁定人（アジュディケーター）の資格を知りたい。

A3：FIDICウェブサイトに掲載されている。建設工事・建設契約図書の解釈・紛争解決、これら各々の知識と経験が豊富であり、契約言語特に英語が堪能であることなど。適切な学歴・職歴があり、専門的資格を保有していること。これらを勘案すると自然と相当高い年齢のアジュディケーターが多くなる。60歳過ぎではまだ経験不足である。

Q4：FIDICイエローブックとCondition of Contract for EPC/Turnkey Projects：EPC/ターンキープロジェクトの契約条件書（以下「FIDICシルバースタック」という）は紛争が起こってから設置する「ad hoc DAB」を採用しているが、講師の見解は。

A4：非常によい問題提起である。DBをプロジェクトのはじめに設置しなければ、その効果の大部分を失ってしまうと考えられる。講師の考えではFIDICは次の改訂版で「Standing DB/ Full-term DB」に変更するのではないか。（これはJim Perryによって確認された。）

第4章 セミナー分析・評価

4.1 アンケート概要

講義の理解度や講義内容に対する受講者の意見を収集・整理し、本セミナーの成果を分析・評価すると同時に、今後の課題及び問題点を整理する目的で、アンケートを実施した。

実施日	2010年2月26日（金）
調査対象	「国際契約マネージメント・セミナー」の受講者
調査方法	セミナー終了後、会場で調査票を配布し、回収
回収状況	有効回答数：72/72 回答率：100%（全体）

4.2 受講者の属性

(1) 所属先

本セミナーでは、JICA 円借款事業の実施機関（Counterpart）職員及び JICA ナショナルスタッフ（JICA NS）を受講者として招へいした。また、外部専門家の意見も聴衆するため、オブザーバーとして社団法人海外建設協会（OCAJI）会員とコンサルタントの参加も仰いだ。

(2) 業務経験年数

国際建設事業における業務経験に関してはかなりばらつきがあり、1年未満の受講者が15%いた一方、10年以上の経験ある受講者が35%いた。FIDIC 契約約款に関するセミナーは今回が最初であったこと、準備期間や開催時期の制約があったこと、事前に受講者の経験に対する情報を十分把握できなかったこと等から、受講者の理解度や経験に温度差が見られた。特に、業務経験が全く（或いは殆んど）ない受講者には相当難解であったと考えられる。

(3) 所属部署

所属部署に関する質問に対しては、36%が「その他」と回答し最も多かった。具体的には、「インフラストラクチャー部」、「プロジェクト・プログラム部」、「技術協力・円借款部」、「戦略・政策開発部」、「営業部」といった回答であった。次いで、「調達部」、「契約部」、「施工監理部」、「審査・計画」、「総務」の順に多く、公共事業になんらかの形で従事している受講者が大半であった。（図-1）

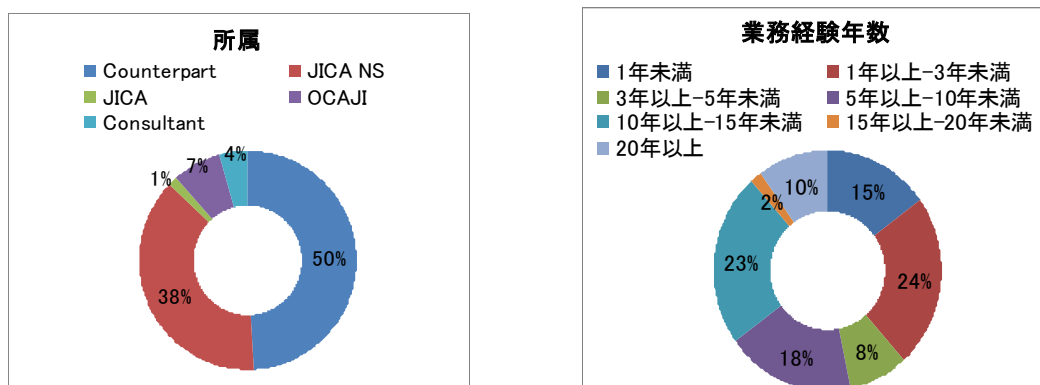


図-1

4.3 FIDIC 契約約款についての事前知識

6割以上の受講者は FIDIC 契約約款に関する事前の知識がないと回答しているが、「独学で学習してきた」、「事前に資料を入手した」と回答した受講者もいた。事前の知識がある受講者については、「国際建設事業、調達、契約などの業務を通じて知識を得た」、「過去に研修や講義を受講した」といった回答が多かった。また、「事前の知識がない」と回答した受講者の中にも、業務を通して聞いたことがあるとの回答もあり、国際建設プロジェクトへの参画経験や今後参画する可能性が高い受講者が参加していたと推測される。(図-2)

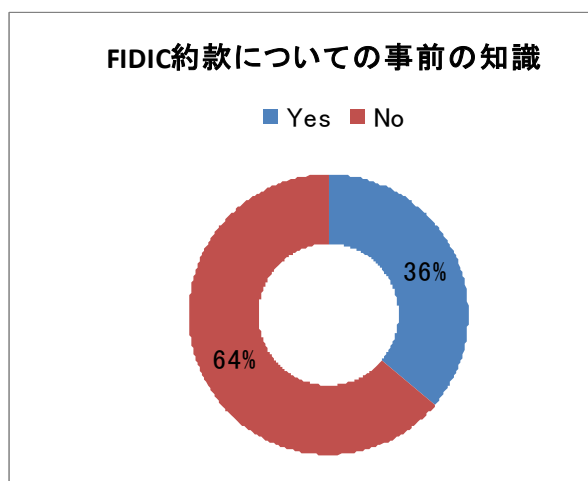


図-2

4.4 講義内容

(1) モジュール 1

図-3 は、モジュール 1 に対する評価を示したものである。講義の理解度、今後に向けた有用性、自身の能力向上、質疑応答での講師の対応についての質問では、90%以上の受講者が高く評価していることから、講義に対する満足度は非常に高かったと判断できる。

内容については「事例を多く示して欲しかった」、「事例に関する練習問題を取り入れて欲しかった」、「少人数のグループ・ディスカッションを取り入れて欲しかった」、「もっと現場視察を追加して欲しかった」といった意見もあり、実践においてすぐに役立つ情報と知識を希望していることがわかる。

教材については、概ね高い評価を得たものの、セミナー資料については、講義で使用したものが配布したものと一部異なっていたため（講師による修正）、実際に使用した資料が欲しいといった受講者も多く、より完成度の高い教材を望む意見もあった。今回は準備期間が短かったことから、講師は現地入りしてから約600枚のプレゼンテーションスライドを最大限照査された。一部修正はあったが、これらは講義で説明頂いた。なお、報告書の提出資料（教材）はプレゼンをとおして修正されたものである。その他、入札書のサンプル資料が欲しかったといった回答もあった。

また、「所属機関でも普及していきたい」と回答した受講者が大半で、受講者自身の能力向上を通じて、組織内においても FIDIC 契約約款に準拠した合理的で透明性の高い調達や契約管理体制構築の必要性などについて理解が深まることが期待される。

一方、講義時間については、過半数の受講者が適当であったと回答している半面、約 40%の受講者は短かったと回答しており、特に FIDIC に関する知識が全くない受講者に対しては、時間をかけて講義を行う必要性が感じられる。（図-3）

(2) モジュール 2

図-4 は、モジュール 2 に対する評価を示したものである。講義の理解度は概ね高いものの、記述回答では、「内容が複雑で難しかった」、「扱う内容が豊富すぎたため、モジュール 2 をさらに二つに分割して欲しかった」、といった回答があった。また、講義時間については、「短すぎた」と回答した受講者が「適当であった」と回答した受講者を上回っていた。以上のことから、モジュール 1 よりも講義内容が難解であったと感じた受講者が多かったことがわかる。

講義の理解度、今後に向けた有用性、自身の能力向上、質疑応答での講師の対応についての質問では、97%以上の受講者が高く評価していることから、モジュール 1 と同様に、講義に対する満足度は非常に高かったと判断できる。（図-4）

モジュール 1

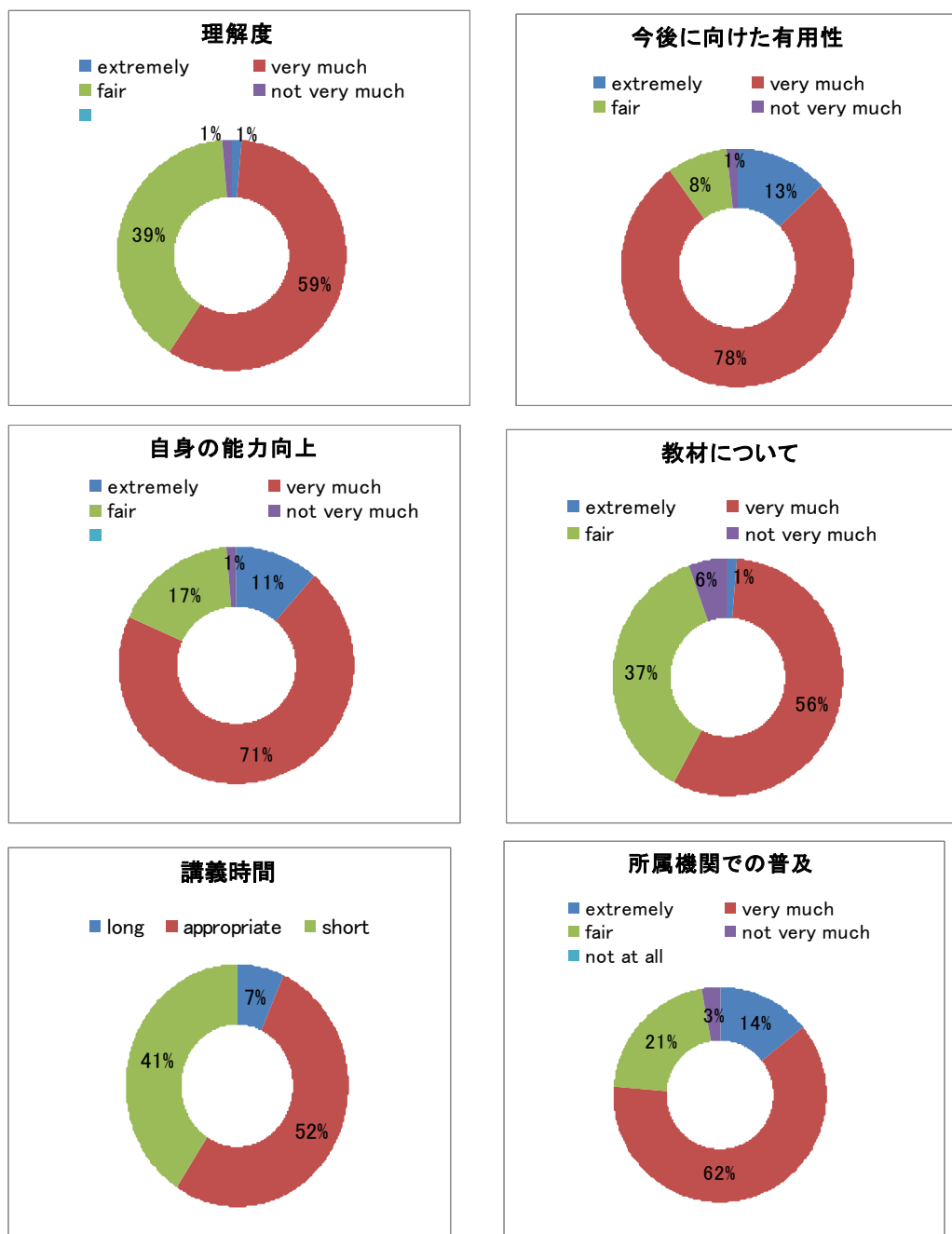


図-3

モジュール 2

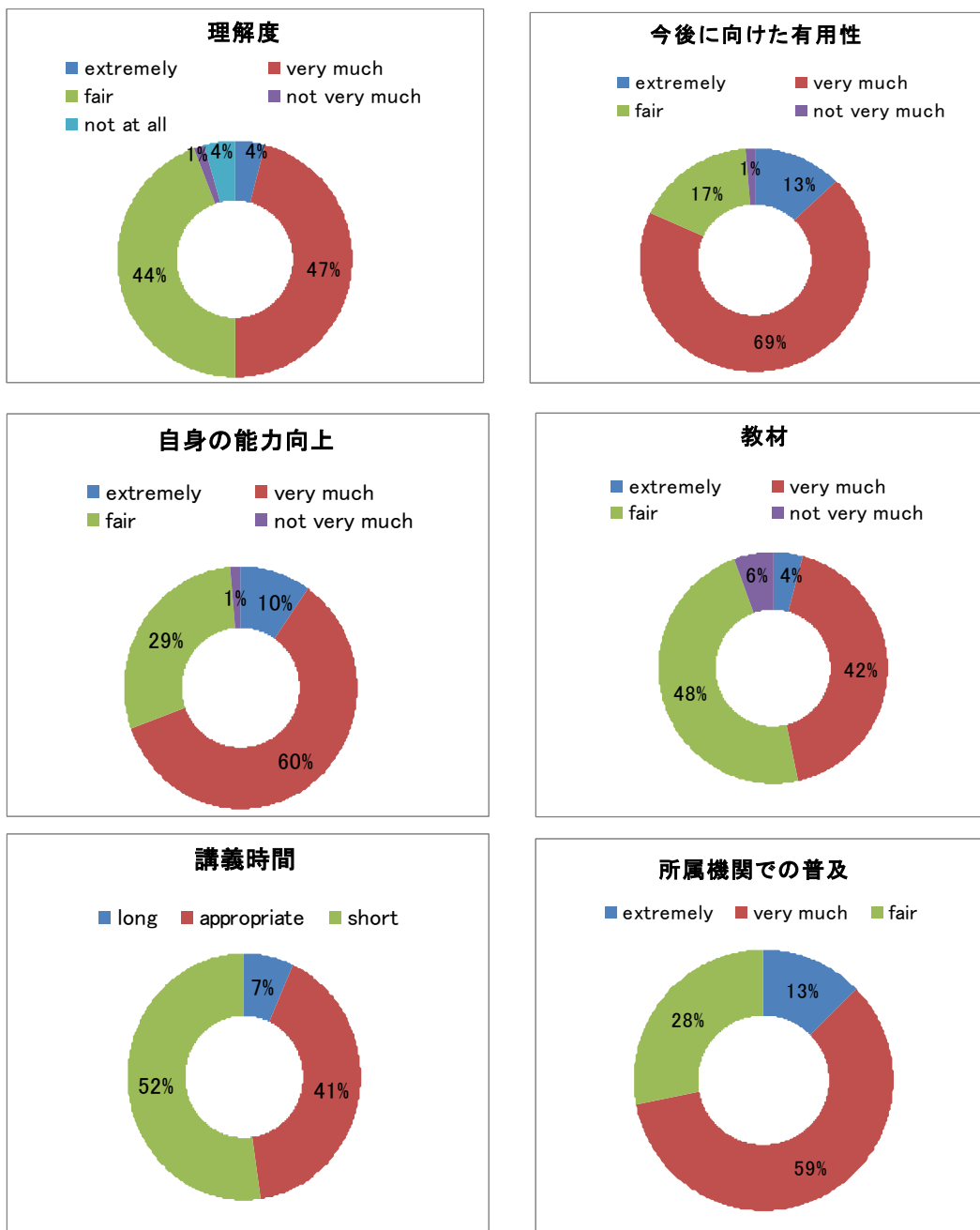
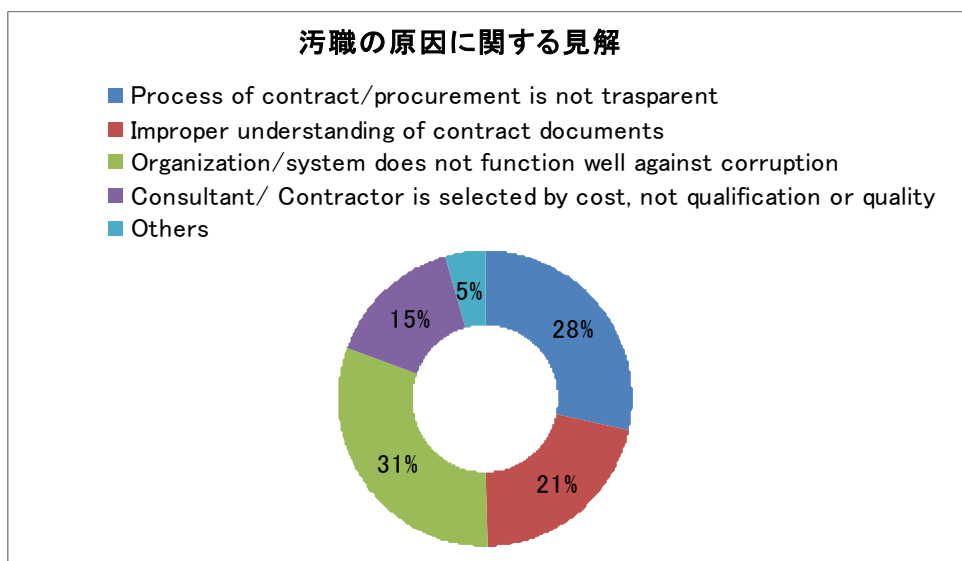


図-4

4.5 汚職の原因に対する見解

図-5 は契約と調達に関連する汚職の原因に対する見解について示したものである。全回答数の内、28%が「契約や調達の過程に透明性がないため」、21%が「契約書に精通していないため」、31%が「組織やシステムが汚職に対してうまく機能していないため」と回答している。また、15%は「コンサルタントや請負業者が資格や質ではなく価格で選定されているため」と回答している。

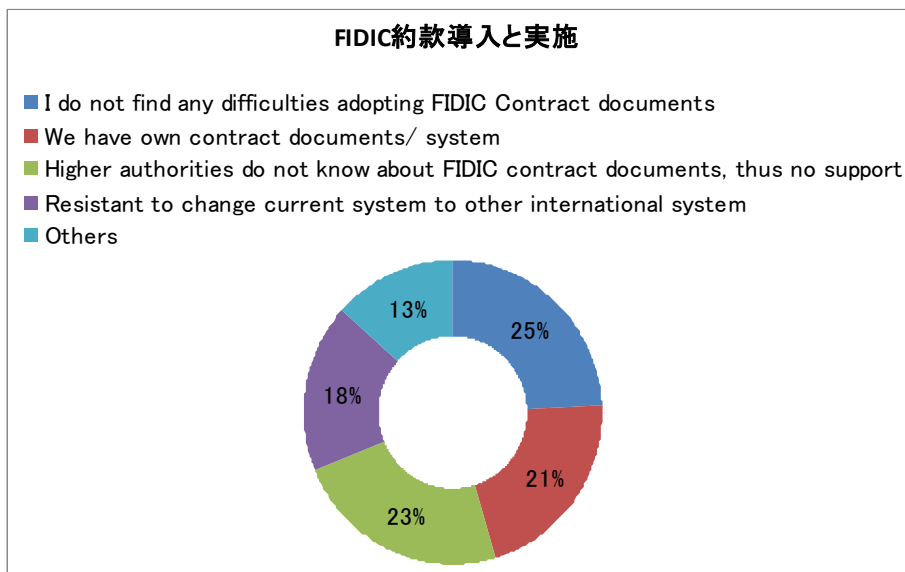


(複数回答)

図-5

4.6 FIDIC 契約約款の導入と実施

図-6 は FIDIC 契約約款の導入と実施に対する課題に関する見解を示したものである。全回答の内、25%が「FIDIC 約款の導入は問題がない」、21%が「独自の契約書や契約システムが存在する」、23%が「高級官僚は FIDIC 約款に関する知識がなく、支援が得られない」、18%が「現行システムから国際的システムへの移行に対する抵抗がある」、13%が「その他」と回答している。

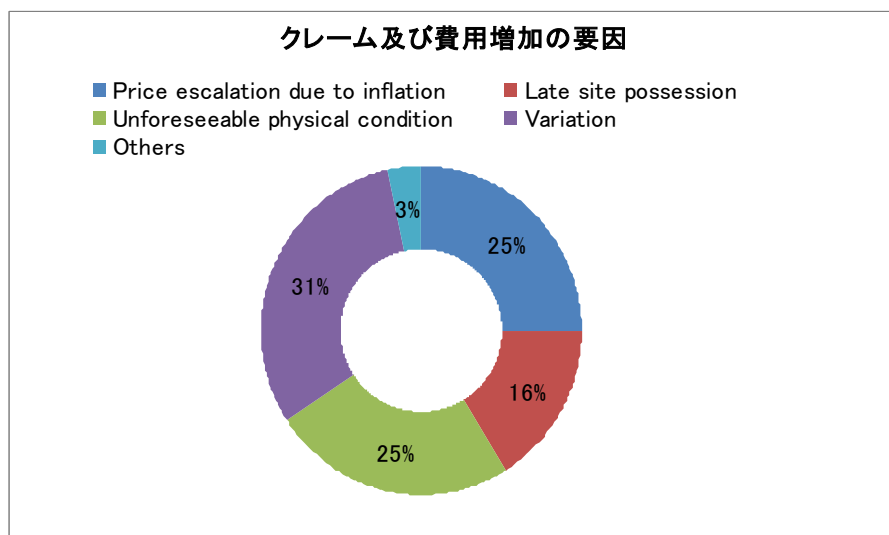


(複数回答)

