

Chapter 1

The Employer and the FIDIC Conditions of Contract for Construction (CONS) – ‘The Red Book’

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Clause 1 General Provisions

1.0

Much of the primary planning and organisation of a project is necessarily defined and arranged by the Employer in the pre-tender stage. Consequently the quality of this work will have a significant effect on the execution of the project. The FIDIC Contracts Guide, under the headings of Procurement and Project Documentation, provides valuable guidance to the Employer in respect of this primary planning and organisation.

The FIDIC Conditions of Contract consequently reflects the decisions reached by the Employer in the pre-tender stage and proceeds to define the duties and responsibilities of the Parties and the allocation of risk between them.

The Conditions of Contract incorporated in the tender documents and in the Contract Agreement include a significant number of Clauses and Sub-Clauses the contents of which refer to matters which have (or should have) been addressed by the Employer in the preparation of the tender documents.

The number of issues to be addressed by the Employer during the construction period are somewhat less than might be apparent from a first reading of the Conditions of Contract. These issues are identified and discussed in this chapter.

1.1 Definitions

This sub-clause provides definitions of approximately 65 words and expressions that are used in the Conditions of Contract. *With the exception of the words 'day' and 'year', these defined words and expressions are identifiable by the use of capital initial letters.*

Consequently, in any submission or correspondence it is important to use the capitalised form of the words and expressions if that is what is precisely intended by the writer.

The FIDIC Contracts Guide (p. 339–346) provides a glossary (dictionary) of words and phrases which are in common use in the civil engineering and building industry. This glossary does not amplify or replace the definitions given in this Sub-Clause 1.1, but the consistent use of the definitions contained in this glossary is useful to ensure clarity on a given topic.

The Employer has the responsibility for the correctness and consistency of the Contract Documents and may find it necessary to introduce additional expressions or words into the text which require appropriate definitions to be added. There are a significant number of words which are loosely used in the construction industry, such as 'variation order', 'working drawings',

which are not defined in these Conditions of Contract and consequently should not be used if other more appropriate definitions are already available.

Sub-Clause 1.1.1 Contract

In the preparation of the tender documents the Employer or the Employer’s personnel will need to identify any further documents (in addition to those already indicated) for eventual inclusion in the Contract Agreement.

Sub-Clause 1.1.1.3 Letter of Acceptance

In many jurisdictions the Employer who is a government department or agency may be prohibited by law from entering into a contract by means of a Letter of Acceptance. In such circumstances, to conclude a binding contract will require a complete contract document to be prepared and signed by the Parties.

Sub-Clause 1.1.1.6 Drawings

The Employer is required to provide the Drawings of the Works to the Contractor for execution. The Contractor is required to provide his own workshop or working drawings which will provide detail of how he will execute the Works. Unless specifically stated, the Contractor does not have a duty to modify or correct drawings provided by the Employer. Indeed he may be prohibited from doing so by the applicable law and by the terms of the project insurances.

Sub-Clause 1.1.1.9 Appendix to Tender

Omissions and errors may occur in the preparation of the Appendix to Tender. The Contractor may identify some of these omissions and errors in the preparation of his Tender, but a detailed check of this document is highly recommended before issuing the same to tenderers.

Sub-Clause 1.1.2.4 Engineer

It is intended that the Engineer is named in the Appendix to Tender (for further commentary see Clause 3).

Sub-Clause 1.1.2.6 Employer’s Personnel

It is to be noted that this term includes the Engineer and his assistants. The use of the term ‘Personnel’ does not imply that the concerned people are necessarily employees of the Employer.

Sub-Clause 1.1.2.9 DAB (Dispute Adjudication Board)

The Employer is required to decide the composition of the DAB within the tender documents, as part of the cost thereof has to be included in the Contractor’s tender offer. (It is to be noted that the MDB Harmonised Edition, the ‘Pink Book’, uses the term ‘Dispute Board’ [DB], in substitution for ‘Dispute Adjudication Board’ [DAB].)

1.2 Interpretation

This sub-clause contains legal statements confirming (except where the context requires otherwise)

- (a) words indicating one gender include all genders
- (b) words indicating the singular also include the plural and vice-versa
- (c) 'Agreements' are to be recorded in writing. Verbal agreements made by the Parties should be recorded in writing. A failure to record verbal agreements can cause difficulties at a later stage particularly if there are changes in personnel
- (d) where something is stated to be 'written' or 'in writing' this shall result in a permanent record. Reference may be made to the authorised means of communication identified in Sub-Clause 1.3.

1.3 Communications

In the preparation of the tender documents the Employer is required to identify the authorised means of communication between the Parties.

Sub-paragraph 1.3(a) provides for the following means of communication:

- in writing and delivered by hand. This remains an important means of communication where the Parties are normally in close physical proximity or where the communication is bulky or of a physical nature or where the document is of sufficient value or importance that warrants a personal delivery. The use of a formal mail transmission book is highly recommended
- by electronic transmission using any of the agreed systems of electronic transmission. In particular if e-mail communications are not permitted or are restricted, this needs to be clarified.

Both Parties should ensure that only authorised staff members are allowed to formally communicate and that the other Party is informed in writing of the limitations of any delegated authority.

1.4 Law and Language

The Employer is required to define both the applicable law and the language of communication in the Appendix to Tender. Invariably the applicable law will be that of the country where the contract is to be executed. For all contracts, where the Employer is a state organisation or other public body, the use of local law is likely to be mandatory.

Exceptionally and particularly, where both the Employer and the Contractor are non-resident in the country of execution and where the commercial laws of the country of execution are not well developed, the Parties may elect to specify the use of the laws of a more developed country.

Where the Employer is a state organisation or other public body, the Employer is likely to require that all communications from the Engineer or the

Contractor are provided in the official language of the country of execution. It has become a standard practice for the Engineer and the Contractor, when writing to the Employer in the official language of the country of execution, to also provide a simultaneous translation into the language of the Contract.

1.5 Priority of Documents

A listing of standard documents and their priorities is given in the Conditions of Contract. The Employer has the responsibility to ensure that this model listing is suitably upgraded in the final Contract document to reflect the titles and content of the actual documents included in the tender package together with any relevant documentation provided by the Contractor with his tender offer.

Further, the conclusions of any post-tender negotiations between the Employer and the prospective Contractor need to be formally agreed and included in the Contract as a separate document of the highest priority.