図-6

4.7 クレーム及び費用増加の原因

図-7 はクレームや費用の増加原因に関する見解について示したものである。全回答の内、25%は「インフレーションによる物価上昇」、16%が「用地所有の遅延」、25%が「予見不可能な物的条件」、31%が「設計変更」、3%が「その他」と回答している。

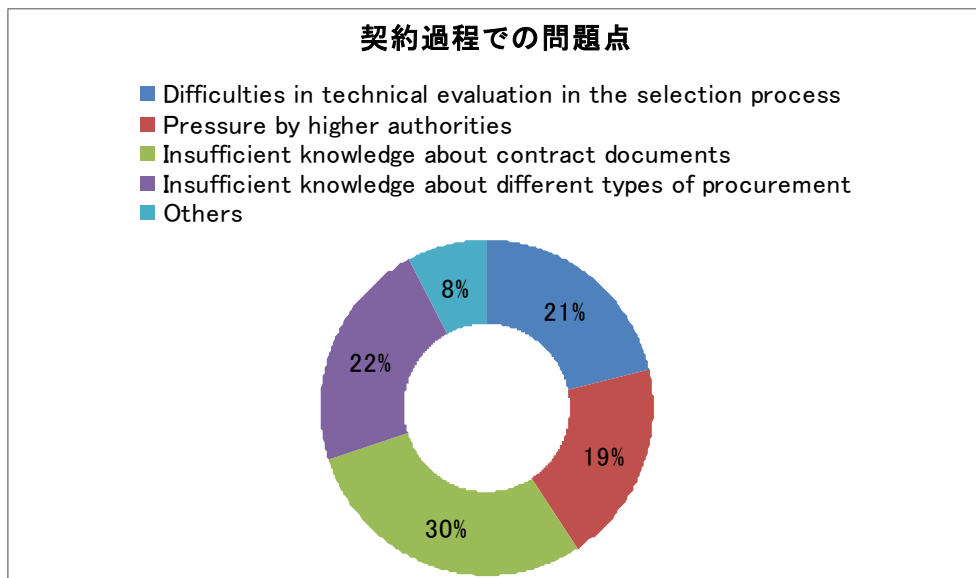


(複数回答)

図-7

4.8 契約過程での問題点

図-8は、契約過程での問題点に関する見解を示したものである。全回答の内、21%が「選考過程での技術評価における問題」、19%が「高級官僚からの圧力」、30%が「契約書についての十分な知識がない」、22%が「様々な種類の調達について十分な知識がない」、8%が「その他」と回答している。



(複数回答)

図-8

4.9 まとめ

アンケート結果から、セミナー全体に対する満足度は非常に高く、総じて高い評価を得ることができたと判断される。

講義内容の理解度が非常に高かったことから、セミナーをとおして受講者の国際契約マネジメントに関する知識及び能力を向上することができたものと判断でき、本事業の目的を達成することができたと考える。

本セミナーでは、20カ国からの受講者に講義を行ったことで、受講者間での知識や課題の共有化を図ることができたと考える。一方、受講者の業務経験にばらつきがあったため、講義レベルの設定が課題としてあげられる。また、講義時間が短すぎたと回答した受講者もいたため、今後は受講者を経験に応じクラス分けし、講義内容や講義方法を変えることで、各受講者のレベルやバックグラウンドに合致したセミナーを企画することも考えられる。今回は1ヶ国当りの受講者数は限定されていたが、対象国を絞ってセミナーを開催することで、幅広い立場の関係者が知識を共有することも、国際建設事業を円滑に遂行するために効果的であると考えられる。

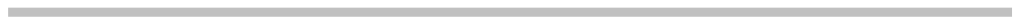
添付資料 - 1

セミナープログラム

Japan International Cooperation Agency

Seminar on Contract Management for International Construction

February 22nd to 26th, 2010, Tokyo



DAY1 Monday, Feb 22: Conference Room 2A

9:00-9:05 Opening Remarks, Koki Hirota, Director General, JICA

9:05-9:35 Orientation, Yoshihiko Yamashita, Secretary General, AJCE

9:40-12:00 **Session 1- FIDIC Module 1 (1), Geoffrey Smith, Accredited Trainer, FIDIC**
(Coffee Break in between)

Module 1: Practical Use of the FIDIC Contracts
FIDIC Contract Documents: Introduction and Principles

What is FIDIC and where do the FIDIC contracts come from? Why are FIDIC contracts structured the way they are? Which FIDIC contract should you use for your project? How do you set up a FIDIC contract? These are some of the basic aspects that will be addressed during the first session:

- Introduction to the FIDIC organization
- Background to FIDIC contracts
- Structure of the documents
- Preparation of Conditions of Contract
- Risk Analysis
- Which form to use?
- Overview of the 1999 Contracts
- The MDB Version

12:00-13:30 Lunch

13:30-17:00 **Session 2 - FIDIC Module 1 (2), Geoffrey Smith, Accredited Trainer, FIDIC**
(Coffee Break in between)

Responsibilities of the Main Parties

Understanding the role and responsibilities of each of the main parties to a FIDIC contract is one of the keys to the success of the project and misunderstandings of the responsibilities are often the source of disagreements and disputes.

- General Provisions
 - The Employer
 - The Contractor
 - The Engineer
 - Nominated Subcontractors (Red Book)
 - Design (Yellow Book)
-

DAY2 Tuesday, Feb 23: Conference Room B1

9:00-12:00 **Session 3 - FIDIC Module 1 (3), Geoffrey Smith, Accredited Trainer, FIDIC**
(Coffee Break in between)

Module 1: Practical Use of the FIDIC Contracts (Cont'd)

The Management of Projects

As well as setting out the fundamental terms agreed between the Parties to the contract, FIDIC contracts contain detailed obligations and procedures that are intended to help the Parties to efficiently manage their project. These obligations and procedures deal with matters such as:

- Staff and Labour
- Plant Material and Workmanship
- Commencement, Delays and Suspension
- Tests on Completion
- Employer's Taking Over; Defects Liability
- Plant Contract: Tests after Completion

Financial Clauses and Procedures

FIDIC contracts also include detailed procedures and timetables with respect to the assessment of amounts due from one Party to the other and procedures for paying these amounts:

- Construction Contract: Measurement and Evaluation
- Variations and Adjustments
- Contract Price and Payment

12:00-13:30 Lunch

13:30-17:00 **Session 4 - FIDIC Module 1 (4), Geoffrey Smith, Accredited Trainer, FIDIC**
(Coffee Break in between)

Risk, Force Majeure and Termination

Construction is a risky business and the sharing of responsibility for those risks is of major importance. This final session of Module 1 looks at what to do when your project "goes wrong."

- Risk and Responsibility,
- Termination by Employer
- Suspension and Termination by Contractor
- Liability and Insurance
- Force Majeure
- Claims, Disputes and Arbitration



DAY3 Wednesday, Feb 24: Conference Room 2A9:00-12:00 **Session 5**9:00- 9:45 **FIDIC Contract Documents and JICA ODA Loan Projects,**
Yukinobu Hayashi, General Manager, Nippon Koei

In this session, relevance between FIDIC contracts and JICA procurement documents is expounded. Also, "Check List for One-sided Contracts", unique document issued by JICA, is introduced.

- Overview of FIDIC rainbow of Contract
- Overview of JICA Procurement Documents
- Relevance between FIDIC Doc. and JICA Doc.
- Why FIDIC Contract is used?

9:45-10:45 **FIDIC Contract Documents and Dispute Resolution**
- Prevention of Corruption
Toshihiko Omoto, Professor, Kyoto University

The best way for dispute resolution is not give rise to a dispute in the first place. A Dispute Board helps the parties to prevent dispute from occurring. On the other hand, under the existence of a Dispute Board, the process of contract performance could be kept open and transparent among the parties, Engineer and the Dispute Board, thus corruption could be avoided.

10:45-11:00 Coffee Break11:00-12:00 **FIDIC Module 2 (1), James Perry, Accredited Trainer, FIDIC**

Module 2: Management of Claims and the Resolution of Disputes
Managing Variations

Many claims can be avoided if the variation procedure under FIDIC contracts is understood and properly administered. In this section we will look at how Clause 13 works and relates to other Sub-Clauses plus review how and when a variation should be instructed, and what powers the Engineer has under the Contract.

- Contract definitions
- Timing and authority to issue Variations
- Variations covered by Clause 13 and related Clauses
- Initiation and instruction of variations
- The Contractor's rights and obligations
- Practical Management Suggestions
- Avoiding typical claim issues related to Variations

12:00-13:00 Lunch13:30-15:00 Site Visit, National Museum of Emerging Science and Innovation15:30-16:30 Site Visit, Haneda International Airport, New Construction

DAY4 Thursday, Feb 25 Conference Room B1

9:00-12:00 **Session 6 - FIDIC Module 2 (2), James Perry, Accredited Trainer, FIDIC**
(Coffee Break in between)

Module 2: Management of Claims and the Resolution of Disputes (Con't)**The Management of Claims****Notices and Claims Procedures**

Both the Contractor and the Employer are required to follow well defined procedures when a potential claim arises. These procedures help both parties follow the evolution of the Contract more accurately and in "real time," which increases predictability for both parties and reduces claims.

- Clauses requiring notices by the Contractor
- Employer's/ Engineer's Claims, Sub-Clause 2.5

Contractor's Claims Sub-Clause 20.1

FIDIC contracts detail many areas where events may trigger the Contractor's right to claim for additional payments and/or an extension to the Time for Completion. In this section we will review both the scope and procedure of a Contractor claim, plus the documentation required to support a claim and the role of the Engineer.

- Notification of claims
- Contemporary records
- Preparation of claims
- Engineer's assessment and principles of claim
- Engineer's valuation
- Engineer's determination, Sub-Clause 3.5

Claims for Delay

The most complicated claims are often those linked to delay. In this section, we will look at how an extension to the Time for Completion is handled under FIDIC, and how damages are calculated.

- Extension of time, Sub-Clause 8.4 and 8.5
- Force Majeure, Sub-Clause 19.4



12:00-13:30 Lunch

13:30-17:00 **Session 7 - FIDIC Module 2 (3) , James Perry, Accredited Trainer, FIDIC**
(Coffee Break in between)



Module 2: Management of Claims and the Resolution of Disputes (Con't)

The Management of Claims

Claims for Delay (Con't)

- Delay damages

Claims for Additional Payment

After delay, the most common source of claims arising from the Contractor's side are related to ground conditions, late possession and payment difficulties. The FIDIC procedure on treating these claims are reviewed in detail in this section.

- Ground Conditions, Sub-Clause 4.12
- Late possession, Sub-Clause 2.1
- Breaches of Contract

Employer's Financial Claims

Of course the Employer can suffer damages due to failures to perform on the part of the Contractor. These damages and resulting Employer's claims, typically are for Contractor delay or defective work, which may result in a call on the Contractor's Performance and/or Retention Security. This section covers how the Employer/Engineer should work their way through these matters.

- Delay damages
 - Defects in the works and/or design
 - Retention and bonds
-

DAY5 Friday, Feb 26 Conference Room B1

9:00-12:00 **Session 8 - FIDIC Module 2 (4), James Perry, Accredited Trainer, FIDIC**
(Coffee Break in between)

Module 2: Management of Claims and the Resolution of Disputes (Con't)

The Resolution of Disputes

Dispute Adjudication Boards (DABs)

Dispute Adjudication Boards (DAB) have proven to be an effective way of solving disputes at an early stage. The Red Book and Multilateral Development Bank Harmonized Edition of the FIDIC suite of contracts use standing DABs, which allows for the early detection and efficient resolution of disputes and potential disputes. This section explains the purpose of DABs, how they work, their cost and how a DAB decision comes about and operates.

- Dispute Adjudication Board principles
- Dispute Adjudication Board working
- Post-DAB decision processes

Arbitration Claims

No contract can guarantee the parties will not have litigation at some point either during or after the execution of the works. FIDIC contracts have selected arbitration as the dispute resolution mechanism of last resort. In this final section of Module 2, we will briefly look at the arbitration process under the International Chamber of Commerce (ICC) Rules.

- ICC Rules
- Selecting arbitrators
- Use of experts

12:00-13:30 Lunch

13:30-15:00 Discussion with participants and practitioners

15:00-15:15 Coffee Break

15:15-15:45 Seminar Questionnaire

15:45-16:15 Conferment of FIDIC Certificate

16:15-16:25 Closing Remarks, Takashi Ito, Director, JICA

16:25-16:35 Photo Taking





Mr. Geoffrey Smith is the Accredited Trainer of FIDIC, Chartered Engineer, Fellow of the Chartered Institute of Arbitrators, Barrister, Bar of England & Wales, Accredited Mediator & Conciliator, Member of the Society of Construction Law, Member of the Disputes Resolution Board Foundation, Member of the International Bar Association, and possesses diploma in Law and Accounting. Since his graduation as a civil engineer in 1975, he has worked in civil and infrastructure projects as contract manager, senior contract manager and operation director in Asia, Africa and Europe. His experience in litigation and arbitration covers globally, many in Asian countries. As an accredited trainer of FIDIC, he has conducted FIDIC Contracts Trainings for government entities in Europe, Middle East, South-East Asia



Dr. James Perry is the Accredited Trainer of FIDIC, Member of the District of Columbia Bar, Member of the Society for Construction Law (Country rep. for France), Member of the Disputes Resolution Board Foundation (Board of Directors, Region 2), Member of the International Bar Association, Member of the French National Committee of the ICC. He possesses B.S. Civil Engineering and Juris Doctor. Since his graduation in 1985, he has worked in heavy civil and infrastructure fields such as industrial, power and petrochemical, urban development as project manager, senior contract manager, director of contract administration. His experience in arbitration and litigation covers various dispute resolutions in Europe, Africa and Asia. He has conducted FIDIC and other Contracts Trainings for government and private entities in Europe, Africa, Asia and the Americas.



Dr. Toshihiko Omoto is a full time Professor at the Graduate School of Management (MBA) of Kyoto University. First Class Civil Engineer in Japan and a Chartered Civil Engineer in UK, holding Master's and Doctor's Degrees in Civil Engineering awarded by Kyoto University, Japan, and Master's Degree in Construction Law and Arbitration awarded by King's College, University of London. He has over 35 years experience in the construction industry, including 30 years experience in the international projects. He worked for a major Japanese contractor for 25 years, for 15 years of which, he was involved in resolution of engineering and construction disputes, both by amicable settlement negotiations and by arbitration. In year 2000, he began his independent consultancy, specializing in dispute resolution. He has worked in 25 countries, representing and/or advising owners, contractors and insurers.



Mr. Yukinobu Hayashi is the General Manager of Nippon Koei Co., Ltd. and vice chairman of the Professional Training Committee of AJCE. He has over 30 years of professional experience in project management for various types of infrastructure development projects in Asia, Middle East, Africa and Latin American countries. Since his graduation from University with a B. Sc. in mechanical engineering in 1977, he has been involved in construction planning and scheduling, project cost estimate, tender document preparation, tender evaluation, and assessment of contractual claims for the projects undertaken by the firm. As a member of AJCE, he has drafted Japanese versions of FIDIC contracts including Red Book 1999, Yellow Book 1999 and FIDIC Contract Guide.

添付資料 - 2

オリエンテーション



22 February, 2010

Seminar on Contract Management for International Construction

Orientation

1. Introduction of Trainers and trainees

2. Conference Venue

- ✓ Mon. and Wed: Room 2A (2F)、 Tue, Thurs, Fri: RoomB1
- ✓ No drinking except for water and coffee served by the venue or by vending machine
- ✓ Toilet: 2nd and B1(Men and Women); No women toilet on 1st floor
- ✓ No smoking in the venue and outside of the building except for Smoking Room on 3rd floor
- ✓ Vending machine: 3Fand1F

3. Outline of Seminar Program

- Distributed materials
 - ✓Program
 - ✓FIDIC Modules
 - ✓FIDIC Contract Document (MDB Harmonized Ed.)
 - ✓Materials prepared by Mr. Hayashi and Prof. Omoto
 - ✓Questionnaire (to be distributed later)
- Curriculum
- Coffee break
- Site Visit
- Awarding of FIDIC Certificate

4. Food, Restaurant

- ✓Use restaurant guide map for your lunch
- ✓Lunch break on Wed 24 is short. Recommend to buy sandwich or lunch box and eat in the bus.

5. Transportation, tipping

6. Punctuality and mutual cooperation

On Wed. 24 Feb, site visit by bus. Be punctual about time.
You are requested to move as a group during the site visit.

7. Oversea Accident Insurance

- ✓If medical treatment by doctor is necessary, contact secretariat for assistance
- ✓All the participants of ODA implementing agencies are covered by Accident Insurance.
Regular medical treatments are covered. Effective period: from arrival to departure date.
- ✓Previous illness such as heart disease, high blood pressure, teeth/cavity treatment, etc are not covered



8. Reimbursement of visa application cost

To be announced

9. Transportation to Airport on departure

✓ Meet at the hotel lobby

Group A: 7:00、 Group B: 7:20

✓ (Group A)

- VN951、TG641、NH953: 16 people (+6 National Staffs)

Route and time

Departure: Atagoyama Tokyu Inn at 7:15AM

→ Narita Terminal 2 at 8:30AM

→ Narita Terminal 1 at 8:40AM

✓ (Group B)

- VN955、JL725: 19 people (+2 National Staffs)

Route and time

Departure: Atagoyama Tokyu Inn at 7:45AM

→ Narita Terminal 2 at 9:00AM

10. Others

✓ FIDIC Certificate will be awarded at the end of Seminar. Be sure that your name is correctly printed on your name tag. If you find mistakes, report to the secretariat.

添付資料 - 3

セミナー風景

セミナー風景



JICA 広田部長による冒頭挨拶



山下総括によるオリエンテーション



Geoffrey Smith 氏による講義



熱心に聴講する受講者



林幸伸氏による講義



大本俊彦氏による講義



本セミナー中には受講者から積極的に質問が寄せられた



James Perry 氏による講義



羽田空港 D 滑走路建設工事の視察



JICA 伊藤課長より修了証書授与



集合写真

添付資料 - 4

アンケート

JICA Seminar on Contract Management for International Construction

Questionnaire

1. Questions about you

Q1. Which country do you come from?

Q2. Your name

Q3. Current employment (Name of organization/company)

Q4. Which section do you belong to in your organization? (Please check box.)

- | | | |
|--|--|--|
| <input type="checkbox"/> General Administration | <input type="checkbox"/> Accounting | <input type="checkbox"/> Human Resource Management |
| <input type="checkbox"/> Investigation/ Planning | <input type="checkbox"/> Engineering Works/ Design | <input type="checkbox"/> Procurement |
| <input type="checkbox"/> Safety Management | <input type="checkbox"/> Construction Control/ Supervision | |
| <input type="checkbox"/> Contract Administration | <input type="checkbox"/> Others (|) |

Q5. How many years of experience in working for international construction project do you have?
() years

Q6. Do you have any knowledge of the FIDIC construction contracts before attending this seminar? If yes, please explain how you gained such knowledge, for example did you attend a training course or lecture, or did you acquire the knowledge by self learning, etc.

Yes.

No.

Q4. What do you find difficult in adopting and implementing FIDIC Contract documents?
(multiple choices accepted)

- I do not find any difficulties adopting FIDIC Contract documents
- We have own contract documents/ system
- Higher authorities do not know about FIDIC contract documents, thus no support
- Resistant to change current system to other international system
- Others (Please give your comments below)

Q5. What is typical source of claim or increased cost? (multiple choices accepted)

- Price escalation due to inflation
- Late site possession
- Unforeseeable physical condition
- Variation
- Others (please give your comments below)

Q6. What other kind of problems do you encounter frequently in the course of contract?

- Difficulties in technical evaluation in the selection process
- Pressure by higher authorities
- Insufficient knowledge about contract documents
- Insufficient knowledge about different types of procurement
- Others (please give your comments below)

Thank you very much for taking your time.

添付資料 - 5

アンケート集計結果

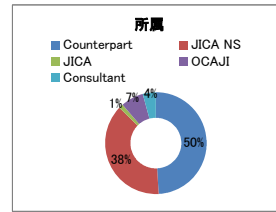
1. Questions about you

Q1. Which country do you come from?

Q2. Your name

Q3. Current employment (Name of organization/company)

回答	回答数
Counterpart	35
JICA NS	27
JICA	1
OCAJI	5
Consultant	3
総計	71

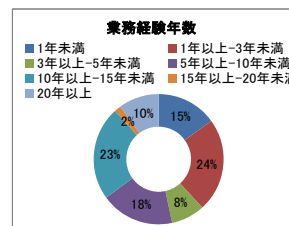


Q4. Which section do you belong to in your organization? (Please check box.)

回答	回答数	割合
General Administration	7	7%
Accounting	1	1%
Human Resource Management	1	1%
Investigation/ Planning	7	7%
Engineering Works/ Design	4	4%
Procurement	17	18%
Safety Management	1	1%
Construction Control/ Supervision	10	11%
Contract Administration	13	14%
Others	34	36%
総計	95	100%

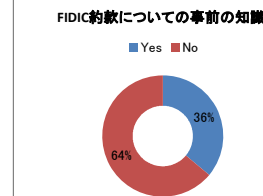
Q5. How many years of experience in working for international construction project do you have?

回答	回答数
1年未満	9
1年以上-3年未満	14
3年以上-5年未満	5
5年以上-10年未満	11
10年以上-15年未満	14
15年以上-20年未満	1
20年以上	6
総計	60



Q6. Do you have any knowledge of the FIDIC construction contracts before attending this seminar? If yes, please explain how you gained such knowledge, for example did you attend a training course or lecture, or did you acquire the knowledge by self learning, etc.