1.6 Contract Agreement

The standard FIDIC Conditions of Contract provides that a Letter of Agreement shall be provided by the Employer and within a period of 28 days a Contract Agreement shall be drawn up and finalised between the Parties. The Employer is responsible for all taxes and other charges which may arise in the preparation of the Contract Agreement. If a Letter of Agreement is not required, the time interval between tender date and the date of signing a Contract Agreement is to be stated in the Instructions to Tenderers.

1.7 Assignment

Neither Party (Employer or Contractor) is permitted to assign or transfer the whole or any part of the Contract without the prior agreement of the other Party.

Should the Employer receive a request for assignment from the Contractor, legal advice should be sought particularly with reference to key contract documents such as the Performance Security, Advance Payment Guarantees, and Insurances.

1.8 Care and Supply of Documents

The Employer (not the Engineer) is required to provide to the Contractor two copies of the Contract which typically includes all those documents (including Drawings) which are identified in Sub-Clause 1.5. In addition two copies of any subsequent drawings are to be provided by the Employer to the Contractor. Since these subsequent drawings are most likely to be produced

by the Engineer, the Employer may also delegate responsibility for their distribution to the Engineer.

This sub-clause makes no mention of the need for Drawings to be provided in a reproducible format which would not only facilitate general distribution, but would also be of considerable benefit in the anticipated eventual preparation of so-called ‘as-built’ drawings.

The Contractor is required to provide to the Engineer (not the Employer) six copies of each of the Contractor’s Documents. The Contractor’s Documents would importantly include submittals requiring the Engineer’s consent. The Contractor should seek clarification from the Engineer if a full submittal of all six copies is required at the submittal for approval stage. It is possible that only a full submittal is required once the documents are approved.

It may be mutually convenient if documentation, particularly drawings, can be passed electronically between the Parties. This should be discussed between the Parties at the earliest opportunity, as this would for example facilitate the production of ‘as-built’ drawings.

1.9 Delayed Drawings and Instructions

Each Party has a general obligation to notify the other Party when it becomes aware of a technical defect or error in the Documents. Each Party has the implied duty of care to the other and the applicable law may also impose this duty.

The sub-clause refers only to the technical defects or errors (and not those of a financial or other nature) the consequences of which may give rise to a Variation to the Contract as described in Sub-Clause 13.1.

The Contractor is required to give reasonable notice to the Engineer if there are likely to be delays or disruption caused by a late supply of drawings or instructions. The notice shall give details of the requested drawings or instructions, when it is required and the likely consequences if the drawing or instructions are delayed. Should the Works be delayed, then the Contractor, having given notice in accordance with Sub-Clause 20.1, shall be entitled to an extension of time and to payment of Cost plus profit.

1.10 Employer’s Use of the Contractor’s Documents

The Contractor retains intellectual property rights in the Contractor’s Documents and other design documents made by (or on behalf of) the Contractor.

At the signing of the Contract the Contractor is deemed to have given the Employer a non-terminable transferable non-exclusive royalty free licence to copy, use or communicate the Contractor’s Documents including making and using modifications of them.

The licence applies throughout the normal working life of the relevant part of the Works and entitles any person in possession of the relevant part of the Works to use the Contractor’s Documents to complete, operate, adjust, repair, etc., the Works.

The Employer is entitled to use computer programs and other software supplied by the Contractor under the Contract, but is not entitled to use such information for similar works.

The FIDIC Contracts Guide gives a reminder that the term ‘Contractor’s Documents’ refers to documents which the Contractor was required to supply under the terms of the Contract and not to other documents which may have been supplied by the Contractor. Any permission given by the Contractor is to be given in writing.

1.11 Contractor’s Use of Employer’s Documents

This sub-clause is effectively a mirror image of Sub-Clause 1.10.

The Employer retains the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer, which would encompass drawings provided by the Engineer.

The Contractor is permitted to copy and use these documents at his own cost, but is not permitted to communicate the same to third parties except as necessary for the purposes of the Contract. Consequently a Contractor is permitted to provide copies of these documents to suppliers and subcontractors, but not for example to the media for publicity purposes.

1.12 Confidential Details

The Contractor is required ‘*to disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Contractor’s compliance with the Contract*’.

The FIDIC Contracts Guide explains that ‘*although the Employer might like to have details of Plant and other parts of the Works to be supplied to him, Contractors and Subcontractors will wish to keep confidential certain processes which they regard as trade secrets*’.

1.13 Compliance with Statutes, Regulations and Laws

Although the Contractor, in performing the Works, is required to comply with applicable law, certain duties are placed on the Employer.

- The Employer has the duty to obtain the planning and similar permissions for the Permanent Works. Major projects may require special legislation and cross border arrangements with neighbouring countries. The Employer indemnifies the Contractor in respect of any failure by him to obtain these permissions. The Contractor is required to comply with the applicable law.
- The Contractor, not the Employer, is required to give all notices, pay all taxes, duties and fees and obtain all permits, licences and approvals, as

required by the applicable laws relating to the execution of the Contract. It will be noted that the term 'Law' is a defined term (Sub-Clause 1.1.6.5) and in addition to national or state statutes and laws also includes regulations and by-laws of any legally constituted public authority.

Any exceptions to these general obligations of the Contractor can be specified and included in the Particular Conditions of Contract. In some instances there may be advantages to the Employer if he were to arrange and pay for key services to the Site in advance of the Contractor starting work. A prime example would be the supply of electrical power and/or water to a location close to the Site.

1.14 Joint and Several Liability

In order to limit individual risk and to share resources and expertise, it is a common practice, particularly for larger complex projects, for the Contractor to consist of two or more companies who have jointly tendered as a joint venture (or a consortium or other unincorporated grouping).

The Instructions to Tenderers, in authorising tenders from joint ventures, will have specified in detail the terms and conditions governing the acceptability of these joint ventures.

The Instructions to Tenderers will contain a reference to this Sub-Clause 1.14. Thus, although the acceptability of a joint venture will have been dealt with in detail as part of the tender process, this sub-clause serves to define the crucial legal status of the joint venture executing the Contract:

- All participants in the joint venture are deemed to be jointly and severally liable to the Employer for the performance of the Contract.
- The business of the joint venture will likely be conducted by a committee who will nominate a leader authorised to formally represent them in dealings with the Employer.
- The Contractor (joint venture) is not allowed to alter its composition without the prior consent of the Employer. Changes may be inevitable if a member of the joint venture is unable to continue. In such cases the remaining partners are obliged to accept responsibility for the share of the failing party. Either the remaining joint-venturers will agree a re-arrangement of their respective shareholdings or will seek a replacement partner. Any changes require the consent of the Employer.

Clause 2 The Employer

2.1 Right of Access to the Site

The Employer has the primary obligation to provide the Contractor with access to the Site and possession thereof within the time(s) stated in the Appendix to Tender.

If it is the Employer’s intention that the Contractor is not to be given exclusive access to and possession of the Site, then any restrictions and limitations have to be stated in the tender documents in order to allow contractors an opportunity to make due allowance in their tender offers. Any restrictions introduced after the signing of the contract are likely to meet with an adverse reaction from the Contractor.

Should the Employer’s overall project planning necessitate that the Site and access thereto be shared between two or more contractors (or the Employer’s own organisation for non- contractual purposes), then the Employer will need to decide which party will operate common services, including security and maintenance of the access to the Site.

As part of the handover process it is recommended that the Site and access thereto be formally inspected by the Employer, the Contractor and – if available – the Engineer. The condition of the Site and access should be formally recorded (a video record would be beneficial). Not uncommonly, unattended sites are frequently used as illegal dump sites by others. The cost of removal of such illegal material would be to the Employer’s expense if the material was dumped after the date of tender and prior to handover of the Site to the Contractor.

On inspection the Site and access may be further obstructed by buildings or other structures which cannot be cleared due to a lack of requisition or other legal prevention. Should limited obstructions be noted during the inspection, the Employer and the Contractor have the possibility to agree for the Works to commence with the obstruction to be removed by an agreed later date. This solution should prove less costly and minimise delays compared with the alternative of delaying commencement.

If no time for handover is given in the Appendix to Tender, then the Employer is required to make the necessary handovers to correspond with the Contractor’s programme submitted under Sub-Clause 8.3. This alternative procedure is not without its hazards, as the Contractor may take some time to prepare the programme (Sub-Clause 8.3 allows the Contractor up to 28 days to prepare and submit the programme). As a consequence, the precise date for handover of the Site can become imprecise and may lead to unforeseen delays.

Experienced contractors will as a matter of course mobilise as quickly as possible and use the initial stages of a contract to set up their site establishment, including the setting up of offices, etc., the bringing to site of the plant, setting out and site clearance, all of which can take place with limited resources and minimal supervision.

It is a regrettable fact that a disproportionate number of delays and claims arise in the opening stages of many projects as a direct consequence of

delayed or disturbed site handovers. Self-evidently the timely handover of the Site and the provision of site access is a mutual goal that both the Employer and the Contractor have every interest to strive to achieve.

The wording of this sub-clause requires only that the Employer grants the Contractor the right of access to the Site. The assumption is that there is already an existing practical access or a route which can be adequately improved by the Contractor. Unless there is a specific entitlement elsewhere in the Contract, this Sub-Clause 2.1 does not require the Employer to provide an access route suitable for the Contractor's needs. If the Site is totally surrounded by lands owned by third parties, the Contract should clarify how the Contractor will be granted right of access across such lands.

Extensive sites, such as lengthy road rehabilitation projects, require special considerations. To minimise and control disruption to road users, the Employer may consider handing over the existing road in lengths of approximately 5–10 kilometres, with corresponding diversion lengths. Additional lengths for rehabilitation would be released to the Contractor corresponding to the lengths successfully rehabilitated and available for use by the travelling public. The Employer will need to establish a policy for the taking over of the completed lengths of road. The policy needs to be described in the tender documents and subsequently in the Contract Documents. A taking over represents a transfer of risk from the Contractor to the Engineer and has a number of implications, not least a reduction in the Contractor's insurance obligations.

If the Site is not provided to the Contractor by the due date, then, subject to compliance with the requirements of Sub-Clause 20.1, he is entitled to claim additional compensation and extension of time for completion in accordance with the provisions of Sub-Clause 8.4.

Extraordinary long delays by the Employer in providing the Site and access thereto may entitle the Contractor to terminate the Contract.

2.2 Permits, Licences or Approvals

This sub-clause requires the Employer (wherever he is able) to provide reasonable assistance to the Contractor upon his request:

(a) *'by obtaining copies of the Laws of the Country which are relevant but are not readily available...'*. Assistance in this instance would be especially useful in the preparation of tenders and during the days immediately following commencement when the Contractor is actively establishing himself on site. Official translations would be invaluable.

and

(b) *'for the Contractor's applications for any permits, licences or approvals required by the Laws of the Country*

(i) *which the Contractor is required to obtain under Sub-Clause 1.13'*.

These applications would typically extend to:

- building permits
- design approvals

- compliance with local authority regulations including accesses, road use
 - legalisation of vehicles, taxes
 - compliance with the relevant labour laws
- (ii) for the delivery of Goods including clearance through customs.

In many tightly regulated countries the Contractor is likely to require the close support of the Employer to import Goods through customs. This is especially important if the Employer is a state organisation and the Contract permits the Contractor to import Goods free of customs duties and taxes. Duty free importation normally requires pre-authorisation by the government ministry responsible for customs affairs. Consequently the Employer (assumed also to be a state organisation) is required to ensure that all necessary arrangements are in place before the Contractor commences importation. Delayed importation will likely delay the progress of the Works and cause additional cost to the Contractor for which he can be expected to make claim for reimbursement, particularly if he has been obliged to make a temporary customs payment pending clarification of his contracted duty free status.

Sensitive items, including the importation of explosives, will need special arrangements for their importation, handling and storage. Although the Contractor is responsible for arranging matters, the support of the Employer will be invaluable in dealing with the appropriate authorities.

- (iii) for the export of Contractor’s equipment when it is removed from the Site.

Having obtained the consent of the Engineer to remove items of the Contractor’s Equipment from Site in accordance with Sub-Clause 4.17, the Contractor may decide either

- elect to transfer the Equipment to another State-financed project within the country also with duty free status. In addition to obtaining the authority of the Ministry of Finance to make the transfer, the documentary requirements of the Employer and his counterpart on the receiving project will also have to be met.
- to transfer the Equipment to another project within the country which does not have duty free status. The Contractor will be required to regularise the transfer from temporary importation status to final importation status with the Ministry of Finance. In order to ensure that there is no conflict with the terms of the initial duty-free importation, the Employer is likely to require evidence of those transfers.
- to sell unwanted items of Contractor’s Equipment to third parties within the country. Should the cost of transportation on re-exportation be uneconomical relative to the value of the Contractor’s Equipment, the Contractor may seek permission to dispose of the Contractor’s Equipment locally. These items may also be of interest to the Employer for his own operations.