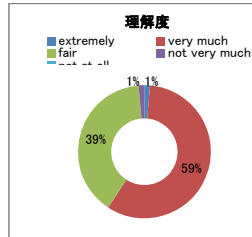
回答	回答数	割合
Yes	26	36%
No	46	64%
総計	72	100%



2. Questions about Module 1

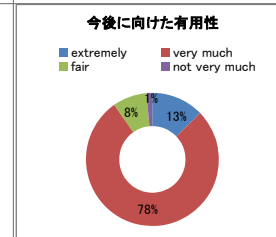
Q1. Was the module easy to understand?

回答	回答数
extremely	1
very much	41
fair	28
not very much	1
not at all	0
総計	71



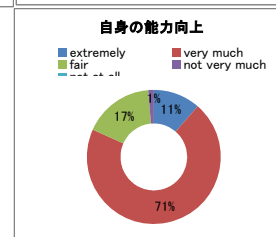
Q2. Was the module useful for your future?

回答	回答数
extremely	9
very much	55
fair	6
not very much	1
not at all	0
総計	71



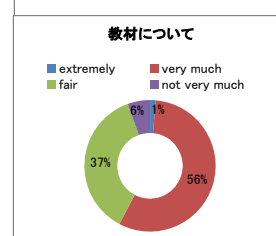
Q3. Will the knowledge gained in the module help to enhance your capacity?

回答	回答数
extremely	8
very much	50
fair	12
not very much	1
not at all	0
総計	71



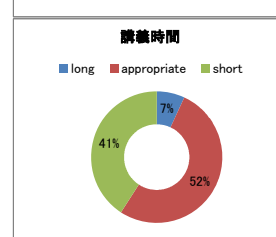
Q4. Were the seminar materials enough to explain the contents?

回答	回答数
extremely	1
very much	40
fair	26
not very much	4
not at all	0
総計	71



Q5. Do you find the duration of the program appropriate?

回答	回答数
long	5
appropriate	37
short	29
総計	71



Q6. Were you able to get satisfactory advice/answer by lecturers when you raise any question?

回答	回答数
5	11
4	41
3	16
2	0
1	0
総計	68

Q7. After you return to your country, are you going to diffuse the knowledge gained in this module in your organization or country?

回答	回答数
extremely	10
very much	44
fair	15
not very much	2
not at all	0
総計	71

3. Questions about Module 2

Q1. Was the module easy to understand?

回答	回答数
extremely	3
very much	33
fair	32
not very much	1
not at all	3
総計	72

Q2. Was the module useful for your future?

回答	回答数
extremely	9
very much	50
fair	12
not very much	1
not at all	0
総計	72

Q3. Will the knowledge gained in the module help to enhance your capacity?

回答	回答数
extremely	7
very much	43
fair	21
not very much	1
not at all	0
総計	72

Q4. Were the seminar materials enough to explain the contents?

回答	回答数
extremely	3
very much	30
fair	34
not very much	4
not at all	0
総計	71

Q5. Do you find the duration of the program appropriate?

回答	回答数
long	5
appropriate	29
short	37
総計	71

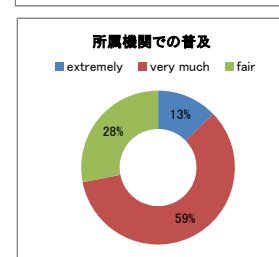
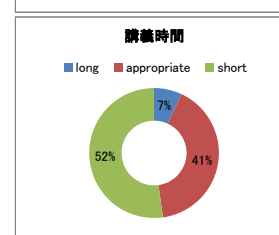
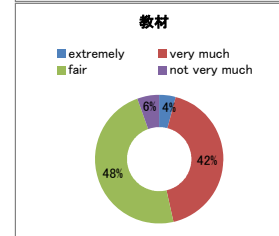
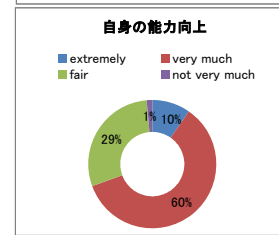
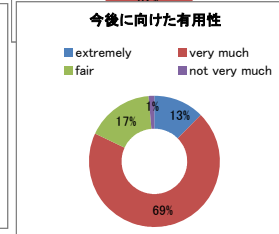
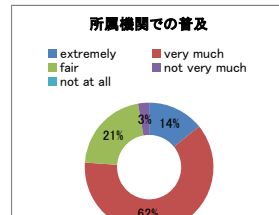
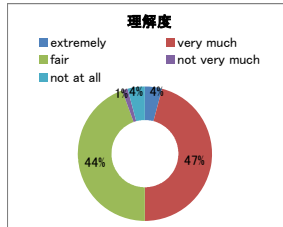
Q6. Were you able to get satisfactory advice/answer by lecturers when you raise any question?

回答	回答数
5	11
4	41
3	17
2	0
1	0
総計	69

Q7. After you return to your country, are you going to diffuse the knowledge gained in this module in your organization or country?

回答	回答数
extremely	9
very much	42
fair	20
not very much	0
not at all	0
総計	71

4. General Questions



Q1. Do you find the seminar useful?

回答	回答数
5	30
4	37
3	5
2	0
1	0
総計	72

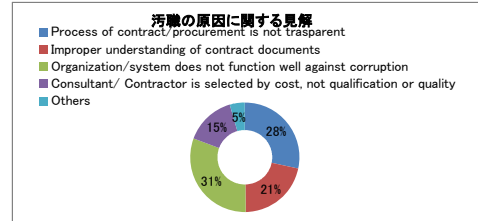
Q2. Do you wish to continue the seminar in the future?

回答	回答数
5	40
4	25
3	6
2	1
1	0
総計	72

Q3. What do you think the cause of corruption in relation with contract/ procurement? (multiple choices accepted)

回答	回答数
Process of contract/procurement is not transparent	44
Improper understanding of contract documents	33
Organization/system does not function well against corruption	48
Consultant/ Contractor is selected by cost, not qualification or quality	23
Others	7
総計	155

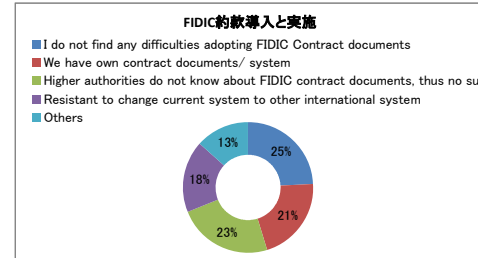
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21%
31%
15%
5%
100%



Q4. What do you find difficult in adopting and implementing FIDIC contract documents?

回答	回答数
I do not find any difficulties adopting FIDIC Contract documents	31
We have own contract documents/ system	27
Higher authorities do not know about FIDIC contract documents, thus no support	30
Resistant to change current system to other international system	23
Others	17
総計	128

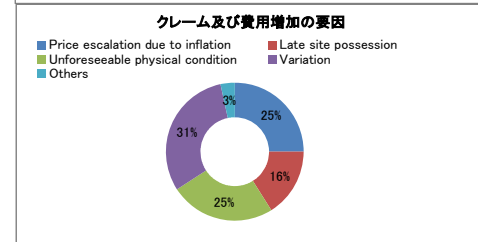
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13%
100%



Q5. What is typical source of claim or increased cost? (multiple choices accepted)

回答	回答数
Price escalation due to inflation	47
Late site possession	30
Unforeseeable physical condition	46
Variation	58
Others	6
総計	187

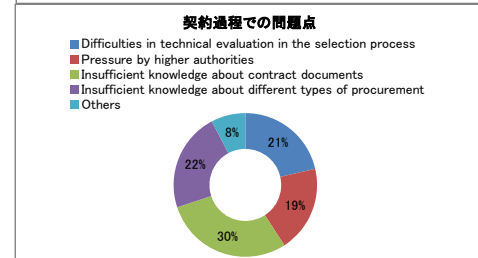
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25%
31%
3%
100%



Q6. What other kind of problems do you encounter frequently in the course of contract?

回答	回答数
Difficulties in technical evaluation in the selection process	33
Pressure by higher authorities	30
Insufficient knowledge about contract documents	45
Insufficient knowledge about different types of procurement	34
Others	12
総計	154

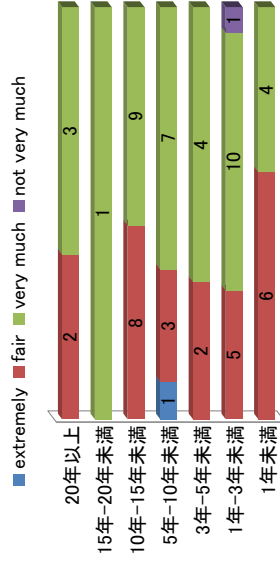
21%
19%
29%
22%
8%
100%



経験年数別Module1の理解度

データの個数 / 2-1 経験年数	Module1の理解度				総計
	extremely	fair	very much	not very much	
1年未満			6	4	10
1年-3年未満			5	10	16
3年-5年未満			2	4	6
5年-10年未満	1		3	7	11
10年-15年未満			8	9	17
15年-20年未満			2	1	3
20年以上		1	26	38	66
総計					

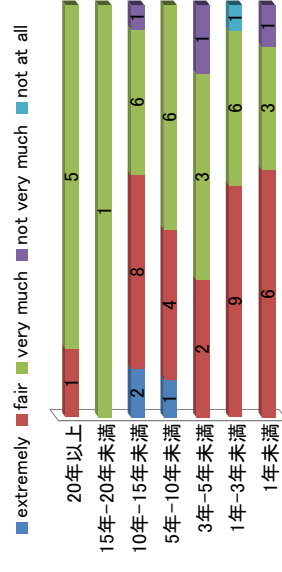
Module2の理解度



経験年数別Module2の理解度

データの個数 / 3-1 経験年数	Module2の理解度				総計
	extremely	fair	very much	not at all	
1年未満			6	3	10
1年-3年未満			9	6	16
3年-5年未満			2	3	6
5年-10年未満	1		4	6	11
10年-15年未満		2	8	6	17
15年-20年未満			1	1	2
20年以上		3	30	30	67
総計					

Module2の理解度



添付資料 -6

アンケート記述回答

1. Questions about you

Q4. Which section do you belong to in your organization?

- Infrastructure/ ODA loans
- TA&ODA loan operation
- ODA loan project and technical cooperation
- Infrastructure sector projects administration
- Coordinator of health, governance and loan for infrastructure
- Project management
- Program section
- Deputy of strategy & policy development
- Procurement for hospital equipment
- Business promotion/ sales

Q6. Do you have any knowledge of the FIDIC construction contracts before attending this seminar? If yes, please explain how you gained such knowledge, for example did you attend a training course or lecture, or did you acquire the knowledge by self learning, etc.

<セミナー・研修参加>

- I had several opportunity to attend training course on ODA-funded projects include FIDIC construction contract.
- Learning from some seminar, lectures and MSc at King's college, London
- Training course in company, self learning, OJT through international construction PJ
- Attend a training course at AIT Bangkok
- Attending training course in APB HQ and has knowledge by self learning –every day used red book for the supervision of construction under WB, ADB of AFD Project for the construction of Watu Transmission Main & Watu Treatment Plant Especially we are going to implement new project for the construction of Nivoth Watu Treatment under JICA financing over 35millions USD from middle of 2010 to end of 2012.
- ADB seminar on Administration and construction monitoring under ADM loan in Cambodia (many time)
- I attended one FIDIC workshop organized by ADB, Lao resident mission.
- Attended several courses previously: in Washington D.C., Singapore and Jpan
- Attended a lecture on dispute adjudication board
- FIDIC lecture in the company

- Regional Seminar of monitoring and Administration of ADB loan in Manila(year 2005)
- Attended just a two-day orientation seminar / introduction to FIDIC conditions of contract.
- After joining JICA, I have learned FIDIC more by self learning and a seminar on DAB organized by JICA last year.
- I also used to attend the DAB seminar organized by JICA in Cambodia.
- I ever attended me short session seminar (3hrs) 2 years ago. When I attended staff training in Japan. But I never attended a full course training of contract administration at all. Most of knowledge I gained is by self learning.

<独学>

- By self learning from documents acquired from colleagues and through website
- I have any knowledge of the FIDC contract by self learning
- By self learning (3)
- Searched on the topic prior to attending the seminar
- by my self learning.
- By my self learning (source from FIDIC Books and interned)
- I acquired the knowledge of the FIDIC construction contract by my self learning.

<業務を通じた知識>

- On the job learning
- For necessity for everyday works
- Have experience of supervision few projects using FIDIC IV and some experience in preparing FIDIC IV contract documents.
- Most of the projects I was in charge associated with were under FIDIC
- From FIDIC contract project
- That's my job.
- I acquire the knowledge by self learning. As I am now concurring a contract
- Self Training, work experience in JICA projects
- Knowledge acquired by self leaving because former JBIC (now JICA) sample procurement documents are based on FIDIC, and the contract submissions I review from Executing Agencies are also (partially –at least) based on FIDIC.
- I acquired the knowledge of FIDIC by self learning through application of it in former JBIC's (now changed to JICA) sample of bidding documents/guidelines and handbooks on procurements, participated in bidding procedures & contract finalization of 4 JICA

funded projects (with more than 20 contract packages).

- Through JICA's procurement procedures
- Self learning by doing and some seminars related to contract and project management
- Prior to employment with JICA, I had an internship in the contract department of an international company and my role was to assist contract Manager for World Bank and ADB projects. Most of the project applied FIDIC red book 1987.
- I have some knowledge of the FIDIC construction contract before attending this seminar, not so well, I know about FIDIC documents, because I read and I had FIDIC documents and implemented.
- By using the MDB loan, FIDIC is used as general condition of the contract, that the contractor has drafted. As an employer, we understand and therefore I try best to understanding it.
- Through procurement inspection, I had chance to get familiar with FIDIC contract because some JBIC funded projects more FIDIC contract form.
- From my works experience of the first underground live in Thailand, the construction contract has been derived and modified from FIDIC Module.
- Actually it is not much. I have involved in procurement of disbursement of ODA Loan projects so I have experienced in reviewing, before concurrence, the contract agreements which the FIDIC versions are used.
- in 1999, I have a ADB project to bid in forum of ICB

<事前知識なし>

- Just heard about FIDIC, but don't really understand the concept
- I has little information about FIDIC since I work as a civil servant who handle about cooperation. And then I learnt about FIDIC after my office gave me a task to follow this seminar.
- I have knowledge of term of payment and contract. But I know now it comes from FIDIC background.
- I don't have any knowledge of the FIDIC construction contracts before, but my job is about procurement. The bidding documents and contact documents follow FIDIC. I think the documents are prepared by the engineers which have the knowledge of FIDIC.
- No, but I can see how valuable this seminar was because it's given me more widely view about project cycle, as for time, procurement, risks, etc.
- From information (guideline books) learnt at the office, but did not know much of FIDIC contract

➤I just heard some comments and recommendations from WB and ADB. But I had not read any FIDIC documents yet.

<その他>

➤I have gained such knowledge by conducting the practice in Contract Administration with the Consultant Firms and Contractors, who have been successful in Bidding Process by using Japanese ODA Loans.

➤Overview and detail and construction contract. According to FIDIC opinion

2. Questions about Module 1

Please give your comments/ suggestion to improve this module.

<講義・教材>

➤Supporting materials should be more elaborative.

➤Contents of the seminar are very informative, grateful if we can get self copy of the presentation and sample bidding documents.

➤Module 1 was very essential for me, because of a good lecture and easy-understanding presentation and materials.

➤It would be better to improve the form of handout, not by PowerPoint form but Some are too small to read

➤Previous reading of handout is very useful but unfortunately we did not receive it beforehand. However, a complete set of FIDIC book (at least the update ones) is necessary for future study in order to better diffuse my knowledge.

➤Not full enough the material of the presentation on seminar time.

➤Provide us more FIDIC books (white, red, silver book) Introduce overview of consultant contract and EPC and Turkey contract

<用語集>

➤Abbreviation list will be useful for all participants to understand and review topics.

➤Please add a “Glossary of Abbreviation & Terms”

➤I have a minor comment that it might be effective if there is a list of the definition of terminologies. Then we are quick to learn catch up the theme.

<講義方法>

➤Extremely perfectly structured.

➤Presentation would be more dynamic. For instance with less text, because it can be

read later. Graphic example could be easier to follow.

- Prof. Omoto was very clear, precise and easy to understand.
- Contract administration is not an easy subject and can't be understood immediately, especially for people who never deal with this subject before. The lecturers/experts have done an excellent job to package the subject and squeeze such thick FIDIC standard docs into a reasonable brief presentation materials. HOWEVER, it would be an extraordinary/superb program, if the lecturers can transform portion of material (specifically the complicated issues) into structured diagram/flowchart/process diagram that can be easily understood, instead of merely wordings.
- The lecturers speak too fast. If they speak slowly, it was better for the participants.
- The presentation documents shall mention the clause and sub-clause (Ex, clause 6 than sub-clause 6-1, 6-2...etc) from the participants easy for following up during seminar time.
- The seminar shall be prolonged the time for participants more understanding

<グループ分け・グループディスカッション>

- The trainees should be divided into smaller group (7-10 people) based on their knowledge and experience in contract managements.
- The seminar should be interact that could be enable if the semi group are small enough as stated above.
- It may increase the efficiency of both participants and presentators if the seminar is conducted in small group.
- A separate less detailed module may be appropriate for the seminar (participants from employer and JICA oversea office). But procurement and FIDIC contract doc. Seminar may be held simultaneously to include entire project cycle. This current module may be more appropriate for practicing FIDIC engineer's staff.
- To divided into at least two group based on knowledge of FIDIC and experience of international construction PJ.
- Limit number of seminar attendees to say 40 to make it more manageable.
- Improve time management by separating Q&A from discussion part.
- In addition to classroom type discussion, use other methods that encourage application of concepts learned (easy case method, workshop).
- Better to separate various stakeholders first (JICA staff, executing agencies, contractors, etc.) for the conduct of these introductory modules (modules 1 and 2)

<事前学習>

➤It will be better some module give to participant through email, because of that the participant can learn the module before attend the seminar.

<事例>

- The subject should be explained with more details and examples.
- Cite more practical examples on how parties add specific issues in contract administration. Part of own learning in this seminar will be shared not only with own colleagues in JICA Philippine office but also with own counterpart agencies.
- I would support to give more example and even work on case studies.
- Extended or have a module to discuss specific problem/ example
- To have case study and discussion just like a workshop
- It will be better in the future give to the participant some cases to the module, then the participant can understand FIDIC contract through cases.
- Maybe participant is given the example of FIDIC contract
- In case of JICA, especially for me to have more examples and practical cases will be good for construction MDB harmonized edition. Therefore it does not mean that was not excellent seminar, It was!! I really learn a lot of and now I can understand clearly some other situation with JICA.
- This module has to improve about example because it has a few.
- It was very good. I wanted to see more sample.
- A proposed scenario of contract, where students and lecturers can contribute to draft, and then certain scenarios can be created to trouble-shoot any expected bottlenecks that may arise.
- I wanted to see some typical examples of S.C.C.
- adding more example with picture
- I would like the lecturer to gain the relevant example case, if any

<Q&A>

- Besides of a lecture, Q & As was very useful.

<現場視察>

- Increase the duration of the seminar by one day dedicated for more site visit.
- Need more site visits

<講義時間>

- If the period of training can be extended longer, it will be useful for both lecturers and

trainee to discuss in more details. It couple last day, lecturers have to explain very quickly because of the limited remaining period of time.

➤In this Module1, it has many items to learn or study. So it's really good to take longer duration of period.

➤Increase the period of the Seminar

➤module itself may be sufficient, but more time is needed so the lectures can explain / elaborate more and give appropriate examples.

➤The duration of this module should have been longer to discuss in more detail.

<語学力>

➤Translate the module and the training on Bahasa Indonesia, so we can get more deep understanding about this module

<総合・ロジ・会場>

➤Thanks first for the presentations and for those responsible of logistics aspects.

➤A bit difficult to listen to lectures because of a bit no-good system of audio/ sounds

<その他>

➤Extension of course period in seminar.

➤I feel if I had gone through FIDIC contracts in advance, it would be much more useful to understand the modules and lectures.

➤After I return to my country in order to be diffuse the knowledge gained in this module, we should read the FIDIC books(red) comparing with our applicable contract(Construction and/or Consulting Services) Clause by clause and/or sub-clause by sub-clause.

➤After I return to my country, I am going to diffuse the knowledge gained in this module in my organization.

➤Some countries need their module so we shall modify for convenience to execute the construction contract such as arbitration proceedings and liquid damages

3. Questions about Module 2

Please give your comments/suggestion to improve this module.

<講義・教材>

➤The presentation on FIDIC contract and ODA loan by JICA is very interesting too.

➤Presentation materials are desirably to be same (hand copy and actual presentation)

➤Completed with other books of FIDIC, so we can study much better

➤ This module has little added, in the future the added will be better to distribute these copies

➤ Especially FIDIC document should be given to the participants

➤ Again previous handout (beforehand) is helpful Module 2 is very useful for preventions of disputes and it provides some guidelines for their resolutions.

➤ Similarly to my answer in Module 1, it would be extremely better if some material can be presented into a structured diagram/flowchart/process diagram. So it will be easier for the participants who never deal with contract administration before, to understand the material.

➤ well structured especially the MOV version

<用語集>

<講義方法>

➤ It was so long. I think it should be divided to 2 modules.

➤ Furthermore, it would be more effective if there are some CASE STUDIES, or ROLE PLAYS, to illustrate the process.

➤ The professor should repeat the questions by audiences again before responding because we have difficulties in different accent and intonations.

➤ In order to improve this module, each participants should practice and/or follow-up the implementing of applicable Contract Agreement (Construction and/or Consulting Services) comparing with the FIDIC books(red) stipulated.

<グループ分け・グループディスカッション>

➤ It would be better if participants were split into two or three group in order to allow more discussion.

➤ Extended or have a module to discuss specific problem/ example

<事前学習>

<事例>

➤ Take a case study as example, then let the participants discuss among them and conclude case by case.

➤ If there are some case studies about each section that would be excellent.

➤ I think it should be added many example to this module.

➤ more Examples to be added

➤ It would be better if there were more practical issues along with the lecture.

- Real examples should be shared among the participants.
- Give the relevant example case, if any.

<現場視察>

- Need more site visits

<講義時間>

- Because I'm a beginner in the field of international contracts, Module 2 was a bit difficult to understand. I think the duration was not enough for a beginner. Anyway a lecturer's presentation was good.
- The explanation by lecturer was quite fast. Time was not enough
- Time was very short.
- Since the concepts here are more complicated compared to Module1, then maybe more time should be allocated here, in stead of having had to rush on Day4.
- Allocate more time for this module
- Due to time constraint, the lecturer / trainer rushed to speed up in order to catch up with the program. Some parts of the module were skipped and other parts were just roughly explained without detail discussion. It would be much more comprehensive if more time is allocated for this module.
- Time should be more provided.
- In this module, it's very complicated for understanding for many cases of the project are relevant in this module. So if it's possible, duration of period should be longer.
- The duration of this module should have been longer to discuss in more detail.

<語学力>

- The English explanation speed is difficult for me to understand (Dr. James) or lack of my listening ability (surely).
- If translate the module and the training on Bahasa Indonesia
- For module2, it requires higher level of English capacity of trainee to catch the lecture. Slower explanation would be appreciated.

<総合・ロジ・会場>

- If possible, the facility will be more appreciated if it would be larger to fit the participants.
- Not limit to this module, I think it would be more effective if we can shave this seminar in large room with seat arrangement more suitable for a seminar, with screen

at higher position so that everyone can see it better.

<その他>

- Recommend to extend the course period longer (1.5 works)
- All the knowledge presented by lecturer can be understand by applying them for the reality in each country, so I need some more experience in my job related to international contract of construction.
- It is very important to mention special and good parts that can be so good for us such as the professors mentioned: How about program, why it is so important, communications can be one of the issued that can be so helpful and to be prospective in any situation.
- Diffusing the knowledge to my organization is extremely helpful to manage dispute and claims.
- After I return to my country, I am going to diffuse the knowledge gained in this module in my organization.

4. General Questions

Q3. What do you think the cause of corruption in relation with contract/ procurement?

Others (please give your comments below)

- Weak enforcement by the financier of contract conditions
- Poor attention and lack of experience of certain financier in loan project
- Conventional business
- As the tender, general condition are fixed by employer.
- Bad habit of the parties make that parties have bad goal.
- There is related compensation, if the employer from government, not allocation effect if chain, and should have to go to Ministry of Finance
- Changing the policy of government/ Agreement of the contract
- The main strategic issue in procurement is the existence of organization (system + people) which has strong integrity to conduct such process. Also we need a strong enforcement of such system to be implemented effectively. Knowledge can be easily achieved/gained through proper capacity building. Transparency is a result of the effective implementation of strong integrity organization + proper knowledge.
- In addition to answer above which implies that corruption is inherent to the Executing Agent, the constructors are equally the problem as well because they are responsive to the corruption system.

- Tender proposals are assessed (selected) by “Bidding Committees” members of which are appointed from Governmental Agencies. This composition enables the corruption to take place in the system.
- The consultant and contractor is selected from one country also include in the course of corruption
- Politicians meddle with executing agencies and put pressure on agency officials to “favor” their “contractor friends”
- I think the cause of corruption in relation with contract is consultant / contractor is selected by cost, not
- When the engineer, the contractor and the sponsor of a project / contract come from the same country it gives chance for corruption happened during the procurement process & contract implementation.

Q4. What do you find difficult in adopting and implementing FIDIC Contract documents?

Others (please give your comments below)

- Lack of specialists in loan-receiving country and insufficient attention of local officers of financier to ODA loan process
- Implementation with proper understanding of FIDIC document is problematic.
- In case of the contract is funded by the loan, we have to use FIDIC, but if we use our own budget, the contract document is a mixed between FIDIC and Lao government system that is adapted from international
- In case of Thailand, the government does not allow to put arbitration clause in the contract unless agencies propose for approval case by case. I think, without arbitration clause there will be some rooms for corruptions or intransparency.
- Due to previous question, the government can still intervene in international contract system. It will be a bit difficult to convince agencies to follow FIDIC contract documents, since agencies need to follow rules or regulations of the government.
- We have to align with our procurement system, especially for standard bidding documents (SBD).
- Knowing about future
- We can't adaption and implementing FIDIC contract with original. But we must modify sub-clause.
- I'm thinking that JICA has difficult kind if contract, too so it must be easy to unified, because I believe that FIDIC contract document will give security about project and will

be a softfinish of parties too, as well it is unique guideline and regulate document. But also I can see the weakness of some contract in Guatemala in order to give secure of the project.

➤ The National Procurement Act has its own standard for contract administration for domestic bidding purpose, while for ICB usually negotiated between the government and the lender.

➤ Problem w/ implementation is timelines are not followed –easy timeline in making payments and approving variation orders

➤ There are some differences between FIDIC's Contract documents and the current regulation of the government. Therefore sometimes we got in jam with stipulation to apply in our contracts.

➤ Once again a Glossary of Abbreviations & Terms is need to add

➤ Adopting seems to be relatively easy but implementing has sometimes difficulty

➤ There is no official notice from JICA management on strictly adopting the FIDIC contract documents in its loan projects.

➤ The challenge in adopting and implementing FIDIC contract documents can be overcome through capacity building of the authorities.

➤ It might not a difficulty but it should be challenge to apply this while the capacity of EAs and borrower are still limited. However, time and capacity building shall be the key to overcome this challenge.

➤ I do not find any difficulties adopting FIDIC contract doc, because during supplementing the international project wended to use FIDIC doc.

➤ FIDIC contract documents are used for ODA project.

➤ I would like the adaptation of the contract (local) to the international contract so we work together for their contract.

Q5. What is typical source of claim or increased cost?

Others (please give your comments below)

➤ Local FS studies might be different from loan providing organizations, due to different methodology applied.

➤ Weak capacity of JICA national staff and government in international contract administration coupled with weak international consultant staff.

➤ Price escalation due to internationally procured manufacturing goods which fluctuate day by day

➤ Time for completion

➤ For design & build contract in my opinion, the proper concept/basic design shall be in place for tender means that such design has to be prepared to meet requirement of sufficiency, constructability, suitability (fit to purpose), technicality and completeness. without meeting such requirement, the construction tends lead to dispute or delay or cost overrun.

➤ Bad design

➤ Change of law after base date

➤ Change of management of the employer governments', and thus new changes keep on coming-up, and therefore variation orders keep on flowing

➤ The time consuming in reviewing and making decision which leads to the delay of the implementation.

The typical source of claim or increased cost is variation, because some scope of work need to reduce or decrease, there to be the cost of the project will increase.

Q6. What other kind of problems do you encounter frequently in the course of contract?

Others (please give your comments below)

➤ Besides loan-related projects I have to deal with many other schemes like grant aid, TA as well as execute some routine work related to administration not equal not enough time to concentrate on loan projects I am in charge.

➤ I was not yet directly involved in the elaboration of contract.

➤ The main problem is an unknowledge of international contracts documents and contract management, especially the employer's (governmental organization) lack of experience and knowledge.

➤ My counterparts are facing every kind of problems because they were isolated from international standard over years. (I'm working for JICA loan projects in Iraq.) I hope they can take the opportunity to reach FIDIC basic knowledge in the near future.

➤ No chance to negotiate conditions of contract with employer

➤ (27) Bidden chain as always the procurement process

➤ I suggest in the future the participants are given cases of the contract that was ended & not confidential.

➤ Estimation and review process of Supplementary Agreements to Contracts takes the most of to me, causing the delays in disbursements, by the employers' state agencies.

- I have no experience on actual contract.

- The Procurement Review committee for evaluation from Line Ministry thou mind the

evaluation period going to delay –not complied to tracking time by the bank.

➤ The kind of problems, I do encounter frequently in the course of contract is difficulties in technical evaluation in the selection process, because procedure take long time.

添付資料 - 7

FIDIC Certificate



FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS
INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS
INTERNATIONALE VEREINIGUNG BERATENDER INGENIEURE
FEDERACION INTERNACIONAL DE INGENIEROS CONSULTORES



This is to certify that

Mr. ○○○○○○○○

successfully completed

*the Seminar on Contract Management for International
Construction,*

from February 22 to February 26, 2010 in Tokyo,

sponsored by the Japan International Cooperation Agency
(JICA) in association with FIDIC, organized by the
Association of Japanese Consulting Engineers (AJCE) and
Japan International Cooperation Center (JICE).

Geoffrey Smith
Accredited Trainer, FIDIC

James C. Perry
Accredited Trainer, FIDIC

Akihiko Hirotani
President, AJCE

Koki Hirota
Director General,
Southeast Asia 1 and Pacific Department
Japan International Cooperation Agency,
JICA

添付資料 - 8

Copy Right Agreement

Licence Agreement for the Use for In-House Training Purposes of FIDIC Training Modules

Parties

The Parties to this agreement are the International Federation of Consulting Engineers ("FIDIC") and the Association of Japanese Consulting Engineers ("AJCE").

Preamble

In 2010 AJCE in association with FIDIC contracted with JICA to deliver two in-house training seminars in Japan to JICA. It was agreed that the trainers would be supplied by a FIDIC accredited training supplier.

The proposal and acceptance of the lump-sum offer to provide these services required FIDIC to enter into an agreement with AJCE for the following:

- that training materials would be based upon modified versions of FIDIC Contracts Manual Modules 1 and 2;
- that FIDIC would transfer to AJCE the right to use these training materials which can be distributed to JICA for in-house training.

Each of the training modules are deemed to constitute a module chapter serving as courses notes for distribution to participants, presentation slides and summaries of cases studies and exercises.

Under the present licence agreement:

- AJCE will supply JICA with watermarked electronic versions of the modules for printing and reproduction by JICA for distribution by JICA to participants of JICA's in-house training events.
- AJCE is authorised to use indefinitely after for the date for last signature of this agreement for JICA's internal training purposes the modified FIDIC Modules 1 and 2 supplied by FIDIC's accredited training supplier under licence with FIDIC subject to the conditions listed below.

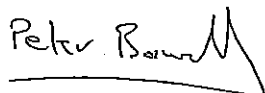
Conditions

The conditions for the use of the training modules are as follows:

- Distributed to JICA participants are watermarked hard copies indicating that the training module materials are based upon FIDIC training modules supplied under licence;
- That electronic versions of the training modules are not distributed outside AJCE and JICA;
- That AJCE is permitted to amend the modules provided that it is indicated in the front piece or similar that the modules are amended versions of modules supplied by FIDIC.

Signatures

FIDIC



Name: Peter Boswell

Date: February 15, 2010

Position: General Manager

AJCE



Name: Yoshihiko Yamashita

Date: February 15, 2010

Position: Secretary General

国際契約マネジメント・セミナー

セミナー教材

- 1. FIDIC MODULE 1**
- 2. FIDIC MODULE 2**
- 3. FIDIC Contract Documents and JICA ODA Loan Projects**
- 4. FIDIC Contract Documents and Dispute Resolution
- Prevention of Corruption -**

FIDIC MODULE 1

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Contract Management and Administration

**Contracts Management and Administration under
FIDIC Contracts**

Tokyo
22-26 February 2010

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Practical Use of the FIDIC Contracts

Module 1

Practical Use of the FIDIC Contracts

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Practical Use of FIDIC Contracts

Outline

1. FIDIC Contract Documents: Introduction & Principles
2. Responsibilities of the Main Parties
3. The Management of Projects
4. Financial Clauses & Procedures
5. Risk, Force Majeure & Termination

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Practical Use of FIDIC Contracts

Session 1

**FIDIC Contract Documents:
Introduction & Principles**

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Practical Use of FIDIC Contracts

FIDIC Contract Documents: Introduction & Principles

1. Introduction to the FIDIC organisation
2. Background to FIDIC Contracts
3. Structure of the documents
4. Preparation of Conditions of Contract
5. Risk Analysis
6. Which form to use?
7. The MDB Version

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1. Introduction to FIDIC

- Founded in 1913.
- Composed of national associations of consulting engineers.
- Promotes and implements the consulting engineering industry's strategic goals.
- Members endorse FIDIC statutes and policy statements and comply with FIDIC Code of Ethics.
- Develops and promotes business practice: Business Integrity Management; Project Sustainability Management; Quality Management, Risk Management.

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1. Introduction to FIDIC

Organises:

- Extensive programme of seminars and conferences.
- International Training Programme (courses: workshops)
- Capacity Development Programme (accredited trainers, training suppliers, programmes and events).

Publishes:

- Business practice contracts
- International professional services agreements
- Works Contracts.

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Practical Use of FIDIC Contracts

2. Background to FIDIC Contracts

- First FIDIC Works Contract was published in 1957 – “Conditions of Contract (International) for Works of Civil Engineering Construction” – known as the “Red Book”.
- Second edition was published in 1969 & reprinted in 1973.
- The 1973 version followed closely the fourth edition of the English “ICE Conditions of Contract”.
- Thus, as in the UK, an important role was reserved for “The Engineer”, and the Contractor was to be paid according to the actual quantities executed by application of unit rates.

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2. Background to FIDIC Contracts

- Third edition of the Red Book published in 1977 consisted of General Conditions and Conditions of Particular Application - which were suggestions upon which the Parties were required to make their own agreements.
- As with the English ICE Conditions there was also a Form of Tender and Appendix, and a Form of Agreement.
- Red Book contemplated the existence of drawings, specifications and bills of quantities as contract documents.

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2. Background to FIDIC Contracts

- The first three editions of the Red Book assumed that the detailed design would be provided to the Contractor by the Employer or the Engineer.
- Thus Red Book was unsatisfactory for contracts where major items of plant and alike were manufactured away from site.
- This led to the first edition of the FIDIC Yellow Book for mechanical and electrical works in 1963, with an emphasis on testing and commissioning and more suitable for the manufacture and installation of plant.
- The second edition was published in 1980.

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2. Background to FIDIC Contracts

- New editions of both the Red and Yellow Books were published in 1987.
- Red Book 4th Edition 1987 introduced an express term which required the Engineer to act impartially when giving a decision or taking any action which might affect the rights and obligations of the Parties.
- It included the addition of a ground for extension of time in the event of "delay, impediment or prevention by the Employer".
- The 1987 Red Book was reprinted in 1992 with modifications.

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2. Background to FIDIC Contracts

- A Red Book 4th Edition Supplement was published in 1996 which gave an option for a Dispute Adjudication Board, and an option for payment on a lump sum basis instead of by reference to bills of quantities.
- By this time FIDIC had responded to the increasing popularity of projects being procured on a design and build or turnkey basis. This resulted in the Conditions of Contract for Design-Build and Turnkey (1995 Orange Book).

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2. Background to FIDIC Contracts

- 1995 Orange Book replaced the traditional "Engineer" by the "Employer's Representative".
- The express requirement to be impartial was also removed, although when determining value, costs or extensions of time the Employer's Representative had to "determine the matter fairly, reasonably and in accordance with the Contract".
- Need to submit matters to the Engineer for his "Decision" prior to an ability to pursue a dispute, was eliminated.
- In its place - an independent Dispute Adjudication Board (DAB)

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2. Background to FIDIC Contracts

- Updates of Red, Yellow and Orange Books were published in 1999 as "Construction", "Plant and Design-Build" and "EPC/Turkey" Contracts.
- Aims:
 - standardise the terminology;
 - make the documents as user-friendly as possible;
 - solve the problem of the Engineer not seen as acting impartially while he was employed and paid by the Employer.

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FIDIC now publishes 5 standard Works Contracts & distributes 25000 copies each year



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2. Background to FIDIC Contracts


- The Construction Contract (Red Book) is based on design provided by the Employer.
- The Plant Contract (Yellow Book), the Design, Build & Operate Contract (Gold Book) and the EPC/Turkey Contract (Silver Book) are based on design by the Contractor.
- Under the 1999 Red Book, the Contractor is paid on a re-measurement basis for constructing works designed by others.
- Under the other books, the Contractor is paid on a lump-sum basis for providing works to his own design.

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Practical Use of FIDIC Contracts

Since May 2005
Multilateral Development Banks
use the General Conditions of
the MDB Harmonised Edition of
the FIDIC Construction Contract



MDB Supplement to Contracts
Guide is also available

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Practical Use of FIDIC Contracts

3. Structure of the documents

- Each includes:
 - General Conditions
 - Guidance for the Preparation of the Particular Conditions
 - Letter of Tender, Contract Agreement and Dispute Adjudication Agreements
 - Appendix to Tender (giving essential project data)
 - Example Forms.
- General Conditions are intended to be used unchanged.
- Changes to suit an Employer's own requirements are illegal and in breach of copyright.
- All project- and country-specific info in Particular Conditions.

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Practical Use of FIDIC Contracts

3. Structure of the 1999 FIDIC contracts

- Similar defined words and phrases are used in all 1999 editions, the main exception being descriptions of the documents in the Contract:
 - Construction (Red Book): Contract Agreement, Letter of Acceptance, Letter of Tender, Conditions of Contract, Specification, Drawings, Schedules.
 - Plant (Yellow Book): Contract Agreement, Letter of Acceptance, Letter of Tender, Conditions of Contract, Employer's Requirements, Schedules, Contractor's Proposal.
 - EPCT (Silver Book): Contract Agreement, Conditions of Contract, Employer's Requirements, Tender.

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Practical Use of FIDIC Contracts

3. Structure of the 1999 FIDIC contracts

In any commercial contract, what are the main areas to be considered?

- Identification of the Parties;
- The proper specification of the supplies, works or services to be provided;
- Compliance with the specification (QA: inspection; rectification of defects; guarantees & warranties; acceptance);
- Timing (commencement; programme; delivery/completion; delay);
- Price and payment (definition of price; amount of payments; timing of payments; method of payment; delayed payment);

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Practical Use of FIDIC Contracts

3. Structure of the 1999 FIDIC contracts

- Damage & Injury (to supplies or Works during transport or during erection; to employees; to third parties; intellectual property);
- Social & Environmental Issues;
- Failure to perform (delay damages; performance damages; default; termination; security);
- "Boilerplate clauses" (law of the contract; language of the contract; order of precedence; severability; waiver; assignment; amendment; notices);
- Resolution of Disputes

FIDIC contracts, like all other commercial contracts, address all these issues, largely under the same groupings.

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Practical Use of FIDIC Contracts

3. Structure of the 1999 FIDIC contracts

- Clause 1: General Provisions - subjects which apply to the Contract in general, e.g. definitions, applicable language and law, priority of documents, use of various documents.
- Clauses 2 - 5: The Employer; The Engineer; The Contractor; Nominated Subcontractors - deal with the duties and obligations of the different organisations that play a part in the execution of the Works.
- Clauses 6 & 7: Staff and Labour; Plant, Materials and Workmanship - deal with the requirements for the items which the Contractor brings to the site.

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Practical Use of FIDIC Contracts

3. Structure of the 1999 FIDIC contracts

- Clauses 8 - 11: Commencement, Delays and Suspension; Tests on Completion; Employer's Taking Over; Defects - follow the sequence of events during the construction.
- Clauses 12 - 14: Measurement and Evaluation; Variations and Adjustments; Contract Price and Payment - procedures for the Employer to pay the Contractor for his work.
- Clauses 15 & 16: Termination by Employer; Suspension and Termination by Contractor - logically at the end of the construction sequence.

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Practical Use of FIDIC Contracts

3. Structure of the 1999 FIDIC contracts

- Clause 17: Risk and Responsibility - relates to the project as a whole and includes sub-clauses which are only used rarely, together with matters which are critical to the Parties' responsibilities and overlap with the requirements of other important sub-clauses.
- Clause 18: Insurance - includes important procedures, which must be implemented at or before Works' commencement.
- Clause 19: Force Majeure - general clause that will only be used when the particular problem occurs.

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3. Structure of the 1999 FIDIC contracts

- Clause 20: Claims, Disputes and Arbitration - probably the most frequently used clause in the Conditions of Contract. Includes procedures, such as the submission and response to Contractor's claims, which must be used when a problem has arisen. It also includes the procedures for the appointment of the Dispute Adjudication Board, which must be used at or before the commencement of the Works.

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3. Structure of the 1999 FIDIC contracts

- The "Appendix to Tender" provides a convenient check-list of all the essential data required for the various sub-clauses.
- There are example texts for six forms of securities:
 - ✓ Parent Company Guarantee;
 - ✓ Tender Security;
 - ✓ Performance Security;
 - ✓ Advance Payment Guarantee;
 - ✓ Retention Money Guarantee;
 - ✓ Payment Guarantee by Employer.
- "Dispute Adjudication Agreements" are short, because they refer to "General Conditions of Dispute Adjudication Agreement" which are appended to the General Conditions.