Again the Contractor will be required to regularise the transfer from temporary importation status to final importation status and the Employer may wish to be kept informed of the Contractor's intentions.

- to re-export the Contractor's Equipment. The Contractor has the responsibility to ensure that paperwork governing the original duty-free importation is correctly reconciled with re-exportation.

2.3 Employer's Personnel

This sub-clause confirms that the Employer is responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site will co-operate with the Contractor in fulfilling his duties described in Sub-Clause 4.6 (Co-operation) and will take similar action to support the Contractor's efforts in respect of safety procedures (Sub-Clause 4.8) and protection of the environment (Sub-Clause 4.18).

Although not specifically identified in this sub-clause, it is reasonable to assume that the Employer will ensure that the Employer's Personnel co-operate with the Contractor in respect of security of the Site (Sub-Clause 4.22).

The FIDIC Contracts Guide confirms that the term 'Employer's Personnel' includes the Engineer and his staff.

2.4 Employer's Financial Arrangement

At the time of tender the Contractor will have a general understanding of the means by which the Employer intends to finance the execution of the Works. Where the Employer is a state authority, it is quite possible that the funding will be provided by an international financial institution, such as the World Bank. Understandably these institutions require a strict financial control of the funds provided. As a consequence the Engineer is routinely prevented from agreeing any additional payment without the prior authorisation of the Employer.

Given the unpredictable nature of many building and civil engineering projects, there is a distinct risk that the amount of available funding may be inadequate to complete the Works as planned without the injection of further funding. Often this additional funding cannot be obtained within an ideal time frame, with the net result that the Contractor is not paid within the stated time periods.

The situation is exacerbated if additional work has to be performed which necessitates additional payment to the Contractor in accordance with the procedures given in Clause 13, Variations and Adjustments. The Contractor will become concerned if payments rightly due are delayed for lengthy periods, particularly if he himself is under pressure from his own bankers. It would be hoped that a positive relationship between the Employer and the Contractor will allow matters to be discussed and a mutually satisfactory solution developed to expedite payments due.

However, if the Contractor became seriously concerned of the Employer’s ability to pay the amounts due under the terms of the Contract, this Clause 2.4 entitles the Contractor to request the Employer to ‘*provide reasonable evidence that financial arrangements have been made and are being maintained, which will enable the Employer to pay the Contract Price... in accordance with Clause 14, Contract Price and Payment*’. The Employer is required to respond within 28 days of receiving the Contractor’s request.

Should the Employer fail to respond, then Sub-Clause 16.1 entitles the Contractor (after 21 days’ notice) to ‘suspend the work or reduce the rate of work’. Termination under Sub-Clause 16.2 provides the ultimate remedy.

2.5 Employer’s Claims

The Employer and the Contractor would most likely agree that any payments one to another for the supply of miscellaneous goods and services would be amicably arranged and payment made by commercial invoices independently of payments falling under the scope of Sub-Clause 14.7, Payment. However, circumstances may arise which entitle the Employer to claim payment from the Contractor under various Contract clauses which are identified and listed in Appendix D.

Sub-Clause 2.5 describes the procedure to be followed by the Employer should he consider himself to be entitled to payment from the Contractor under the terms of the Contract.

The Employer (or the Engineer on his behalf) is required to give notice of the Employer’s claim with particulars as soon as practicable after the Employer becomes aware of the event or circumstances giving rise to the claim. The notice shall be given to the Engineer in writing and copied to the Contractor.

No notice is required for payments due to the Employer under:

- Sub-Clause 4.19, Electricity, Water, Gas
- Sub-Clause 4.20, Employer’s Equipment and Free-issue Material
- Other services provided by the Employer to the Contractor.

The particulars of the claim shall specify the clause of the Contract entitling the Employer to make the claim and substantiate the amount which the Employer considers due under the Contract.

The procedure to be followed by the Employer in presenting claims is in its essentials similar to that to be followed by the Contractor in presenting his claims against the Employer under Clause 20.1, Contractor’s Claims. The notable difference is that there are no time limits (unless required by applicable law) for the Employer to present his claims, in sharp contrast to the strict time limits applied to any Contractor’s Claims.

(*Note: The MDB Harmonised Pink Book has different requirements. The Employer is required to give notice ‘as soon as practical and no longer than 28 days after... the event or circumstances giving rise to the claim’.*)

The FIDIC Contracts Guide states that the Employer’s Claims are to be included in the monthly progress reports described in Sub-Clause 4.21,

Progress Reports. Considering that the progress reports are prepared by the Contractor, this requirement is likely to be neglected and requires enforcement.

Following receipt of a claim from the Employer, the Engineer is required to proceed in accordance with Sub-Clause 3.5, Determinations, to agree or determine the amount (if any) which the Employer is entitled to be paid by the Contractor. The relevant procedures are discussed further in Chapter 2 of this book.

The amount determined by the Engineer to be due to the Employer under Sub-Clause 3.5 can then be deducted by the Employer from Interim Payment Certificates.

Also within this Sub-Clause 2.5 FIDIC has chosen to deal with matters arising from claims arising from Sub-Clause 11.3, Extension of Defects Notification, entitling the Employer to claim an extension of the Defects Notification Period for the Works, Section or major item of Plant which after taking over cannot be used for their intended purpose by reason of a defect or fault falling under the Contractor's responsibility. Any claims made by the Employer under Sub-Clause 11.3 shall follow the procedures given in Sub-Clause 3.5.

Clause 3 The Engineer

The majority of the sub-clauses under this heading relate to the activities of the Engineer and are discussed in detail in Part 2. Only those sub-clauses identified below require the direct intervention of the Employer.

3.1 Engineer’s Duties and Authority

The Employer is required to appoint the Engineer to carry out the duties assigned to him in the Contract. Ideally the Employer should identify the Engineer in the tender documents (Appendix to Tender) as this will permit the Contractor to make his own evaluation of the quality of the Engineer.

If the Engineer cannot be identified at the date of tender, it is important that the Engineer be appointed and be available to carry out his duties prior to the Contractor commencing the Works.

In preference to suspending the Works and incurring delays and standing costs, the Employer may be tempted to appoint one of his own staff as a temporary substitute for the Engineer if the Engineer is not yet appointed. This is a most unsatisfactory arrangement, as the Employer’s staff member will not be perceived to have independence, particularly with respect to contractual issues and will likely provoke an adverse reaction from the Contractor, particular if an intended short period of substitution becomes extended. A short-term appointment of a substitute independent engineer with appropriate experience may prove a better if still unsatisfactory option.

The appointment of the Engineer (and in a timely fashion) is crucial to most FIDIC-based contracts and consequently the Employer is required to make every effort to ensure the Engineer is available to undertake his duties prior to the Contractor commencing with the Works.

3.4 Replacement of the Engineer

The Employer may necessarily have to replace the Engineer for a variety of reasons. He is required to give 42 days’ notice to the Contractor of his intention to replace the Engineer, the intended date of replacement and particulars of the replacement.

Within this notice period of 42 days the Contractor has the right to object in writing to the appointment of the replacement and giving detailed particulars for objecting. It is possible that the proposed replacement and the Contractor have had an unhappy relationship in the past and the Contractor considers that the risk assumed in his tender has increased.

It is appropriate that the Employer and the Contractor discuss any replacement proposal at an early stage to avoid any potential conflict however small that possibility might be.

3.5 Determinations

Sub-Clauses 2.5 and 20.1 specify the procedures to be adopted by each Party for the submission of claims for financial compensation and/or extension of time in accordance with Sub-Clauses 11.3 and 8.4 respectively. Having received notice of claim and detailed particulars, the Engineer is required to proceed in accordance with Sub-Clause 3.5 and consult with each Party to agree or determine the extension of time or the amount of financial compensation due.

If agreement is not achieved, then the Engineer shall make a fair determination. The Engineer's determination is not required to be made impartially, unless there are specific provisions in the Particular Conditions. However, the Engineer shall act in a responsible, professional manner and where required, shall engage suitably qualified engineers and other professionals to assist him in his duties.

The FIDIC Contracts Guide states '*The Engineer does not proceed in accordance with Sub-Clause 3.5 only once in respect of each claim. He does so in stages as further particulars are submitted under Sub-Clause 20.1 until the extension and financial compensation are finally agreed or determined*'.

Sub-Clause 3.2, Delegation by the Engineer, prohibits the Engineer from delegating his authority to determine any matter which is to be determined in accordance with this Sub-Clause 3.5, unless agreed otherwise by the Parties.

Sub-Clause 1.3 requires that the Engineer's determination be given in writing to the Parties. The Engineer's Determination shall not be unduly delayed or withheld.

Clause 4 The Contractor

4.0 General

This clause describes the obligations and duties and other matters concerning the role of the Contractor and inevitably touches upon issues which are of direct concern to the Employer. Commentary is centred on those sub-clauses which directly involve the Employer.

Other issues which are related to the role of the Engineer are given in Chapter 2 of this book.

4.1 Contractor’s General Obligations

This sub-clause describes in broad detail the general obligations of the Contractor.

The Contractor is required to:

- *‘design (to the extent specified in the Contract), execute and complete the Works’*. The extent of the Contractor’s involvement in design should be clearly expressed in the Contract Documents. Any lack of clarity should be queried in the Tender period. The Engineer is responsible for the coordination of designs
- provide all manpower, plant and materials, whether of permanent or temporary nature, required for the design, execution and completion of the Works, including remedying the defects
- take responsibility for adequacy, stability and safety of all Site operations. The Contractor is required to submit details of all arrangements (e.g. plant and office layouts) and methods of execution (‘Method Statements’)
- follow specified procedures for the submittal of Contractor’s Documents for any part of the Permanent Works designed by the Contractor. Further, the Contractor is requested to submit ‘as built’ documents together with operation and maintenance manuals for those parts of the Works designed by him.

4.2 Performance Security

Within 28 days after receiving the Letter of Acceptance, the Contractor is required to submit the Performance Security to the Employer with a copy provided to the Engineer. The form of the Performance Security and the entity providing it are subject to the written approval of the Employer (and not the Engineer), although it may be assumed that the Engineer will provide the Employer with any assistance he may require. The Performance Security is to be kept in the safe custody of the Employer.

Example forms of the Performance Security are provided as annexures to the Red Book. Two types are offered, a demand guarantee type and a surety bond. The demand guarantee type is largely favoured by the Employer and the relevant model form will form part of the Contract Documents.

Importantly, the model form defines the expiry date as the '*expected expiry of the Defects Notification Period for the Works*', although the Employer is entitled to present claims against the Performance Security for a further period of 70 days.

Not infrequently many smaller contractors find their guarantee providers (often their own bankers) limit the expiry date of the guarantee to the expected date of taking over. This non-compliance could be avoided if Employers were to specify that the proposed provider be identified in the tender together with a statement from the proposed provider, confirming that the guarantee will be fully compliant with the requirements of the Contract and not restrict the validity period of the guarantee.

Having awarded the Contract, the Employer will have the intention to allow the Contractor to commence the Works without undue delay, and may be faced with a difficult decision whether to allow the Contractor to proceed with a non-compliant guarantee or to have to deal with a major breach of Contract by the Contractor.

If, as is frequently the case, the Employer accepts the non-compliance, there is a real possibility that the validity period of the guarantee will later need extending. Should doubts exist concerning the ability of the Contractor to complete the Works, events may arise which make it difficult to get the validity period of the guarantee extended.

The Engineer will have a significant input in providing assistance to the Employer to resolve these issues, since he will be best placed to evaluate the period the guarantee is required to be extended.

4.3 Contractor's Representative

Unless the Contractor's Representative is named in the Contract, the Contractor is required to submit to the Engineer for consent the name and particulars of the person who he proposes to appoint as the Contractor's Representative.

There is no involvement of the Employer in this process, but it may be expected that he will wish to be involved in the approval procedure.

4.4 Subcontractors

The Contractor is not allowed to subcontract all of the Works. A limit to the amount which can be subcontracted is to be provided by the Employer in the Contract Documents. There is also a possibility that local subcontractors may be given preference in selected areas of work.

The Subcontractor is required to obtain the prior consent of the Engineer if he intends to subcontract parts of the Works with the proviso that no approval is required in respect of subcontractors named in the tender. Consequently, if the Employer (or the Engineer) has objection to a named subcontractor, then any objection has to be resolved in post-tender discussions and prior to the signing of the Contract Agreement.