4. Preparation of Conditions of Contract

- FIDIC Conditions do not just set out the rights and obligations of the Parties, to be used for resolving disputes. They include project management procedures essential for the administration of the project.
- The Conditions on their own are not complete. Certain information must be provided in other documents in order to make them complete, notably "Appendix to Tender", "Particular Conditions" and "Specifications".
- Information must be carefully co-ordinated with the other documents in order to ensure that the contract, as a whole, will serve its intended purpose.

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4. Preparation of Conditions of Contract

- The Specifications may include matters which are referred to in the Conditions of Contract such as:
- Requirements for Contractor's Documents
 - Permissions being obtained by the Employer
 - Phased possession of foundations, structures, plant or means of access
 - Contractor's designs
 - Work by other contractors on the Site
 - Setting out information
 - Environmental constraints
 - Electricity, water and other services available on Site
 - Employer's equipment
 - Nominated Subcontractors
 - Facilities for Personnel
 - Testing
 - Provisional Sums



4. Preparation of Conditions of Contract

- ✓ Prepare Particular Conditions to suit the Employer's requirements.
- ✓ Check the sub-clauses that refer to
 - ✓ a) information in the Specification and
 - ✓ b) information that may be included elsewhere in the Contract.
- ✓ Modify standard Contract Agreement to suit the Employer's requirements.
- ✓ Decide between a one-person or three-person DAB and whether to nominate potential members.
- ✓ Employer and Tenderer must insert information in the Appendix to Tender.

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4. Preparation of Conditions of Contract

- ✓ Consider the use of Annexes A to G for the forms of securities that are referred to in the General Conditions and the Appendix to Tender (may need to be modified to suit the Employer's requirements and the applicable law).
- ✓ Consider the use of a standard Letter of Tender for use by tenderers when submitting Tenders. The information given in the Conditions of Contract must be included.

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4. Preparation of Conditions of Contract

General Conditions may be modified for project circumstances by adding Particular Conditions.

But if the Particular Conditions put too much risk on the Contractor, the following may occur:

- Higher bid price
- Bid failure and disruption of project implementation
- Non-participation in the bid of conscientious and capable contractors
- Contract award to a bidder incapable of estimating risks
- Poor construction quality and delay to the progress of the work
- Undermining the relationship of mutual trust
- Repetition of groundless claims from the Contractor
- Frequent disputes
- In an extreme case, termination of the contract.

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5. Risk Analysis

Risk allocation in the 1999 editions has moved slightly in the Contractor's favour:

- Definition of "Force Majeure" has broadened.
- Contractor recovers time and money for Force Majeure.
- Greater power of the Contractor in relation to the Employer's ability to pay and actual payment.
- Financing charges and suspension for non-payment and suspension for late Interim Payment Certificates increase the pressure on Employers to have financing or, where that is not possible, to relieve the Contractor from the obligation to continue working.

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5. Risk Analysis

The main participants in a FIDIC contract are :

- Employer: Service agreement between Employer and Engineer (FIDIC White Book)
- Engineer: Administers Works Contract on behalf of Employer
- Contractor: Works Contract
- DAB: Agreement between Employer / Contractor and 1 or 3 Members of DAB

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5. Risk Analysis

- Ensure that the Engineer's responsibilities as stated in his agreement with the Employer (e.g. a FIDIC Client/Consultant Model Services Agreement) are identical with those required under the contract for the Works.
- Discrepancies in respect of the Engineer's responsibilities and authorities, under the respective contracts, could lead to contractual disputes and could expose the Engineer to liability.
- It is not uncommon for the Employer to limit, under the service agreement, the Engineer's authorities to vary the Works, issue Variation Orders, determine unit payment rates for new work items, award Extensions of Time for Completion, and/or render determinations of Contractor's claims, etc., without the Employer's prior written approval.

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5. Risk Analysis

- A promoter of a project should carefully analyse:
 - Allocation of the essential functions found in a construction project and in particular the design function.
 - Allocation of the risks inherent in the project.
 - Allocation of the management role.
 - Method and timing of remuneration for the Contractor.
- Applicable Law - allocates the risks envisaged in the contract to the contracting parties.
- Contract - either affirms the allocation or re-allocates risks from one to the other contracting party or spreads them to third parties.

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5. Risk Analysis

- If a risk is not allocated to one of the contracting parties either by the applicable law or by the terms of the contract then courts will ask the following questions:
 - Which party can best foresee the risk?
 - Which party can best control the risk?
 - Which party can best bear the risk?
 - Which party most benefits or suffers if the risk eventuates?
- It is foolish to allocate a risk to a party who cannot bear the risk unless that party is able to shift the risk to others who can. This shift or spread is usually done through insurance.

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5. Risk Analysis

Project risks are divided into :

- Mainly insurable risks: risks of loss, damage or injury occurring during the contract, including: consequences of accidents due to defective design, defective material and defective workmanship; acts of God; fire; human error; failure to take adequate precautions
- Mainly uninsurable risks: risks leading to financial and/or time loss with their impact on the project, including: late possession of the site; delay in receipt of necessary information; changes in design; variations in the original contract.



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5. Risk Analysis

- The promoter when allocating the functions and risks to various parties must consider management and the method of valuing the work done and how the work is paid. He should consider whether or not he is prepared to share these risks with the other parties and if so the extent of such sharing.
- In broad terms, three categories must be considered:
 - ✓ Cost-reimbursable contracts
 - ✓ Re-measurement contracts based on unit rates & prices
 - ✓ Lump sum contracts.



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6. Which contract form to use

When selecting the contract, the following checklist should be used:

- Choice of the type of the project to be procured.
- Choice of design and whether or not it has an exclusive nature.
- Checking of how and when payment is made.
- Certainty of final cost of the project.
- Method of tendering.
- Control during construction.
- Possibility or probability of having a variation or change in the works after entering into the Contract.



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6. Which contract form to use?

- Relatively small value, short construction time or involving simple or repetitive work: Short Form (Green Book)
- Larger or more complex projects:
 - Employer (or the Engineer) to do most of the design - Construction Contract (Red Book)
 - Contractor to do most of the design - Plant & DB (Yellow Book)
 - Contractor to do most of the design & to take responsibility for operation - DBO (Gold Book)
 - Contractor takes total responsibility for the financing, construction and operation - EPC/T (Silver Book)
- Also for EPC/T:
 - The Employer (who provides the finance) wishes to implement the project on a fixed-price turnkey basis - EPC/T (Silver Book)



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7. The MDB Version

- The MDB Harmonised Edition of the FIDIC Conditions of Contract for Construction, referred to as the "MDB Harmonised Construction Contract" comprises:
 - General Conditions
 - Particular Conditions (Part A: Contract Data & Part B: Special Provisions)
 - Sample Forms.
- As stated earlier, it is extensively based on the FIDIC Red Book (1999) – which means that it is intended for use in relation to contracts where:
 - the Contractor is provided with the design by the Employer and
 - he is paid on a re-measurement basis, applying agreed unit rates to the actual quantities executed.



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7. The MDB Version

- For the time being, there is no MDB Version of the Yellow, Green, Gold or Silver Books.
- The MDB Version is not suited for lump sum contracts without substantial changes.
- Under the licence agreement between the MDBs and FIDIC, the General Conditions can only be changed through prior agreement between the MDB and FIDIC and any change to suit a particular project can only be made in the Particular Conditions.



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7. The MDB Version

- Where changes are made, care must be taken to ensure that no ambiguity is created between the General Conditions and Particular Conditions or between clauses in the Particular Conditions.
- It is essential that such drafting tasks, and the entire preparation of the tender documents, be entrusted to personnel with the relevant experience, including the contractual, technical and procurement aspects.
- The tender documents should be prepared by suitably-qualified engineers, familiar with the technical aspects of the Works and reviewed by suitably-qualified lawyers.



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End of Session 1



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Session 2

Responsibilities of the Main Parties

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Responsibilities of the Main Parties

1. General Provisions
2. The Employer
3. The Contractor
4. The Engineer
5. Nominated Subcontractors
6. Design

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1. General Provisions

It is necessary to be familiar with some general provisions in the FIDIC Contracts and the MDB Version in order to correctly understand and interpret the specific clauses found elsewhere in the Contracts.

Most of these provisions are set out under Clause 1 and include the so-called "Boiler-plate" provisions.

1. Definitions:

- Defined terms begin with capital letters: FIDIC Contracts and the MDB Version include many. There are important differences between the standard FIDIC Contracts and the MDB Version. (Clause 1.1)

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1. General Provisions

2. Interpretation:

- Clause 1.2 describes how the Contract is to be interpreted.
 - In the MDB Version, the word "tender" is taken to be the same as "bid", the word "tenderer" the same as "bidder" and the expression "tender documents" the same as "bid documents".
 - In the MDB Version, the expression "Cost plus profit" requires this profit to be 5% of the Cost unless indicated otherwise in the Contract Data.

3. Communications:

- Clause 1.3 sets out the rules for official communications among all of the parties – care is required in fixing these details.

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1. General Provisions

3. Communications (continued):

- Clause 1.3 also includes a very important provision: **Approvals, certificates, consents and determinations are not to be unreasonably withheld or delayed.**

4. Law & Language:

- The Contract is to be governed by the law of the country stated in the Contract Data...
- The ruling language of the Contract shall be that stated in the Contract Data.
- The language for communication can be different from the ruling language (but better to avoid). If none is stated in the Contract Data, it shall be the same as the ruling language. (Clause 1.4)

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1. General Provisions

5. Priority of Documents:

- The documents forming the Contract are mutually explanatory but in the event of conflict between them, the order of priority is :
 - The Contract Agreement (if any)
 - The Letter of Acceptance
 - The Tender
 - The Particular Conditions – Part A
 - The Particular Conditions – Part B
 - The General Conditions
 - The Specification,
 - The Drawings,
 - The Schedules and any other documents forming part of the Contract.

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2. The Employer

The role of the Employer is covered to a large extent by five sub-clauses of Clause 2:

- 2.1 Right of Access to the Site;
- 2.2 Permits, Licences or Approvals;
- 2.3 Employer's Personnel;
- 2.4 Employer's Financial Arrangements; and
- 2.5 Employer's Claims.

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2. The Employer

However, the Employer's role and obligations are also mentioned elsewhere in the Contract and can be summarised in the order in which they appear in the General Conditions.

1. Definitions – "Contract Data";
 The Employer is required to provide the Contract Data, within Part A of the Particular Conditions.
2. Obtain building permit, etc.:
 The Employer must obtain planning, zoning, building permits or similar permission for Permanent Works and any permits described in the Specifications as to be obtained by the Employer. (Clause 1.13)

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2. The Employer

3. Give access to and possession of the Site:

- The Employer is required under Clauses 2.1 & 4.13 to give the Contractor access to and possession of the Site and temporary rights of way necessary for the Works.
- He may withhold doing so until the Performance Security has been received.
- The Site means the places where the Permanent Works are to be executed, including storage and working areas and areas to which Plant & Materials are to be delivered and any other places specified in the Contract as forming part of the Site.
- Access and possession must be given within the times stated in the Contract Data. If no times are stated, they must be given so as to allow the Contractor to proceed without disruption.



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2. The Employer

4. Assist the Contractor for permits:

The Employer shall provide reasonable assistance to the Contractor to obtain:

- copies of relevant laws, not readily available, &
- any permits, approvals etc, the Contractor needs for the Works, for the delivery of Goods including customs clearance and for the export of his equipment. (Clause 2.2)

5. Ensure the co - operation of his personnel:

The Employer must ensure that his personnel and his other contractors cooperate with the Contractor and take actions similar to those required of the Contractor with respect to safety and protection of the environment. (Clause 2.3)



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2. The Employer

6. Provide evidence of financial arrangements:

- The Employer must provide reasonable evidence that financial arrangements have been made and are being maintained to enable him to pay the Contractor punctually.
- He must do so before the Commencement Date but also within 28 days after receiving any request from the Contractor.
- Before making any material change to his arrangements, he must notify the Contractor and give detailed particulars.
- If the Bank suspends disbursements under the project loan, the Employer must notify the Contractor within 7 days of being notified by the Bank. (Clause 2.4)



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2. The Employer

7. Employer's Claims

The Employer (or the Engineer) must give notice and particulars to the Contractor of any claim by the Employer for payment in connection with the Contract and/or for any extension of the Defects Notification Period (DNP).

- The notice must be given as soon as practicable and no more than 28 days after the Employer became aware or should have become aware of the event or circumstances.
- The notice must specify the basis for the claim and substantiate the amount and/or extension claimed.
- Any claim for an extension of the DNP must be made before the expiry of the DNP.



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2. The Employer

8. Appoint the "Engineer":

The Employer is required to appoint the "Engineer" and name him in the Contract Data.

He must promptly inform the Contractor of any change to the authority of the Engineer. (Clause 3.1)

If he intends to appoint a replacement Engineer, he must give notice to the Contractor at least 21 days beforehand and he must give full and fair consideration to any objection raised by the Contractor. (Clause 3.4)

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2. The Employer

9. Release Contractor's Security:

- The Employer must return the Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate.

- He shall not make any claim under the Performance Security except for amounts to which he is entitled under the Contract.

- He must indemnify the Contractor against all damages, losses & expenses (including legal fees) resulting from an unjustified claim under the Performance Security. (Clause 4.2)

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2. The Employer

10. Supply Equipment & Materials

- The Employer shall make the Employer's Equipment (if any) available to the Contractor in accordance with the details, arrangements & prices stated in the Specification.

- He is responsible for the Employer's Equipment except when it is in the possession or under the control of the Contractor.

- Any "free-issue" materials are to be issued by the Employer at his risk and cost, at the time and place specified in the Contract.

- They are to be visually checked by the Contractor and he must give prompt notice of any shortage or defect. The Employer shall immediately rectify. (Clause 4.20)

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2. The Employer

11. Nominate specialist subcontractors:

- The Employer must choose any subcontractor who the Contractor is required by the Contract to appoint as a Nominated Subcontractor.

- If the Contractor raises reasonable objection to the appointment of the Nominated Subcontractor, the Employer must indemnify the Contractor against the consequences of proceeding with the appointment or he must choose another subcontractor without delay.

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2. The Employer

12. Make Payments

- The Employer shall pay:
 - The first instalment of the advance payment, as an interest-free loan for mobilisation and cash-flow support within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the Performance Security and Advance Payment Guarantee, whichever is later (Clauses 14.2 & 14.7);
 - The amount certified in each Interim Payment Certificate (IPC) within 56 days after the Engineer receives the Contractor's Statement and supporting documents;
 - The amount certified in the Final Payment Certificate within 56 days of receiving the Final Payment Certificate.

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2. The Employer

12. Make Payments (continued)

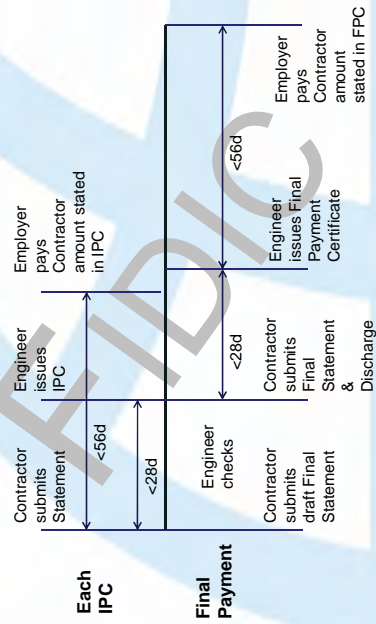
- In the event that the Bank's loan or credit is suspended, the Employer shall pay:
 - The amount certified in each Interim Payment Certificate (IPC) within 14 days after such Statement is submitted
 - The undisputed portion of the Contractor's Final Statement within 56 days after date of notification of the suspension (Clause 14.7).

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Typical Sequence of Payment Events

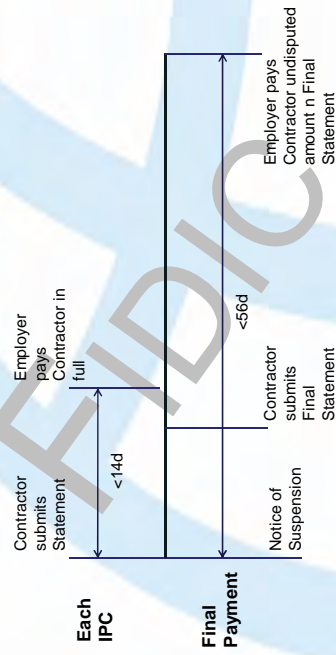


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Sequence of Payment Events if Loan Suspended



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2. The Employer

13. Appoint a Dispute Board:

- The Employer shall participate in the appointment of a Dispute Board (DB) – 1 or 3 members.
- He may include in the tender documents a list of potential DB members to be included in the Contract, if agreed by the successful tenderer.
- Regardless of whether or not a list has been included in the Contract, he must appoint a member of the DB within the time fixed in the Contract (3 member DB) or if the Contract states that the DB shall have one member, he must attempt to agree with the Contractor on the appointment within the time fixed in the Contract.



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3. The Contractor

In a construction contract, the Contractor's obligations may be divided into two main categories:

- Obligations which are construed from the agreement between the Parties to the Contract as set out in the Conditions of Contract;
- Obligations which apply under the applicable Law of the Contract between the Parties, and which extend in legal terms beyond the Contractor's obligations under the Contract with the Employer and in time beyond the completion of that Contract.



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3. The Contractor

In simple terms, the Contractor's obligations under the MDB Version revolve around six main areas:

- Construction and completion of the Works with due diligence and within the Time for Completion as contemplated in the Contract.
- Use of materials, plant and workmanship as described in the Contract and in accordance with the Engineer's instructions.
- Provision of securities, indemnities and insurances in respect of such work during the Contract Period.



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3. The Contractor

- Supply of information and notices required for the execution and completion of the Works and also for alerting the Employer whenever an event occurs which is likely to increase the cost of the Works or the time for completion.
- Performance of certain administrative and other functions, (including, if explicitly required, the design of certain elements) to facilitate the process of construction and its various activities.
- Respect of a number of social and environmental requirements.




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3. The Contractor
Although the Contractor's obligations can be summarized as above, they are in fact spread throughout the whole document . Some of the more evident obligations include:

1. Compliance with applicable Laws:

- The Contractor shall, in performing the Contract comply with applicable Laws.
- He shall give all notices, pay all taxes, duties and fees and obtain all permits, approvals, etc required by the Laws in relation to the execution and completion of the Works and the remedying of defects.
- He must indemnify the Employer against the consequences of any failure to do so unless he is impeded in doing so and shows evidence of his diligence. (Clause 1.13)

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3. The Contractor

2. Allow Inspections & Audit by the Bank:

- The Contractor must permit the Bank or its representatives to inspect the Site and/or his accounts and records and have these audited by auditors appointed by the Bank(Clause 1.15)

3. Provide the Personnel, Goods, Plant, etc.:

- The Contractor must provide the Plant and Contractor's Documents specified in the Contract and must provide all Personnel, Goods, consumables and services required in and for the execution, completion and remedying of defects.
- All equipment, material and services required for the Works shall have their origin in any eligible source country as defined by the Bank. (Clause 4.1)

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3. The Contractor

3. Provide the Personnel, Goods, Plant, etc. (continued):

- Whenever required by the Engineer, he shall submit details of the arrangements and methods he proposes to use for the execution of the Works.
- Prior to the Tests on Completion, he must submit the "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification.

4. Provide the Performance Security:

- The Contractor shall provide a Performance Security in the required form and in the amount and currencies stated in the Contract Data, within 28 days after receiving the Letter of Acceptance (with a copy to the Engineer).

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3. The Contractor

4. Provide the Performance Security (continued):

- He must ensure that the Performance Security remains valid and enforceable until he has executed and completed the Works and remedied any defects.
- Whenever the Engineer determines an addition or reduction in the Contract Price of more than 25% in a specific currency due to changes in costs and/or legislation or due to a Variation, the Contractor must increase the value of the Performance Security at the request of the Engineer or may decrease as the case may be. (Clause 4.2)

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3. The Contractor

5. Appoint his Representative:

- The Contractor must appoint the Contractor's Representative and give him all the necessary authority to act on his behalf.
- Unless the person is named in the Contract (unusual) the Contractor must submit his name and details prior to the Commencement Date.
- The Contractor must not revoke the appointment of the Contractor's Representative or appoint a replacement without the prior consent of the Engineer.
- The Representative must be fluent in the language of the Contract, if not competent interpreters must be available during working hours. (Clause 4.3)

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3. The Contractor

6. Obtain the Engineer's consent to a Subcontractor

- The Contractor must obtain the Engineer's consent before appointing a Subcontractor, unless the Subcontractor is to supply materials only or is named in the Contract.
- He must give the Engineer at least 28 days notice of the intended date of the commencement of Subcontractor's work.
- Each subcontract shall permit the assignment of the benefit to the Employer under given circumstances.
- The Contractor shall not subcontract the whole of the Works.
- He must give fair and reasonable opportunity to local Subcontractors, where practicable. (Clause 4.4)
- He remains liable for the acts and defaults of Subcontractors.