4.5 Assignment of Benefit of Subcontract

In some circumstances the obligations of the Subcontractor may extend beyond the expiry date of the relevant Defects Notification Period. For example elevators, air conditioning units and similar may have to be maintained for a period well in excess of the defects notification period for which the Contractor is liable under the Contract.

Experienced Employers and Engineers are well aware of the need to retain the services of the Subcontractor after the departure of the Contractor from Site. For the most part subcontractors welcome the possibility of extended maintenance contracts (or material supply) and are willing to accept the assignment of the benefit of the subcontract to the Employer.

At the time of preparing his tender the Contractor should check if provisions have been included in the tender documents for the assignment of benefit of the subcontract to the Employer. If there is no such provision, then the Contractor should ask the Engineer to clarify the requirements of the Employer. In any event the issue of assignment has to be addressed in the subcontract documents.

4.6 Co-operation

It is preferable that the Employer ensures that the tender documents describe the extent of the co-operation to be provided by the Contractor in order that the Contractor may make appropriate allowance in his tender.

If the scope of co-operation is extended beyond that reasonably foreseeable at the time of tender, then any additional cost incurred by the Contractor shall be the subject of a variation.

4.7 Setting Out

The Employer is required to arrange for the primary setting out to be established by others. He now has the obligation to provide the setting out information to the Contractor either directly or via the Engineer. The hand-over is likely to require a site inspection of survey beacons to ensure that all exist and none are disturbed, in which case the Employer is liable for their reinstatement.

4.8 Safety Procedures

The Employer has no direct involvement in the establishment of safety procedures, excepting that his own personnel will be required to fully co-operate with the Contractor and the Engineer.

4.9 Quality Assurance

All matters relating to Quality Assurance are to be dealt with by the Contractor under the supervision of the Engineer. The Employer has no direct involvement.

4.10 Site Data

This sub-clause requires that the Employer makes available to the Contractor prior to the Base Date *'all relevant information in the Employer's possession of sub-surface and hydrological conditions at the Site including environmental aspects'*. The Employer may choose to supply this information as part of the Tender documentation or, if the data is bulky, he may invite tenderers to inspect the data at a given location.

The Contractor is responsible for his own interpretation of such data.

Other key data may be available from other sources, particularly government offices and agencies. This could include statistical data, indices, labour laws including levels of pay, company law and similar. The Contractor is solely responsible for identifying, collecting and analysing this data. It is a truism that a tenderer given unlimited time and unlimited resources could discover everything necessary for a risk-free project. This is clearly not a practical consideration for a tenderer preparing his offer in a limited period of time. FIDIC recognises this reality by stating that *'... to the extent which was practicable (taking into account of cost and time), the Contractor shall be deemed to have obtained all necessary information...'*.

This criterion of practicality has a profound influence on any claim the Contractor may wish to make under the provisions of Sub-Clause 4.12, Unforeseeable Physical Conditions. The Contractor's tender office would be well advised to keep copies or records of the data provided by the Employer, together with copies or records of data obtained elsewhere, which had an influence on his tender. These may be important in the evaluation of claims.

Under this sub-clause the *'Contractor is deemed to have inspected and examined the Site before submitting his Tender offer'*.

It is not an obligatory duty, but the majority of employers organise a formal inspection of the Site which the Contractor may be obliged to attend as a precondition of the tendering process. Should the Site be in a restricted area, the formal inspection may be the only opportunity for the Contractor to inspect the Site. It is recommended that the Contractor properly prepare himself for any site inspection. Clarifications should be sought, where appropriate, from the Employer/Engineer. A written record should be prepared complete with a photographic record for future reference.

Should the Employer come into possession of other data after the Base Date, he is obliged to supply the same to the tenderers (Contractor) for

evaluation. It may be that the other Data may lead to claims for additional payment from the Contractor. However, if the Employer negligently or intentionally withholds data, he may leave himself exposed to legal action, especially in the event of death or injury or loss during the execution of the Works.

4.11 Sufficiency of the Accepted Contract Amount

‘The Contractor is deemed to have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount and to have based the Accepted Contract Amount on the matters referred to in Sub-Clause 4.10 “Site Data”.’

4.12 Unforeseeable Physical Conditions

Having provided Contract Data as required by Sub-Clause 4.10, the Employer has no formal duties in respect of any claim presented by the Contractor under the provisions of this sub-clause, but, as a consequence of being a central figure in the preparation of the Contract Documents, the Employer will have an important role in the evaluation of any claim made by the Contractor under the provisions of this sub-clause.

4.13 Rights of Way and Facilities

Sub-Clause 2.1, Right of Access to Site, requires that the Employer provides the Contractor with the right of access to Site. The Contractor has the obligation to prepare the access according to his needs. Should the Contractor require other rights of access to Site or other areas, which are not areas to be provided by the Employer, then the Contractor is obliged to make appropriate arrangements at his own risk and expense.

4.14 Avoidance of Interference

The Contractor shall not improperly cause any interference with the public, including access to and use of roads and footpaths, irrespective of ownership. The Contractor shall indemnify the Employer for all claims for damages resulting from any improper interference.

However, the FIDIC Contracts Guide qualifies this liability by referring to Sub-Clauses 17.1 and 18.3(d)(ii), wherein the Employer is required to indemnify the Contractor from ‘damage which unavoidably arises of the Contractor’s obligations’. However, damage which arises as a consequence of the Contractor’s chosen methods of executing the Works is a Contractor’s responsibility.

4.15 Access Route

The Employer is not responsible for any claims arising from the use by the Contractor of any access route, nor does the Employer guarantee the suitability of any particular access route.

It may happen that the local authorities may have objection to the use of a particular access by the Contractor, even though the access may be a public road. In such instances the Contractor may have a valid claim under Sub-Clause 2.2, Permits, licences or approvals, or under Sub-Clause 8.5, Delays caused by local Authorities. The assistance of the Employer to overcome access difficulties would clearly be of benefit to the progress of the Works.

4.16 Transport of Goods

On receiving notice of the anticipated arrival date on site of Plant or a major item of other Goods, the Employer and Engineer should consider if any action is required by them, e.g. inspection, storage arrangements, etc.

4.17 Contractor's Equipment

The Contractor's Equipment, when brought to Site, is deemed to be exclusively for use on the Works.

The consent of the Engineer is to be obtained before the Contractor is allowed to remove Contractor's Equipment from Site.

4.18 Protection of the Environment

The Employer will need to have satisfied all requirements of the appropriate authorities in respect of protection of the environment. This approval process is likely to have identified specific obligations and duties to be observed during the period of executing the Works. The Employer can be expected to include appropriate data in the Contract Documents and identify any specific obligations and duties of the Contractor.

These obligations and duties will be wide ranging from dust control in quarries to disposal of waste. The Contractor will be obliged to provide statements concerning his proposed method of fulfilling these obligations.

4.19 Electricity, Water and Gas

The Contractor is responsible for the provision of all power, water and other services he may require. He shall make his own provisions, either using his own resources or the services provided by external service providers, and shall include the cost of these services in his tender price.

It may happen that there are existing supplies of services on the Site, which are in the control or ownership of the Employer. The Employer may require the Contractor to make use of these existing services, particularly if he is the sole source of supply and there are a number of consumers (including other Contractors) on or near the Site.

The Employer shall provide the terms and conditions of these services to the Contractor together with pricing details. The Contractor shall include the cost in his tender price.

4.20 Employer’s Equipment and Free-Issue Material

- (a) The Employer may have available Employer’s Equipment, which he can offer at stated prices to the Contractor for incorporation in the Works, thereby reducing the overall cost of the project. The Employer shall prepare and include in the tender documents full details of the availability, prices, specifications and any other key data.
- (b) The Employer may have materials (the ‘free-issue’ materials), which can be used by the Contractor in the execution of the Works free of charge. Full details of these free issue materials shall be provided in the Specifications. The Contractor has to make his own decision whether or not to use these free-issue materials.

It is likely that tenderers would request to inspect both the Employer’s Equipment and the free-issue materials in the pre-tender period.

The Bill of Quantities should contain bill items for the supply of all specified equipment and materials available with the Employer, and alternate bill items for the supply of the same items by the Contractor through his own purchasing office.

The sequencing of the hand-over of these items to the Contractor is discussed in Chapter 2, Sub-Clause 4.20 of this book.

4.21 Progress Reports

The Conditions of Contract do not require any involvement of the Employer in the preparation and presentation of Progress Reports.

4.22 Security of the Site

Although this sub-clause allocates primary responsibility for the security of the Site to the Contractor, there may be situations when it is more appropriate that the Employer assumes primary control and responsibility (e.g. security of a Site that is part of an existing operational facility).

Should the Contractor have responsibility for security, it will be necessary to define the scope of his responsibilities, including geographical limits. The Contractor will be expected to provide a detailed security plan for the consent of the Employer and the Engineer.

4.23 Contractor's Operations on Site

The Contractor has general obligations to confine his operations to the Site (and any additional areas) and to keep the Site free from obstructions, surplus materials and waste. No specific duties are allocated to the Employer in this regard, as the Engineer will be tasked with ensuring compliance.

4.24 Fossils

As the FIDIC Contracts Guide notes '*.... fossils and other antiquities are the property and also the liability of the Employer, although other parties may have rights and/or liabilities*'.

Should there be an expectation that fossils or antiquities would be encountered, it would be beneficial if a procedural plan was pre-arranged by the Employer to allow immediate action to be taken, thus minimising the possibility of a claim for delay from the Contractor.

Clause 5 Nominated Subcontractors

5.0 General

This clause of the Contract is prefaced in the FIDIC Contracts Guide with some notes of caution. Although these advisory notes are primarily directed towards the Employer and the Engineer, they are also of interest to Contractors as they provide an insight into the reasoning behind the engagement of nominated Subcontractors for the Works:

- (i) *‘If there are restrictions relating to the manufacture of certain items of Plant or Materials, the specification may refer to the named manufacturer without making him a nominated Subcontractor’.*
- (ii) If the Employer requires that a part of the Works ‘is executed by a specialist company, the Specification may include a list of acceptable Subcontractors’ inviting the Contractor to make his own choice. *‘The selected Subcontractor would not then be a nominated Subcontractor’.*
- (iii) Should the Employer wish to become significantly involved in design and execution using a specialist company, a separate contract may be preferable.

The Conditions of Contract do not specifically identify which Party shall investigate enquiries for potential subcontractors and which Party shall be responsible for conducting negotiations with preferred subcontractors.

It is likely that the Employer, with the assistance of the Engineer, will have identified potential subcontractors and will provide them with appropriate documentation in order that they can provide tender offers.

Once the preferred subcontractor is identified, the Contractor will need to join in any discussions to ensure that the subcontracted Works are acceptably coordinated and contractual issues settled.

As a consequence of the above there is potentially a considerable benefit to both Parties should the Employer involve the Contractor at an early stage of his negotiations with prospective nominated Subcontractors in order that any additional requirements of the Subcontractors can be identified and quantified. In addition this consultative process would provide opportunity for discussion on technical issues and the programming of the subcontracted Works.

The Contractor does not have to accept any greater risk than the risk already contained within the Contract, particularly with respect to key issues such as insurances and payment conditions. Unless specifically stated in the Contract, the Contractor is under no obligation to provide other services such as vehicles, accommodation, materials, and use of Contractor services notably workshop services. The percentage for the Contractor’s overheads and profit does not include the cost of these additional services, if available. It is preferable that the Subcontractor shall include these costs within his subcontract price and pay the Contractor for any consumption on an ‘as and when’ basis provided always that the Contractor is able and willing to provide those additional services.

Once all issues have been agreed between the Parties and the Subcontractor, then the subcontract document can be drawn up, and reviewed by the Engineer prior to signature by the Contractor and Subcontractor.

The nominated Subcontractor will be required to provide the Contractor with a Performance Security and evidence of his insurances. Should the nominated Subcontractor be the beneficiary of an Advance Payment, an Advance Payment Guarantee will be required. These and similar matters need to be addressed in the preparation of the subcontract documents for subcontracted Works.

5.1 Definition of ‘Nominated Subcontractor’

‘The term “nominated Subcontractor” means a Subcontractor:

- (a) *who is stated in the Contract to be a nominated Subcontractor’.* In addition to technical information contained in the Contract, a Provisional Sum will have been included in the Bills of Quantities (cross-refer to Sub-Clause 13.5) or
- (b) *‘whom the Engineer instructs the Contractor to employ as a Subcontractor’.* For payment purposes such instruction shall be referenced to Sub-Clause 13.3 ‘Variations’ or Sub-Clause 13.6 ‘Daywork’.