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3. The Contractor

7. Cooperate with others:

- The Contractor must allow appropriate opportunities for work by others on or near the Site, as specified in the Contract or as instructed by the Engineer.
- Any such instruction will be a Variation if and to the extent that it causes the Contractor to suffer delays and/or to incur Unforeseeable Cost. (Clause 4.6)

8. Shall set out the Works:

- The Contractor must set out the Works on the basis of information and reference points provided to him.
- He is responsible for the correct setting out unless due to errors in the information & reference points. (Clause 4.7)

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3. The Contractor

9. Satisfies himself regarding access routes to the Site:

- The Contractor is deemed to have satisfied himself as to the suitability and availability of access routes to the Site at the Base Date.
- He is responsible (unless otherwise stated in the Contract) for maintenance, signs, etc.
- He cannot claim for costs due to non-availability or non-suitability of the access routes. (Clause 4.15)
- He must obtain at his own risk and cost any additional rights of way or facilities outside the Site, which the Employer is not obliged to provide. (Clause 4.13)

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3. The Contractor

10. Protect the Environment:

- The Contractor must take all reasonable steps to protect the environment (both on and off Site) and to limit damage and nuisance to people and property from pollution, noise, etc.
- He must ensure that emissions, discharges and effluent stay within limits fixed in the Specification or by applicable Laws.

11. Responsible for power, water & other services for construction activities & tests:

- Contractor is responsible for providing power, water etc. for his construction activities and for tests, except as stated elsewhere in the Contract.

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3. The Contractor


12. Maintain the Site in an orderly manner

- The Contractor must confine his activities to the Site and any additional areas agreed by the Engineer as additional working areas.
- He must take all necessary precautions to stay off adjacent land;
- He must keep the site free of unnecessary obstructions and properly store or dispose of his Equipment or surplus materials.
- He shall clear away any rubbish, Temporary Works, etc. and shall leave the Site in a clean and safe condition.

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4. The Engineer

- The concept of engaging a consulting engineer stems from the idea that when a promoter initiates a construction project he is faced with many technical, commercial and legal considerations with which he is not an expert.
- In civil engineering construction, in order to transform the promoter's ideas into reality, the method adopted by FIDIC is to engage a consulting engineer to carry out the following duties.

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4. The Engineer

The Engineer's duties can be specified according to the phase of the project.

Before construction

As Designer, Advisor and Consultant :

Complete a skilful design of the project sought by the promoter. Such design includes:

- Preparation of drawings giving details of every aspect of the Project.
- Drafting a specification of the materials to be used and of the standard of the workmanship to be achieved.
- Preparation of the bill of quantities.

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4. The Engineer

As Employer's Agent (before construction):

- Preparation of tender documents and contract, i.e., all documents necessary for obtaining a competitive price for carrying out the work by a competent contractor.
- Advising the promoter on the tenders received and on the selection of the Contractor.

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4. The Engineer

During construction

As Supervisor and Employer's Agent:

- Supervision or inspection of the work carried out by the Contractor in order to ensure quality and conformity with the design requirements.

As Administrator and Certifier:

- Administration of the Contract
- Evaluation and certification of work carried out
- Dealing with situations as they arise.

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4. The Engineer

Classification of duties by contract phase:

Pre-contract

- Ensure Employer is aware that he carries the financial risk for unforeseen events and of the financial, managerial and advisory resources required for the contract.
- Warn Employer of decisions and actions required of him, giving programme dates for finalisation of designs, provision of access, construction and taking over the Works.
- Design and detail the Works and as far as possible prepare clear working drawings and a concise specification.
- Prepare accurate bills of quantities, detailing the Works required. Keep provisional items to a minimum.

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4. The Engineer

- Ensure the Employer and his staff understand the role of the Engineer under the Conditions of Contract, to ensure fair dealings between the Contractor and the Employer.
- Draw the Employer's attention to the powers and duties of the Engineer under the Contract..
- Ensure the Employer and his auditors accept the joint statement of accounting principles on the Engineer's and auditor's relationship.
- Ensure the Engineer has a defined and readily understood method of selecting contractors and recommend that the number invited should be limited.
- Ensure all tenderers receive the same tendering information and are given a sufficient period for the preparation of tenders.

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4. The Engineer

- Make all site and service information in the Employer's and Engineer's possession available to those invited to tender.
- Ensure tenders are delivered in specifically marked envelopes to the Employer or Engineer, by a fixed date and time, and are opened with witnesses at a declared date.
- Check tenders carefully and correct any errors. Notify tenderer of any resulting change in the total of the priced bills of quantities and tender sum.
- Review tenders received with particular regard to the proposed construction methods and degree of risk involved and with the implications of sectional completion dates on the Employer's and Contractor's cash flow, as well as the anticipated final Contract Price.

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4. The Engineer

- Submit a report to the Employer pointing out any rate that is less than the known cost of carrying out the work and giving a recommendation of a tender acceptance with reasons. If rates are in doubt recommend a tenderer be invited to stand by his rates or withdraw.
- Advise the Employer to give tenderers the name of the successful tenderer at the earliest opportunity. It is also recommended that the list of values of tenders received should be circulated.

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4. The Engineer

Post-contract

- On the appointment of a Contractor, confirm the appointment by letter.
- State by letter to the Contractor and Engineer's representative details of the delegated powers and responsibilities and names of the Engineer's representative and project team, and give a date for commencement of the Works.
- Agree the extent and methods of payment for variations, extras and supervision and recording of Dayworks, preferably before work is commenced, and confirm in writing.
- Do not exceed the powers granted by the Employer.

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4. The Engineer

- Make decisions on extensions of time at stages and times required under the Contract. (Clause 20.1 requires these to be given in writing within 42 days of receipt).
- Ensure that a site diary and site records are properly kept and agreed where appropriate with the Contractor and arrange for regular progress photographs to be taken.
- Ensure site meetings are held at least monthly and that minutes are kept and agreed.
- Issue certificates for payments after interim measurements promptly.
- Visit the site regularly. Inspect works in progress and review compliance with the Contractor's Programme.

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4. The Engineer

- Ensure Nominated Subcontractors are properly appointed by the Contractor and that appropriate Subcontract Conditions of Contract are applied.
- Agree measurements of quantities for completed Works as the work proceeds..
- Ensure claims are detailed and the sums due are settled as soon as possible.
- Ensure certification of Taking Over and defects rectification are issued to the Contractor on time.
- Ensure the Employer is aware of his changed insurance liability when the Taking Over Certificate and Performance Certificates are issued.



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4. The Engineer

Engineer as the Employer's Agent

Typical duties:

- Design: implementing and augmenting the design.
- The process of design normally continues during the construction period and many questions could arise related to the design. Designs are best modified or changed, should it be required, by the original designer.
- Quality control
- The design is expressed through drawings and specifications which set out the required quality to be achieved. Quality must be monitored by someone familiar with the original concepts and parameters of the design.



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4. The Engineer

- Cost accountability and certification
- The Contract is based on interim payments made periodically, mostly on a monthly basis, by the Employer to the Contractor. The Employer's agent must possess the necessary knowledge to evaluate the work carried out by the Contractor, periodically and ultimately in a Final Certificate.
- Administration and management
- Progress on Site depends to a large extent on the availability of information required by the Contractor. It is necessary that the Employer's agent be familiar with the details of the project in order to deal with requests promptly.



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4. The Engineer

Engineer as a Supervisor

- Although the achievement of the quality specified in the Contract is the primary responsibility of the Contractor, it is particularly important in construction contracts to identify problems of quality at an early date because:
- Most construction contracts take a long time to complete during which time, parts of the Works become covered or concealed and, thus, become practically inaccessible.
 - The work is carried out on the Employer's Site. A completed but defective project cannot be rejected and replaced in practice by another. Instead it has to be repaired and accepted in a condition which might be less than perfect.



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4. The Engineer

- As the construction process includes a great number of activities, some of which cannot start before the completion of others, the earlier a defect is discovered the greater the possibility of finding a possible or feasible solution. Furthermore, the earlier the discovery of a defect, the lower the cost of implementing a solution and the shorter the period of disruption and delay to the completion of the project.

Accordingly, the supervisory role of the Engineer is an essential part of any construction contract, but such a role must be viewed as a supportive role to the Contractor's objective of quality rather than a primary one for its achievement.



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4. The Engineer

- The Engineer as a supervisor is expected to monitor, through inspection and testing, the work being carried out and to make sure that on completion the Employer, for whom the project has been constructed, has a project completed in accordance with the Contract and with any supplementary instructions which may have been given.



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4. The Engineer

Engineer as Certifier

The Engineer's role as a certifier includes:

- Valuation of work done and payments to the Contractor
- Certifying payments to Nominated Sub-Contractors
- Issuing Interim Payment Certificates
- Issuing a Taking-Over Certificate
- Issuing Performance Certificate.
- Issuing Final Payment Certificate
- Valuation in case of termination under Sub-Clause 15.3.



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5. Nominated Subcontractors

- A Nominated Subcontractor is someone who is either so-named in the Contract or who the Engineer has instructed the Contractor to employ as a Subcontractor.
- A "Subcontractor" can be a supplier of Goods and/or materials.
- There are three potential advantages to the Employer or Engineer of using a Nominated Subcontractor:
 - involvement in the choice of a specialist subcontractor;
 - involvement in the choice of plant;
 - the avoidance of participation in the co-ordination of the interface between the nominated sub-contractors and the Contractors' Works.



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5. Nominated Subcontractors

- Disadvantages in using Nominated Subcontractors include:
 - Lack of commitment from the Contractor to manage a Subcontractor that he feels was imposed upon him.
 - Nominated Subcontractors are sometimes chosen because of close links to the Employer's organisation rather than because of their ability.
 - Delays often occur in the appointment of the Nominated Subcontractor, thereby delaying completion of the Works.
- If there are to be Nominated Subcontractors, the Employer should make this clear in the tender documents so that the Contractor can take account of this in his price.

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5. Nominated Subcontractors

- The Employer and/or Engineer cannot unilaterally impose a subcontractor on the Contractor as Sub-clause 5.2 provides that a Contractor can raise a reasonable objection to any proposed appointment.
- An objection is deemed reasonable if it arises from (among other things):
 - There are reasons to believe the Nominated Subcontractor lacks competence or sufficient finances or resources.
 - The Nominated Subcontractor does not accept to indemnify the Contractor against his negligence or misuse of Goods.

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5. Nominated Subcontractors

- The Nominated Subcontractor does not accept to enter into a subcontract under which the Nominated Subcontractor shall
 - have similar obligations and liabilities as the Contractor;
 - indemnify the Contractor against all obligations and liabilities arising from any failure by the Subcontractor to perform;
 - be paid only if and when the Contractor has received payment from the Employer for sums due under the Subcontract.
- In respect of this latter point, the Contractor shall pay the Nominated Subcontractor amounts shown on the Subcontractor's invoices approved by the Contractor and which are certified by the Engineer as being due.

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6. Design

- The premise upon which the Red Book (1999) and the MDB Version are based is that the Contractor shall be provided with the design by the Employer.
- The full title of the Red Book (1999) is:
"Conditions of Contract for Construction for Building and Engineering Works designed by the Employer"
- The Foreword to both Contracts states:
"Under the usual arrangements for this type of contract, the Contractor constructs the Works in accordance with a design provided by the Employer. However, the works may include some elements of Contractor-designed civil, electrical and/or construction works."

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6. Design

As part of his role at the pre-contract stage the following aspects of the project would normally have been determined by the Engineer or the Employer's designer:

- Shape, form and dimensions of the project.
- Function which the Project is expected to perform and the level and quality of performance.
- Selection of materials and workmanship to produce the shape, form and dimensions of the project; and the production of documents necessary to express and communicate the design precisely and clearly to the Employer and to prospective contractors.
- Production of documents



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6. Design

Certain aspects of the method of construction which would be necessary for the implementation of the project may have to be included, depending on the project and its design.

- Projected cost of the Project on completion, based on an accurate Bill of Quantities, and also the projected maintenance cost of the Project's life span.
- It is generally accepted that there is a relationship between the quality of the materials and workmanship selected in the design and the necessity for maintenance and its frequency.

As part of his role during the post-contract stage (during the execution phase), the Engineer will normally issue additional or modified drawings and information.



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6. Design

- "The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions and shall remedy any defects in the Works" (Sub-Clause 4.1)
- If the Contractor is required to design any part of the Works, the extent of this design work must be clearly stated in the Contract.
- Otherwise, the Contractor does not undertake design but merely produces his shop/working drawings in order to show how to build the Works.



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End of Session 2



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Session 3

The Management of Projects

1. Staff and Labour
2. Plant, Material and Workmanship
3. Commencement, Delays and Suspension
4. Tests on Completion
5. Employer's Taking Over; Defects Liability

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The Management of Projects

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1. Staff and Labour

- Clause 6 of the Red Book (1999) and the MBD Version places a number of obligations upon the Contractor with respect to the proper treatment of staff and labour.
- The MBD Version goes much further than the Red Book (1999) and contains 22 sub-clauses dealing with "social issues" compared to only 11 in the Red Book (1999).

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1. Staff and Labour

These sub-clauses cover:

- **Engagement of Staff and Labour**

The Contractor must engage and pay the necessary staff and labour and arrange feeding, transport and when appropriate, housing. He is encouraged to employ staff and labour, with appropriate qualifications and experience from the Country of the Works.

- **Rates of Wages & Conditions of Labour**

The Contractor must respect local rates of wages. He must inform his personnel of their liability to pay income taxes and has to fulfil his legal duties with respect to deductions.

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1. Staff and Labour

- **Persons in the service of the Employer**
The Contractor must not attempt to recruit the Employer's personnel.
- **Labour Laws**
He must respect all the relevant labour Laws and shall require his employees to obey all applicable Laws.
- **Working hours**
No work is allowed outside normal working hours or on locally recognised rest days, unless allowed by the Contract, agreed by the Engineer or is necessary for safety reasons.

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1. Staff and Labour

- **Facilities for Staff and Labour**
He must provide all necessary accommodation & welfare facilities (including for Employer's Personnel if this is stated in the Specification). Accommodating workers in the Permanent Works is not allowed.
- **Health and Safety**
He must take all reasonable measures to maintain health & safety of his personnel. He shall ensure that medical staff, etc are available at all times on Site and at accommodation provided by him. He must appoint a qualified accident-prevention officer and give him the necessary authority to take action in order to avoid accidents. He must maintain records and immediately report any accident.

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1. Staff and Labour

- **Health and Safety (Continued)**
He must regularly provide HIV-AIDS education among his workers, those involved in the project and the local community. He shall provide condoms and screening for both HIV-AIDS and STI. He shall propose an alleviation programme in respect of STI, STD and HIV-AIDS, the cost of which will be covered by a Provisional Sum included in the Accepted Contract Amount.
- **Contractor's Superintendence**
He must provide all necessary superintendence by a sufficient number of qualified persons having adequate knowledge of the language for communications, for satisfactory and safe execution of the Works.

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1. Staff and Labour

- **Contractor's Personnel**
Engineer may require the removal from Site of any person who
 - persists in any misconduct or lack of care
 - carries out duties incompetently or negligently
 - fails to conform with the Contract
 - persists in conduct which is bad for safety, health or the environment.
- **Records of Personnel & Equipment**
Every month the Contractor must provide the Engineer with details of the number and class of Contractor's Personnel and of each type of equipment on Site.

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1. Staff and Labour

- **Disorderly Conduct**
Contractor must take all reasonable precautions to prevent disorderly conduct and to prevent damage or injury to property and persons on or near Site.
- **Foreign Personnel**
Contractor may bring foreign personnel allowed by the Laws. He must organise visas, work permits and return of the personnel to their place of recruitment or domicile. In the event of death he must arrange for the return of the body or burial.
- **Supply of Foodstuffs**
If required by the Specification, he shall provide a sufficient supply of suitable food at reasonable prices.

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1. Staff and Labour

- **Supply of Water**
Contractor shall provide an adequate supply of drinking and other water on Site.
- **Insect & Pest Nuisance**
Contractor must take necessary measures to protect Contractor's Personnel from insect & pest nuisance.
- **Alcoholic liquor or drugs**
Contractor shall not, otherwise than in accordance with the Laws, import, sell, barter etc. alcohol or drugs and shall not allow his personnel to do so.

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1. Staff and Labour

- **Arms & ammunition**
He must not give, barter or dispose of arms or ammunition and shall not allow his personnel to do so.
- **Festivals & Religious Customs**
He must respect locally recognised festivals, days of rest and religious or other customs.
- **Funeral Arrangements**
To the extent required by local regulations, he is responsible for making funeral arrangements for local employees.

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1. Staff and Labour

- **Forced or Compulsory Labour**
He will not employ labour to do work which is not voluntarily performed but is extracted under threat of force or penalty.
- **Harmful Child Labour**
He will not employ any child to do work that is economically exploitative, is likely to be hazardous, to interfere with the child's education or to be harmful to his health or development.
- **Employment Records of Workers**
He shall keep complete and accurate labour records - names, ages, gender, hours worked and wages paid. They shall be summarised and submitted on a monthly basis and can be inspected by the Engineer during normal working hours.

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2. Plant, Material and Workmanship

- Clause 7 deals with the requirements for the items of Plant and Materials which the Contractor brings to the Site in order to execute the project.
- It covers the Contractor's obligations concerning the quality of his work and the procedures to be followed for tests and in the event that an item of work fails the test.
- The matter of the time when an item of Plant or Materials becomes the property of the Employer is covered at Sub-Clause 7.7 and Royalties are dealt with at Sub-Clause 7.8.

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2. Plant, Material and Workmanship

The Contractor must carry out his work:

- in the manner specified in the Contract;
 - in a workmanlike and careful manner;
 - in accordance with recognised good practice;
 - with properly equipped facilities and using non-hazardous materials, unless otherwise specified in the Contract. (Clause 7.1)
- The quality of materials and standard of workmanship will be specified elsewhere in the contract documents, which will normally refer to the national standard specifications of the country of the project.

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2. Plant, Material and Workmanship

- Phrases such as "proper workmanlike and careful manner", "recognised good practice" and "properly equipped facilities" are not precise. These requirements will have to be interpreted by the Engineer in relation to the actual goods that are supplied and work that is executed by the Contractor.
- The Contractor is to submit samples of Materials, and relevant information, to the Engineer for consent prior to using the Materials in or for the Works. (Clause 7.2)

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2. Plant, Material and Workmanship

- Samples are:
 - manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
 - additional samples instructed by the Engineer as a Variation.
- Under Sub-Clause 1.3, the Engineer cannot unreasonably withhold his consent to the use of Materials. Any decision by the Engineer to reject certain Materials will thus need to be supported by scientific evidence (e.g., laboratory reports).

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2. Plant, Material and Workmanship

- The Employer's Personnel shall:
 - at all reasonable times have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
 - during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.
- The Contractor must give notice to the Engineer whenever any work is ready and before it is covered up.



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2. Plant, Material and Workmanship

- The Engineer shall then either carry out the examination, or testing without unreasonable delay, or promptly give notice to the Contractor that he does not require to do so.
- If the Contractor fails to give the notice, he must, if and when required by the Engineer, uncover the work and then reinstate at his own cost. (Clause 7.3)



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2. Plant, Material and Workmanship

- The Contractor shall provide everything necessary to carry out the tests specified, unless otherwise stated in the Contract.
- He shall agree with the Engineer, the time and place for the specified testing.
- The Engineer may vary the location or details of specified tests, or instruct the Contractor to carry out additional tests.
- If these varied or additional tests show that the item is not in accordance with the Contract, the additional or varied tests shall be at Contractor's expense.



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2. Plant, Material and Workmanship

- The Engineer must give the Contractor not less than 24 hours' notice of his intention to attend the tests. If he does not attend at the time and place agreed, the Contractor may proceed with the tests unless otherwise instructed by the Engineer, and the tests shall be deemed to have been made in the Engineer's presence and to be accurate. (Clause 7.4)
- If any Plant, Material or workmanship is found to be defective, or not in accordance with the Contract, the Engineer may reject it by notifying the Contractor. However, Engineer must not unreasonably withhold approval.



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2. Plant, Material and Workmanship

- If the Engineer requires this Plant, Materials or workmanship to be retested, the tests must be repeated under the same terms and conditions.
- If the Employer suffers additional costs due to the retesting, the Contractor shall pay these costs to the Employer. (Clause 7.5)
- The Contractor must, within a reasonable time, comply with any Engineer's instruction to:
 - remove and replace any Plant or Materials which do not conform with the Contract; or
 - remove and re-execute any works which do not conform with the Contract.

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2. Plant, Material and Workmanship

- The Engineer should only insist upon removal and replacement when it would be unreasonable to repair.
- The Contractor must comply immediately with any Engineer's instruction to execute works, which are urgently required for the safety of the Works.
- If the Contractor fails to comply with the Engineer's instruction, the Employer will be entitled to employ others to carry out the instruction at the Contractor's cost. (Clause 7.6)

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2. Plant, Material and Workmanship

- Unless the Laws of the Country provide otherwise, items of Plant and Materials will become the property of the Employer either:
 - when they are incorporated in the Works; or,
 - when the Contractor is paid for them, whichever takes place first. (Clause 7.7)
- The Contractor must pay all royalties and similar charges in relation to natural materials obtained outside the Site and for the disposal of materials arising from demolition, excavation, etc. (Clause 7.8)

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3. Commencement, Delays and Suspension

- In general, a number of precedent conditions must be satisfied before the Commencement Date. These include:
 - Signature of the Contract Agreement by both Parties together with any necessary approval from relevant authorities;
 - Provision by the Employer of reasonable evidence of his financial arrangements;
 - Possession of the Site and such permissions as are required for commencement are given to the Contractor
 - Receipt by the Contractor of the Advance Payment.

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3. Commencement, Delays and Suspension

- In addition, the Engineer must issue an instruction recording that both Parties agree on fulfilment of the conditions and instructing the Contractor to commence.
- If this instruction is not issued within 180 days from receipt by the Contractor of the Letter of Acceptance, the Contractor may terminate the Contract.
- After receiving the instruction, Contractor must proceed without delay and must complete the whole of the Works and any Section within the Time for Completion of the Works or Section. (Clauses 8.1 & 8.2)

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3. Commencement, Delays and Suspension

- Contractor must submit to the Engineer a Programme within 28 days after receiving the instruction to commence. The Programme is important because:
 - it is the basis for monitoring the Contractor's progress and planning Employer/Engineer activities and obligations;
 - It becomes a base reference for the Engineer's determination of Contractor's claims for extensions of Time for Completion arising from alleged disruption or delay.

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3. Commencement, Delays and Suspension

- Programme must show:
 - order of execution of the Works, dates for Contractor's Documents, procurement, off-site manufacture and fabrication, delivery, construction, erection, and testing;
 - sequencing of the Works, taking into account the lead time for obtaining any approvals;
 - detail of works performed by Nominated Subcontractors;
 - the sequence and timing of inspections and tests;
 - that the Works will be completed within the Time for Completion.

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3. Commencement, Delays and Suspension

- Programme is to be detailed (the Specification may require the Programme to be computer generated using software and showing the critical path).
- It should be accompanied by a supporting report (Method Statement) setting out how the Contractor intends to execute the Works and the resources he intends to use.
- Engineer must:
 - give notice to the Contractor within 21 days of how the Programme does not comply with the Contract;
 - not give comment on its attainability (he should only acknowledge receipt).

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3. Commencement, Delays and Suspension

- Contractor is required to give advance notice or early warning to the Engineer of potential events which might adversely affect or delay the Works. There is no similar obligation on the Engineer or Employer.
- This requirement has a far wider application than just in relation to the programme. The purpose is to enable the Contractor and Engineer to work together to minimise the effects of the potential delay event. The notice gives the Engineer the opportunity to take action to overcome the problem before the Contractor incurs delay or additional cost.

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3. Commencement, Delays and Suspension

- Linked to the requirement to maintain valid programmes and to advise the Engineer of potential delaying events, is the requirement to submit monthly progress reports (Clause 4.21).
- Each report must include charts and detailed descriptions of progress, photographs, details of the manufacture of each major item of Plant & Materials, records of Contractor's Personnel, copies of OA documents, etc., lists of notices given with respect to Employer's and Contractor's claims, safety statistics and comparisons of planned and actual progress with details of measures to overcome delays.

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3. Commencement, Delays and Suspension

- The submission of the monthly report is a pre-requisite for issue of the Interim Payment Certificate for the period covered by the report.
- If any of the circumstances listed under Clause 8.4 occurs, the Contractor shall be entitled to an extension of the Time for Completion, provided that he complies with the procedures set out under Clause 8.4 and elsewhere in the Contract.

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3. Commencement, Delays and Suspension

- If the Contractor is not entitled to an Extension of Time, and the rate of progress of the Works is:
 - too slow to complete the Works within the Time for Completion;
 - or
 - the Contractor has fallen (or will fall) behind the current Programme;the Engineer can instruct the Contractor to submit a revised programme and supporting report describing the revised methods he proposes to adopt, at his own risk and cost, to expedite progress and comply within the Time for Completion.

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3. Commencement, Delays and Suspension

- If, on the other hand, he is entitled to an extension of time but the Engineer instructs him to take measures in order to reduce the delay, he must be paid the additional costs of the measures. (Clause 8.6)
- If the Contractor fails to complete within the Time for Completion (after taking account of any entitlement to extensions of time), he must pay Delay Damages to the Employer, at the rate stated in the Contract .
- The Employer shall not be entitled to the Delay Damages unless he issues a notice to the Contractor within the 28 days limit set out in Clause 2.5 .

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3. Commencement, Delays and Suspension

- The subject of Delay Damages needs to be considered within the context of the applicable Laws.
- In some countries, the Employer is entitled to Delay Damages even if the delay does not cause him any loss. In others, he must be able to show some loss before he can claim Delay Damages.
- In some countries, the right to Delay Damages can be lost if a legal procedure is not followed (rather than a contractual procedure).

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3. Commencement, Delays and Suspension

- The Engineer may instruct the Contractor to suspend the Works (partially or entirely) (Clause 8.8).
- During such suspension, the Contractor shall protect, such part of the Works against any deterioration, loss or damage.
- The Engineer is not obliged to give the reason for the suspension but "may" notify of the cause. A reasonable Engineer should tell the Contractor the reason and likely extent of the suspension in order that he can decide how to meet his obligation to "protect, store and secure" that part of the Works.

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3. Commencement, Delays and Suspension

- If the cause is notified and is the responsibility of the Contractor, he will not be entitled to any extension of time or additional payment due to the suspension.
- Otherwise, he will be so entitled and will also be entitled to payment for Plant and/or Materials that have not yet been delivered to Site, if:
 - the suspension in relation to this Plant and/or Materials has lasted more than 28 days and
 - the Contractor has marked the Plant and/or Materials as the Employer's property. (Clauses 8.9 & 8.10)

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3. Commencement, Delays and Suspension

- He is also entitled to be paid for repairing, on the Engineer's instruction, any damage that has occurred during the suspension.
- If the suspension lasts more than 84 days, the Contractor may request permission to recommence.
- If permission is not given within 28 days, the Contractor may treat the suspension as an omission of the suspended Works or may terminate the Contract if the whole of the Works is affected by the suspension.
- There are strict procedures to be followed in this respect.

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4. Tests on Completion

- Prior to commencing the Tests on Completion, the Contractor must:
 - Submit "As-built" documents and operation and maintenance manuals;
 - Give at least 21 days notice to the Engineer of the date after which he will be ready to carry out the Tests.
 - The Tests on Completion shall be carried out within 14 days after the above-stated date, on the day or days chosen by the Engineer.
 - In considering the results, the Engineer must take account of any adverse effect if the Employer was using the Works. (Clause 9.1)

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4. Tests on Completion

- If the Tests on Completion are unduly delayed by the Employer, the Contractor is entitled in the first place to an extension of time and/or additional payment.
- If the said delay continues for more than 14 days, the Employer shall be deemed to have Taken Over the Works on the date when the Tests should have been completed.
- If the Tests on Completion are unduly delayed by the Contractor, the Engineer may issue instruct the Contractor to carry out the Tests within 21 days, on dates fixed by the Contractor.

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4. Tests on Completion

- If the Contractor fails to do so, the Employer may proceed with the Tests on Completion at the risk and cost of the Contractor.
- In such a case, the Tests will be deemed to have been carried out in the presence of the Contractor and the results will be deemed to be accurate. (Clause 9.2)
- If the Works fail to pass, the Engineer or the Contractor may require the failed Tests and Tests on Completion of related work, to be repeated. (Clause 9.3)

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4. Tests on Completion

- If the Works fail to pass the repeated Tests on Completion, the Engineer may:
 - order further retesting;
 - issue a Taking-Over Certificate, if the Employer so requests
 - reject the Works if the failure deprives the Employer of substantially the whole of the benefit of the Works, in which case, the Employer may terminate the Contract as a whole or in respect of any major part which cannot be put to the intended use and recover the amounts paid to the Contractor for the rejected part, together with financing costs and the cost of dismantling. (Clauses 9.4 & 11.4(c))

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5. Employer's Taking Over; Defects Liability

- When the whole or a part of the Works is completed, Contractor applies by notice to Engineer for a Taking-Over Certificate (TOC).
- Before issuing the TOC, the Engineer must verify that any pre-conditions have been satisfied:
 - statutory requirements affecting Taking Over;
 - Contractor has submitted As-Built Drawings (if required) and Operating/Maintenance Manuals (if any);
 - works have passed Tests on Completion (if any);
- Once a notice has been received, the Engineer must act within a prescribed time.

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5. Employer's Taking Over; Defects Liability

- Issuing of the TOC for the whole of the Works is a significant event. The date indicated in the TOC is the date from which:
 - Employer takes responsibility for care & maintenance;
 - Contractor's obligation to insure the Works ends;
 - part of the Retention Money is paid to the Contractor;
 - time begins to run for the Contractor's submission of a Statement at Completion.
- The date of completion stated in the Certificate is the date from which the Employer's entitlement to Delay Damages ends, and the Defects Notification Period (DNP) starts to run.

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5. Employer's Taking Over; Defects Liability

- Engineer must within 28 days after receipt of the Contractor's notice applying for a TOC, either:
 - issue a TOC stating the date on which the Works were completed in accordance with the Contract; or
 - give written instruction to the Contractor specifying all the work which is required to be done by the Contractor before the issue of the TOC.
- If the Engineer fails to respond within 28 days of receipt of the Contractor's notice, and the Works are substantially in accordance with the Contract, the TOC shall be deemed to have been issued on the last day of that 28 days period.

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5. Employer's Taking Over; Defects Liability

In accordance with the procedures for the whole of the Works, Contractor may request and Engineer shall issue a TOC for:

- any Section in respect of which a separate Time for Completion is provided in the Contract (customarily in the Contract Data); or
- any part of the Permanent Works - but at the sole discretion of the Employer; or
- any part of the Permanent Works which the Employer has decided to use prior to completion (other than as a temporary measure specified in the Contract or agreed by the Contractor).

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5. Employer's Taking Over; Defects Liability

- The part is Taken Over on the date at which it was first used and from such date:

- responsibility for care & maintenance of part is Employer's;
- the Contractor's obligation to insure part ends;
- a proportion of the Retention Money, based on the value of the taken-over works relative to the total value of the Permanent Works, is paid to the Contractor.
- The date of completion stated in the TOC for the part is the date from which the Employer's entitlement to Delay Damages is reduced in proportion to the value of the part of Works; the DNP starts to run for that part.

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5. Employer's Taking Over; Defects Liability

- The TOC may be:

- a simple letter of certification to the Contractor;
- some Employer's have a standard format of certificate.
- In the event that remaining works and/or defects correction are permitted to be completed during the DNP, a Snagging List of such works and defects corrections should be referenced in the TOC and appended thereto.

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5. Employer's Taking Over; Defects Liability

- There is no fixed procedure for listing works to be completed or defects to be corrected prior to or after issuing a TOC.
- Upon receipt of Contractor's notice of completion of the Works (or a part) and request for a TOC, Engineer to:
 - give notice to the Contractor of an inspection of the Works on or near the date that the Contractor has advised that those Works will be completed and ready for taking over;
 - invite the Employer to participate in the inspection;
 - based on the inspection, prepare a list of work remaining to be completed or identified defects to be corrected.

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5. Employer's Taking Over; Defects Liability

- If the remaining work and/or defects corrections are too extensive for a TOC to be issued, Engineer must notify the Contractor of work and defects to correct before re-applying.

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5. Employer's Taking Over; Defects Liability

- Defects Notification Period (DNP) is the period for notifying defects that the Contractor is required to correct. It is 12 months unless stated otherwise in the Contract Data:
 - from the date of completion of the Works certified in the TOC for the whole of the Works;
 - in the event of more than one TOC having been issued, the respective dates so certified.

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5. Employer's Taking Over; Defects Liability

- Contractor is required:
 - if a TOC was issued with a Snagging List, to complete items listed within such reasonable time as is instructed by the Engineer during the DNP applicable to those works taken over;
 - to rectify any defects which are notified to him by or on behalf of the Employer on or before the DNP expiry date.
- The intent is that at or soon after expiry of the DNP, the Works shall be delivered to the Employer in the condition required by the Contract, "fair wear and tear" excepted.

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5. Employer's Taking Over; Defects Liability

- Contractor is to be notified of defects identified during the DNP which he is required, and thereby instructed, to rectify.
- Instruction given by the Engineer should state the time by which the Contractor is to correct notified defects (statement may affect the Employer's remedies in the event of non-compliance).

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5. Employer's Taking Over; Defects Liability

- The Contractor is obliged, at his cost, to rectify any defect attributable to:
 - Any design for which the Contractor is responsible;
 - Plant, Materials or workmanship not in accordance with the Contract;
 - Failure by the Contractor to comply with any other obligation.
- but not :
 - "fair wear and tear";
 - defects which are attributable to faults of design not performed by the Contractor;
 - damage not caused by/attributed to Contractor in the DNP. (Clause 11.2)

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5. Employer's Taking Over; Defects Liability

- Employer may choose to rectify defects or damage that are not attributable to the Contractor by:
 - a request by the Employer (or on his behalf by the Engineer) that the Contractor perform the remedial works, for which the Contractor's agreement and jointly agreed payment terms would be necessary;
 - the Employer executing the remedial works outside the Contract, by himself or by others.

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5. Employer's Taking Over; Defects Liability

- If an argument arises as to whether or not a defect is attributable to the Contractor, he shall, upon instruction of the Engineer:
 - search for the cause of the defect;
 - if, as a result of the search, it is determined that the defect is the Contractor's responsibility, then the Contractor shall bear the cost of the search (may include costs of the Employer's and/or Engineer's participation).
- If the cause of the defect is not the responsibility of the Contractor, then the Contractor is entitled to payment. (Clause 11.8)

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5. Employer's Taking Over; Defects Liability

- Contractor is required:
 - to complete remaining works or rectify defects listed in the Snagging List within a reasonable time during the DNP. In the event of default, Employer is entitled to pay others to execute;
 - to rectify notified defects at his own cost but if not done within the stated or reasonable time: Employer entitled to recover from the Contractor the Employer's full costs, as verified by the Engineer, of the remedial actions/works performed by others.

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5. Employer's Taking Over; Defects Liability

"The Employer shall be entitled... to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However a DNP shall not be extended by more than two years". (Clause 11.3)

- If any Section or Plant cannot be used for a certain time period, then the relevant DNP should be extended by that time period.

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5. Employer's Taking Over; Defects Liability

- If the work of rectifying any defects may have affected the performance of the Works, the Engineer may require a repetition of any test prescribed in the Contract, within 28 days after remedying of the defect or damage.
- The cost of performing repeated tests shall be borne by the Party liable for the cost of rectifying the defects. (Clause 11.6)

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5. Employer's Taking Over; Defects Liability

- The Engineer is required to issue the Performance Certificate:

- within 28 days after expiry of the DNP; (or
- if different DNPs have become applicable to different parts of the Works, within 28 days after expiry of the latest); or
- as soon thereafter as any works instructed by the Engineer have been satisfactorily completed and tested, and the Contractor has handed over all documents prescribed to be handed over by the Contract.

- Certificate may be a simple letter stating the date on which, in the Engineer's determination, the Contractor completed his obligations under the Contract.

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5. Employer's Taking Over; Defects Liability

FIDIC Contracts state that:

"Performance of the Contractor's obligations shall not be considered to have been completed until the Engineer has issued a Performance Certificate to the Contractor....."

and

"Only the Performance Certificate shall be deemed to constitute acceptance of the Works." (Clause 11.9)

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5. Employer's Taking Over; Defects Liability

- However, the statement in the PC, of the Contractor's completion of his obligations cannot be taken literally.
- Under the 'Unfulfilled Obligations' clause, after the PC has been issued each Party remains liable for the fulfilment of any obligation unperformed at that time, and for this purpose the Contract is deemed to remain in force. Obligations include:
 - Contractor's clearance of Site;
 - Contractor's submission of a Final Statement;
 - Employer's Final Payment.

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End of Session 3a

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Session 3b

Financial Clauses & Procedures

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Financial Clauses and Procedures

1. Measurement and Evaluation
2. Variations and Adjustments
3. Contract Price and Payment

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1. Measurement and Evaluation

- Under the Red Book (1999) and the MDB Version, the Bill of Quantities and Unit Prices (BoQ) is a Bill of estimated Quantities and fixed Unit Prices.
- The Quantities set forth against Items in each bill are estimates of each kind of work included in the Contract. There is no guarantee that the Contractor will be required to perform the quantities under any particular item in the BoQ, or that the quantities will not differ from those stated.

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1. Measurement and Evaluation

- The brief descriptions of items given in the BoQ are purely for purpose of identification and shall not modify or supersede the detailed description given in the Technical Specifications and Drawings.
- The BoQ must be read in conjunction with the Preambles to BoQ and with the Method of Measurement (MoM).
- The MoM should describe the coverage of works and activities under each item of the BoQ.
- Any item included in the BoQ for which the Contractor indicates no rate or price is deemed to be included in other rates and prices in the BoQ and is not paid separately.

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1. Measurement and Evaluation

- Interim payments to the Contractor are based upon monthly measurement of quantities of work, applying the rates and prices from the BoQ.
- The Engineer:
 - performs measurements;
 - gives written notice to the Contractor of measurements.
- It is recommended that the Engineer and Contractor:
 - perform measurements together;
 - pre-agree any methods for the calculation of measurements from drawings and records.

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1. Measurement and Evaluation

- Contractor may claim interim payments of 80% of the value of Plant and Materials sent to or delivered to Site, but not yet incorporated in the Works (the amounts certified are deducted in subsequent Interim Payment Certificates).
- Aim is to minimise the Contractor's financing costs.
- Engineer must carefully read the Contract provisions.
- Contractor's intent should be to maintain sufficient working stocks of Materials on Site, such that interrupted deliveries will not delay execution of the Works.

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1. Measurement and Evaluation

Provisional Sums

- If the Contract includes a Provisional Sum the Engineer may instruct work to be executed, or Goods, Materials, Plant or services to be supplied under the Provisional Sum:
 - by the Contractor (the Contractor is entitled to payment in accordance with the Contract provisions for Variations);
 - by a Nominated Subcontractor (the Contractor is entitled to payment of the actual amount due to the Nominated Subcontractor, plus a sum for the Contractor's overhead and profit calculated from the relevant percentage rate stated in the BoQ or Contract Data.

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2. Variations and Adjustments

Variations

- In any construction project, there will be need to change the initial requirements as construction proceeds:
 - Employer changes his mind about some requirement;
 - Engineer may need to issue further information which involves changes to the initial requirements;
 - to correct a mistake in the information which has been issued to the Contractor.
- Engineer is only authorised to instruct Variations under the Contract. Not empowered to instruct a variation of the Contract (a variation of the Contract can be made only by the Parties to the Contract).

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2. Variations and Adjustments

- Engineer may make any Variation that he considers necessary.
- He has authority (subject to restrictions specified in the Contract) to instruct the Contractor to:
 - Increase or decrease the quantity of any work;
 - omit any work unless it is to be carried out by others;
 - change the character or quality of any such work;
 - change the levels, positions and/or dimensions of any part of the Works;
 - execute additional work needed to complete the Works;
 - change any specified sequence or timing of construction / execution of any part of the Works.

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2. Variations and Adjustments

- Contract Price can be adjusted for any increase or decrease in Cost arising from a change in the Laws of the Country made after the Base Date.
- Engineer should only certify payment of such increased / decreased costs after verifying particulars of a claim.
- Contractor to submit a claim for increased costs, and the Employer to submit a claim for decreased costs.
- Price adjustment shall, in general, be inadmissible for changes in Law occurring after the Time for Completion (exceptions: varied works instructed during the DNP or during the Time for Completion).

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2. Variations and Adjustments

- Contract provisions for Valuation of Variations apply to all variations of Unit Prices, establishment of Unit Prices for new items of work, or to any permitted adjustments of the Contract Price. The principles of evaluation are:
 - Variations are to be valued at the Contractor's rates and prices.
 - if the Contract has no rates & prices for the varied work, Contract rates & prices are to be used as the basis for developing new rates (enhanced or star rates).
 - failing which, after due consultation by the Engineer, suitable rates or prices shall be agreed.

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2. Variations and Adjustments

- FIDIC Contracts, provide for adjustment of the amounts payable to the Contractor to take account of rises or falls in the cost of labour, Goods and other inputs to the Works – provided that the Appendix to Tender contains a completed "table of adjustment data".
- The Contracts propose a formula to be used to determine a "multiplier" which, when applied to the estimated contract value of the work carried out during the month, will yield the adjusted amount:

$$P_n = a + b L_n/M_o + c E_n/E_o + d M_n/M_o + \dots$$

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2. Variations and Adjustments

- Employer :
 - defines the coefficients in the given formula and also all the sources of the cost indices in the "table of adjustment data" for each currencyor he may leave it to the Contractor, in his tender, to define the coefficients and their sources.
- In the event that the Contractor does not complete the whole of the Works within the Time for Completion, the adjustment multiplier for works executed after the Time for Completion must be capped at its value applicable to the month during which the Time for Completion expired.

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2. Variations and Adjustments

- In the event of disagreement the Engineer shall fix such rates and prices and shall notify the Contractor and the Employer;
- Until rates or prices are agreed or fixed, the Engineer shall determine provisional rates to enable the Engineer's certification of on-account payments to the Contractor;
- If an instruction to vary the Works is necessitated by some default or breach of Contract by the Contractor or for which he is responsible, any additional cost so attributable shall be borne by the Contractor.

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2. Variations and Adjustments

- New rates may be established for any items of the BoQ whose measured quantities exceed or fall below a specified percentage of the quantities stated in the original BoQ.
- Applicable only if all of the following criteria apply:
 - the measured quantity of the item is changed by more than 25% from the original BoQ quantity;
 - this change in quantity multiplied by the specified unit rate for this item exceeds 0.25 % of the Accepted Contract Amount;
 - the change in quantity directly changes the Cost per unit quantity of this item by more than 1 %; and
 - this item is not specified in the Contract as a fixed rate item.

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2. Variations and Adjustments

Daywork

- Engineer can instruct varied works to be executed on a Daywork basis (payment will be made according to rates and prices in the Daywork Schedule, based on daily records submitted by the Contractor).
- Unless the Engineer verifies the resources applied to Daywork, there may be a temptation for a Contractor to exaggerate resources. So emphasis put on the proof of materials used and on provision of daily records of other resources applied. The Engineer must ensure that: Daywork and resources are monitored daily.

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3. Contract Price & Payment

- The Contract is signed on the basis of the "Accepted Contract Amount" – but this is only an estimate of the amount actually to be paid to the Contractor.
- The amount actually to be paid to the Contractor (the "Contract Price" is to be determined by the Engineer on the basis of measurement of final quantities of work executed and taking account of Variations and certain Adjustments.

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3. Contract Price & Payment

- This Contract Price is not to be adjusted for taxes, duties and fees that the Contractor is required to pay (unless there is a change in legislation) but the MDB Version states that the Contractor shall be exempt from import duties and taxes on his equipment and essential spare parts for his equipment, imported for the sole purpose of executing the Works.

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3. Contract Price & Payment

- Interim payments to the Contractor are based on monthly measurement of quantities of work, applying the unit rates and prices from the BOQ.
- Some contracts may have payment based on a Schedule of Payments, but if no such Schedule is included in the Contract then interim payments must be based on monthly measurement of works executed.
- A re-measurement contract will typically require that the Contractor submit a Statement to the Engineer at the end of each month showing the amounts to which he considers himself entitled to the end of the month.

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3. Contract Price & Payment

- Contractor's Statement must be accompanied by:
 - supporting documents necessary for the Engineer to verify amounts claimed;
 - Contractor's Monthly Progress Report for the period to which the Statement corresponds.
- Contractor's Statement must be submitted in a form approved or prescribed by the Engineer.

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3. Contract Price & Payment

- Engineer shall within 28 days of receiving the Statement deliver to the Employer an Interim Payment Certificate (IPC) stating the amount of payment which the Engineer determines due and payable, provided that:
 - no IPC shall be issued until the Contractor has submitted and the Employer accepted the Performance Security;
 - until the Taking-Over Certificate is issued, the Engineer shall not be bound to issue an IPC if the net amount is less than the Minimum Amount of IPC stated in the Contract Data;
 - the supporting documents submitted by the Contractor include the Contractor's Monthly Progress Report.

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3. Contract Price & Payment

- Engineer must provide all supporting particulars for any reduction or withholding made by him in issuing the IPC.
- Prior to the issue of the Taking Over Certificate, the Engineer is not obliged to issue an IPC if the amount would be less than the minimum amount stated in the Contract Data.
- After the issue of the Taking Over Certificate, even if the amount certified falls below the minimum stated in the Contract Data, the Engineer must issue the IPC in response to a Contractor's Statement.

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3. Contract Price & Payment

- If the Engineer fails to issue an IPC on time, the Contractor may, after giving not less than 21 days notice, suspend work (or reduce the rate of work) unless and until he receives the IPC or evidence of payment in respect thereof before expiry of the 21-day notice period.
- Such action would probably incur additional cost and/or delay that would likely precipitate a subsequent claim, costs of which the Employer could subrogate to the Engineer.

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3. Contract Price & Payment

- If the Engineer fails to issue the IPC within 56 days after receipt of the Statement and supporting documents, the Contractor would be entitled to terminate the Contract.
- Certification for payment should not be withheld by the Engineer for executed works which the Engineer has no reason to believe will not, after testing, satisfy Contract requirements. If later tests show the works to be defective, then appropriate corrections of certified amounts can be made in subsequent IPCs until the defects are corrected.

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3. Contract Price & Payment

- If executed works are unfinished or defective, the Engineer should give consideration to:
 - whether or not the defect can be remedied;
 - if the defect cannot be remedied, then payment cannot be certified;
 - cost of remedial work for a correctable defect.
- If the Contractor has a record of many executed works having been defective, then the Engineer is justified in withholding the contract value of any executed but untested works until the Contractor's performance improves.

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3. Contract Price & Payment

- To correct and/or adjust the Contractor's Statement the Engineer should:
 - clearly mark the Contractor's Statement to show changes;
 - obtain the Contractor's Representative's agreement before issuing the corresponding IPC;
 - if the Contractor is uncooperative, then the Engineer should notify the Employer and Contractor of his reasons for making the not-agreed corrections and adjustments.

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3. Contract Price & Payment

Advance Payment

- The Advance Payment (AP) is repaid to the Employer by incremental deductions applied in the IPCs once the value of work executed reaches 30%.
- The deductions are made at the percentage stated in the Contract Data.
- The AP must be fully repaid before 90% of the Accepted Contract Amount less any Provisional Sums has been certified for payment.
- As the AP is repaid, the amount of the AP Security should be reduced accordingly.

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3. Contract Price & Payment

Retention

- Retention Money - retained by the Employer from moneys otherwise due to the Contractor - is effected by:
 - deducting in IPCs the amount calculated by applying the percentage of Retention given in the Contract Data;
 - until the amount retained reaches the Limit of Retention Money (if any) stated in the Contract Data.
- There is usually a provision for 10% Retention until reaching a Limit of Retention Money expressed as 5% of the Contract Price.

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3. Contract Price & Payment

- Engineer to certify payment to the Contractor of the Retention Money upon completion of the Works upon issue of:
 - a Taking-Over Certificate (TOC) for the whole of the Works, the Engineer shall certify for payment 50% of the Retention Money;
 - a TOC for a part of the Works (if applicable), the Engineer shall certify for payment 50% of the proportion of the Retention Money that corresponds to that part.

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3. Contract Price & Payment

- Upon expiration of the Defects Notification Period (DNP) the Engineer shall certify for payment the remainder of the Retention Money, provided that:
 - if Works remain to be executed upon expiry of the DNP, the Engineer should withhold certification of the cost of completing the remaining work;
 - if different DNPs are being applied to different parts of the Works for which TOCs were issued, then until the last DNP expires, the Engineer shall certify for payment for each part of the Works whose DNP has expired a proportion of the Retention Money.

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3. Contract Price & Payment

- Such certifications must be made under IPCs, either separately or together with other payment entitlements.
- Contract not to be considered as completed until the Engineer signs and delivers to the Employer a Performance Certificate.
- Issue of such certificate is not a condition precedent to payment of the Retention Money (the remainder of Retention Money must be certified for payment by the Engineer promptly upon expiration of the DNP).

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3. Contract Price & Payment

- Under the MDB Version, following issue of the TOC and certification for payment of the first half of the Retention Money, the Contractor may submit a guarantee acceptable to the Employer in the amount of the second half of the Retention Money.
- On receipt of the guarantee, the Engineer must certify and the Employer must pay the second half.
- If the Performance Guarantee is in the form of a demand bond and the amount guaranteed under it at the date of the TOC is more than half of the Retention Money, then a Retention guarantee is not required.

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3. Contract Price & Payment

- If the amount guaranteed by the Performance Security at the date of TOC is less than half of the Retention Money, then the Retention guarantee will be required only for the difference between half of the Retention Money and the amount guaranteed under the Performance Security.

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3. Contract Price & Payment

- The Employer must pay the Contractor within 56 days after receipt by the Engineer of the Contractor's Statement (i.e. irrespective of the date when the Engineer issues an IPC).
- The Employer must make payment in full of the amounts certified by the Engineer in his Payment Certificates, irrespective of any claim which the Employer may have against the Contractor, until such claim has been agreed or determined.

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3. Contract Price & Payment

- Making payments to the Contractor in full and on time is the Employer's contractual obligation, in default of which the Contractor can recover financing costs.
- Contractor may also be entitled to:
 - payment is not by due date: suspend work or reduce the rate of work (after giving notices), either of which could give the Contractor valid grounds to claim Extension of Time for Completion and/or additional costs.
 - payment not within the stipulated period after the due date: Contractor may terminate under the Contract (after giving the appropriate notices).

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3. Contract Price & Payment

- Employer must pay interest on late payments at the rate specified in the Contract.
- Interest charges are damages deemed to have been incurred as a consequence of the Employer's breach of Contract.
- The Contractor is entitled to interest without there being a notice or certification.
- But:
 - the Contractor may include interest in his Statement;
 - the Engineer should not certify payment of interest unless the Contractor has claimed interest;
 - if the Contractor has included interest in a Statement, the Engineer is obliged to certify such valid and correct interest in his corresponding IPC.

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3. Contract Price & Payment

- Unless payment of interest is illegal or unenforceable under the Law of the Contract, the Employer's failure to pay such interest is a breach of Contract subject to the same contractual repercussions as apply to late payment or non-payment of any other amounts due under the Contract.

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3. Contract Price & Payment Contractor's Statement at Completion

- Within 84 days after receiving the TOC for the whole of the Works, the Contractor must submit to the Engineer a Statement at Completion with supporting documents showing in detail:
 - value of all work done in accordance with the Contract up to the date of completion stated in the TOC;
 - any further sums which the Contractor considers due;
 - an estimate of other amounts which the Contractor considers will become due to him under the Contract, with the estimated amounts shown separately.
- If the Contractor does not claim an entitlement in his Statement at Completion, he loses it.

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3. Contract Price & Payment Engineer's IPC at Completion

- Within 28 days after receipt of the Contractor's Statement at Completion, Engineer must certify to the Employer the amount which he fairly determines to be due.
- Notwithstanding that the Contractor's Statement at Completion contains "estimates of amounts which the Contractor considers will become due under the Contract", Engineer shall certify for payment only those amounts that he determines to be due for works already acceptably completed and other payment entitlements
 - a) at the date of completion stated in the TOC;
 - b) after the date of completion stated in the TOC.

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3. Contract Price & Payment

Draft Final Statement

- Within 56 days after receiving the PC, Contractor must submit a draft final statement with supporting documents showing in the form approved by the Engineer:
 - the value of all work done in accordance with the Contract.
 - any further sums which the Contractor considers to be due to him under the Contract or otherwise.
- If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed.

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3. Contract Price & Payment

"... if, following discussions between the Engineer and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement.
Thereafter, if the dispute is finally resolved the Contractor shall then prepare and submit to the Engineer (with a copy to the Employer) a Final Statement." (Clause 14.11)

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3. Contract Price & Payment

Discharge

- At the time of submitting the Final Statement, the Contractor is required to submit a Discharge stating that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor. (Clause 14.12)
- Although there is no requirement for the Contractor to state in his Discharge that it is predicated on the Employer's payment and return of the Performance Security, it would be wise for the Contractor to so state.

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3. Contract Price & Payment Final Payment Certificate

- Engineer shall, within 28 days after receipt of the Contractor's Final Statement, and the Contractor's written Discharge, issue to the Employer a Final Payment Certificate stating:
 - the amount that is finally due to the Contractor;
 - after giving credit for all amounts previously paid and for all sums entitled under the Contract, the balance due.

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3. Contract Price & Payment Final Payment Certificate

- If Contractor has not applied for a Final Payment Certificate within the prescribed time and/or has not submitted a Discharge, the Engineer requests the Contractor to do so.
- If Contractor fails to do so within 28 days the Engineer issues the Final Payment Certificate for an amount he determines.

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3. Contract Price & Payment Final Payment

- The Employer shall make the Final Payment to the Contractor within 56 days after the date of his receipt of the Engineer's Final Payment Certificate.

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End of Session 3

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Session 4

Risk, Force Majeure & Termination

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Risk, Force Majeure & Termination

1. Risk and Responsibility
2. Liability & Insurance
3. Termination by Employer
4. Suspension and Termination by Contractor
5. Force Majeure
6. Claims, Disputes and Arbitration

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1. Risk and Responsibility

- Contractor must indemnify the Employer against all claims, damages, losses and expenses in respect of injury, disease or death and damage to or loss of property arising out of his execution of the Works unless the injury or damage is due to negligence, willful act or breach by the Employer or the Employer's Personnel or agents.
- The Employer must indemnify the Contractor with respect to injury, disease or death attributable to the negligence, willful act or breach by the Employer, or the Employer's Personnel or agents and in respect of certain matters excluded from insurance cover

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1. Risk and Responsibility

- Contractor must take full responsibility for the care of the Works and Goods from the Commencement Date until the TOC is issued (or deemed issued).
- If any loss or damage occurs to the Works during this period other than a matter listed as an Employer's Risk, the Contractor shall rectify the loss or damage at his own risk and cost.
- Contractor will be liable for any damage caused by his actions after the issue of the TOC.

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1. Risk and Responsibility

Employer's risks include:

1. War, hostilities, invasion, act of foreign enemies
2. Rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, civil war, etc.
3. Riot, commotion or disorder within the Country
4. Munitions of war, explosives, radiation, radio-activity within the Country ...
5. Pressure waves caused by aircraft, ...
6. Use or occupation by the Employer of any part of the Permanent Works, except as specified in the Contract.

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1. Risk and Responsibility

7. Design by the Employer's Personnel or others for whom Employer is responsible
8. Any operation of the forces of nature that was unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions. If any of the above Employer's Risks results in loss or damage to the Works, Goods or Contractor's Documents, Contractor shall promptly notify the Engineer and rectify the loss or damage to the extent required by the Engineer. If he suffers delay and/or additional cost from rectification, he shall be entitled to an extension of time and payment of the Cost (and in some cases, Profit)

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1. Risk and Responsibility

- Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit or any indirect or consequential damage, other than as specifically provided under the Contract.
- Except in the case of fraud, deliberate default or reckless misconduct, the total liability of the Contractor to the Employer in connection with the Contract shall not exceed the sum resulting from the application of the multiplier to the Accepted Contract Amount, as stated in the Contract Data or if no multiplier is stated, the Accepted Contract Amount.

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2. Liability & Insurance

- FIDIC contracts require the following to be insured:
 - A Works & Contractor's Equipment
 - B Injury to Persons & Damage to Property
 - C Contractor's Personnel
- Evidence to be provided - within period stated in Contract Data.
- Copies of Policies to be provided:
 - only for "A" & "B"; within period stated in Contract Data.
- Professional indemnity insurance:
 - if, under the Contract, the Contractor designs major parts of the Works, professional indemnity insurance may be required.

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2. Liability & Insurance

- Evidence and, subsequently, copies of policies must be submitted by the Contractor directly to the Employer.
- Implicit that the insurances shall comply with the Contract requirements.
- Employer to notify the Engineer whether or not the Contractor's insurance submissions comply, so that:
 - For compliance: the Engineer can allow the Works to proceed and certify any payment entitlements under the Contract for insurance;
 - For non-compliance: the Engineer can issue to the Contractor notice of requirement to remedy this default.



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2. Liability & Insurance

- Engineer:
 - cannot unilaterally suspend any work by reason that evidence of insurances has not been provided;
 - to monitor that the Contractor maintains adequate insurance in accordance with Contract requirements.



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3. Termination by the Employer

Employer entitled to terminate the Contract for default if the Contractor:

1. enters into liquidation or dissolution;
2. becomes bankrupt or insolvent;
3. gives or offers any bribe, gift, gratuity or commission;
4. fails to maintain an acceptable Performance Security;
5. fails to commence the Work;
6. abandons the Works;
7. fails to expedite progress of the Works;
8. fails to comply with a notice of remedial action;
9. demonstrates an intention not to comply with any of his obligations under the Contract;
10. subcontracts the whole of the Works.



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3. Termination by the Employer

FIDIC contracts do not require any certification by the Engineer. In any of the above, the Employer may give 14 days' notice to the Contractor of termination; except that immediate notice may be given in the event of reasons (1), (2) and (3). Employer should take legal advice before giving notice of termination. If the Employer gives notice and then wishes to withdraw it, the Parties may agree that the notice shall be of no effect or, it may be agreed that the notice be put on hold.



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3. Termination by the Employer

After expiry of the Employer's notice of termination:

- Employer may complete the Works himself or arrange for others to do so;
- Employer, or his other contractors, may use any of the Contractor's Materials, etc. as they deem fit (Engineer to instruct Contractor not to remove any facilities from Site; Employer may need to obtain a court order to enforce this);
- facilities should be released to the Contractor only after receipt by the Engineer of a notice to that effect from the Employer, which might not be until the Works have been completed.

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3. Termination by the Employer

- Employer is entitled to require the Contractor to assign to him the benefit of any agreements or subcontracts;
- Engineer shall determine sums due to the Contractor;
- Employer is entitled to withhold further payments until the expiration of the DNP and then until the costs of completing the Works and remedying defects, damages for delay, and other related expenses have been established;
- Upon completion, Contractor is entitled to receive the amount to which he would have been entitled if he had completed the Works less Employer's costs.

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3. Termination by the Employer

Employer's Termination for Convenience

- Employer entitled to terminate the Contract at any time for his own convenience by giving notice to the Contractor.
- Termination takes effect 28 days after the later of the dates on which the Contractor receives the notice or the Employer returns the Contractor's Performance Security.
- Employer cannot terminate the Contract in order to execute the Works himself or by other contractors or to avoid a termination by the Contractor.
- Ensuing obligations shall proceed as for termination resulting from Force Majeure.

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4. Suspension and Termination by the Contractor

Suspension

- If the Employer fails to pay the Contractor within the times prescribed, the Contractor is entitled to reduce his rate of work or to suspend the Works.
- Full amount certified by the Engineer must be paid, subject to any deductions the Employer is entitled to make.
- Employer's partial payment:
 - does not affect the Contractor's entitlement;
 - Engineer should immediately advise the Employer in writing of his risks, which could include the Contractor's suspension of Works and/or even termination.

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4. Suspension and Termination by the Contractor

Contractor is entitled to terminate if the Employer:

1. fails to pay to the Contractor the amount under any IPC;
2. becomes bankrupt or goes into liquidation;
3. after a suspension by the Engineer of the whole of the Works exceeding 84 days, the Employer fails to give permission to resume working within 28 days after the Contractor's request;
4. if the Employer substantially fails to perform his obligations;
5. if the Employer fails to provide proof of his financial arrangements;
6. if, without the Contractor's prior agreement, the Employer transfers to a third party any of its obligations or rights under the Contract;
7. if the Engineer fails, within 56 days after receiving a Contractor's Statement and supporting documents, to issue the relevant IPC.



4. Suspension and Termination by the Contractor

- For each of the above events, the Contractor may give 14 days' notice to the Employer of termination; except that he may give notice of immediate termination for (2) and (3).
- Contractor's election to terminate the Contract does not prejudice any of his other rights under the Contract.
- If the Contractor gives notice and then wishes or agrees to withdraw it, the Parties may agree that the notice shall be of no effect
- or, it may be agreed that the notice be put on hold.



4. Suspension and Termination by the Contractor

- After expiry of the Contractor's notice of termination:
 - Contractor ceases all further work, except as may be instructed for the safety of life, property and the Works;
 - Contractor hands over to the Employer any documents, Plant, Materials and other work for which he has received payment;
 - Contractor removes from Site all his Equipment and facilities, and leaves the Site;
 - Employer returns the Contractor's Performance Security.



4. Suspension and Termination by the Contractor

- Engineer determines and Employer pays to the Contractor (less any entitled deductions):
 - amounts payable for works acceptably performed;
 - the cost of Plant and Materials delivered by the Contractor;
 - any other cost or liability reasonably incurred;
 - cost of removal of Temporary Works and Contractor's Equipment from Site and their return to the Contractor's home base;
 - cost of repatriation of the Contractor's staff and labour;
- Employer to pay the amount of any loss of profit or other loss or damage sustained by the Contractor as a result of the termination.



5. Force Majeure

- "Force Majeure" means an exceptional event or circumstance:
 - which is beyond a Party's control,
 - which such Party could not reasonably have provided against before entering into the Contract,
 - which, having arisen, such Party could not reasonably have avoided or overcome, and
 - which is not attributable to the other Party.
- Clause 19.1 gives examples of the kind of event that Force Majeure may include.

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5. Force Majeure

- If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, it must give notice to the other Party of the event and specifying the obligations, the performance of which is prevented. The notice must be given within 14 days of becoming aware or when the Party should have become aware of the event.
- Having given notice, the Party is excused from performance for so long as the Force Majeure prevents performance – except with respect to obligations to pay the other Party under the Contract.

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5. Force Majeure

- If the Contractor is prevented from performing its substantial obligations by Force Majeure and has given notice to the Employer, he shall be entitled to an extension of time with respect to delay incurred and in some circumstances, to reimbursement of his Costs.

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5. Force Majeure


- Contract may be terminated if a Party is or will be prevented by Force Majeure from performing its obligations for a continuous period of 84 days or for multiple periods totalling more than 140 days due to the same Force Majeure event.
- In such circumstances, the Party seeking to terminate must give notice to the other Party and the notice shall take effect 7 days after being given.

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5. Force Majeure

- After notice of termination:
 - Contractor ceases all further work, except as may be instructed for the safety of life, property and the Works;
 - Contractor hands over to the Employer any documents, etc. for which he has received payment;
 - Contractor removes from Site all his Equipment and facilities, and leaves the Site;
 - Employer returns the Contractor's Performance Security.
- Engineer shall determine and Employer must pay to the Contractor (less any deductions to which the Employer is entitled under the Contract) as for termination by the Contractor, except loss of profit.


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6. Claims, Disputes and Arbitration

- The Red Book (1999) and the MDB Version include numerous and very detailed provisions, dealing with the submission and processing of claims and the handling and resolution of disputes should they arise.
- These provisions are examined in detail in Module 2.

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End of Session 4

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