5.2 Objection to Nomination

The Contractor has the right to object to the engagement of a nominated Subcontractor. He is required to give notice of his objection to the Engineer as soon as practical with reasoning for his objection. Reasons for objection could include:

- concerns that the Subcontractor does not have the required expertise, experience, resources or financial strength
- failure of the Employer to agree to indemnify the Contractor against negligence by the nominated Subcontractor
- the subcontract does not specify that the nominated Subcontractor will undertake the obligations and liabilities in such a manner and timing as will *‘enable the Contractor to fulfil his own obligations and liabilities under the Contract’*
- *‘the subcontract does not indemnify the Contractor against and from all obligations and liabilities arising under the Contract and from the consequences of any failure by the Subcontractor to meet his obligations and liabilities arising under the subcontract.’*

5.3 Payments to Nominated Subcontractors

‘The Contractor shall pay to the nominated Subcontractor the amounts which the Engineer certifies to be due in accordance with the subcontract’. The Contractor shall be paid the same amount plus a percentage for the Contractor’s overheads and profit.

It is appropriate the subcontract document provides that the Contractor pays the Subcontractor within a fixed number of days from the date on which

the Contractor receives corresponding payment under the Contract. The number of days is to be specifically stated in the subcontract documents.

5.4 Evidence of Payments

Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request evidence that previously certified amounts due under the Subcontract have been paid to the Subcontractor.

The Employer will rightly also be concerned if there are late or under payments by the Contractor to the Subcontractor, not least because it may be an early sign of the financial instability of the Contractor.

Any failure by the Contractor to make payment to nominated Subcontractors when due may entitle the Employer to make direct payment.

Especially on very large projects it is recommended that matters concerning the Contract (which involve the Employer and the Engineer) are separated from those matters solely concerning the Contractor and the nominated Subcontractor. Any claims or disputes between Contractor and the nominated Subcontractor which directly relate to the performance of the Contract have to be managed to conform to the requirements of the Contract. Claims and disputes which solely relate to the contractual relationship between the Contractor and the nominated Subcontractor have to be managed in accordance with the Subcontract, where there is likely to be greater scope for flexibility without the involvement of the Employer and/or the Engineer.

Similarly, payments due to the Subcontractor under the terms of the Contract should preferably be managed separately from other domestic payment matters such as payment for any services provided. It is recommended that the Contractor ensures that formal interim payment certificates are issued to the nominated Subcontractor once the Contractor receives his own certification under the Contract. Any other payment due from the Contractor to the nominated Subcontractor or vice versa should be dealt with separately as a simple commercial transaction in order that the content of the Interim Payment Certificates is not obscured.

Clause 6 Staff and Labour

6.1 Engagement of Staff and Labour

The Contract does not require the Employer to become involved with the Contractor's arrangements for the recruitment of his labour force. However, the Contract may contain restrictions on the use of expatriate staff and labour.

6.2 Rates of Wages and Conditions of Labour

The Employer has no direct involvement in this subject but may request that he is kept informed of any developments which might affect the progress of the Works.

Not infrequently there are likely to be political and social issues which will affect the wages and conditions of labour. The Employer would be ideally placed to provide guidance to the Contractor, particularly if the Contractor is not experienced in local conditions and practices.

6.3 Persons in Service of Employer

The Contractor is prohibited from engaging staff or labour from amongst the Employer's personnel. However, it is possible that there may be provisions in the Contract for the Contractor to provide work experience to a limited number of the Employer's personnel. This experience training is separate to any formal training required under the provisions of Sub-Clause 5.5, Training.

6.4 Labour Laws

The Contractor is required to comply with the relevant labour laws and may require the assistance of the Employer in fulfilling all requirements which would enable him to recruit the staff and labour required to execute the Contract.

6.5 Working Hours

The Contractor is not permitted to work '*...on the site on locally recognised days of rest or outside the normal working hours stated in the Appendix to Tender unless:*

- (a) *otherwise stated in the Contract*
- (b) *the Engineer gives consent*
- (c) *the work is unavoidable or necessary for the protection of life or property...*

It often happens that the work hours given in the Appendix to Tender reflect the Employer's own work practice (particularly if he is a state-controlled

body) and by extension the work hours to be worked by the Engineer whose costs are also met by the Employer.

Although the Engineer may be willing to give the Contractor consent to work additional hours, he may be constrained from doing so because he has no agreement in place that would remunerate him for the additional costs of his own supervisory staff. Suggestions that the Contractor should reimburse these additional engineering costs directly to the Engineer are not appropriate, as such arrangement would be liable to abuse.

In the preparation of the tender documents the Employer should give consideration to the nature of the work necessarily required in the execution of the Works and the consequential effect on the working hours likely to be worked by a successful contractor.

Considerations typically include:

- operations for which multi-shift working is required
- operations affected by season. Asphaltting may not be possible or permitted in cold (winter) months, but extended hours could be worked in long warmer summer months
- concreting operations could be restricted to daylight hours, but subsidiary activities including form stripping, curing operations, etc. could take place at night
- maintenance and other operations including the transportation of materials, which require minimal supervision by the Engineer, could also take place at night.

The working hours finally included in the Appendix to Tender have an important consequence in the programming and execution of the Works, which will be reflected in the valuation of tenders offered. A contractor preparing his tender is obliged to comply with the stated working hours.

6.7 Health and Safety

The Employer’s Personnel are required to co-operate with the Contractor in the execution of his duties under this sub-clause.

The extent (if any) that the Contractor is required to provide medical services to the Employer’s Personnel on Site in excess of first aid should be clearly stated.

6.8 Contractor’s Superintendence

There is no specific involvement of the Employer.

6.9 Contractor’s Personnel

In the event of unacceptable behaviour by a member of the Contractor’s work force, the Employer is likely to instruct the Engineer to order the removal of the offender from site, notwithstanding that this sub-clause does not specifically entitle him to do so directly.

6.10 Records of Contractor's Personnel and Equipment

There is no specific involvement of the Employer.

6.11 Disorderly Conduct

This sub-clause refers to '*disorderly conduct*' by the Contractor's Personnel. The primary responsibility to '*preserve peace and protection of persons and property*' lies with the Contractor. The Employer would wish to be kept informed of occurrences which fall under this heading.

Clause 7 Plant, Materials and Workmanship

The majority of sub-clauses under this heading relate to the activities of the Engineer and are discussed in detail in Chapter 2. Only those sub-clauses identified below require the direct involvement of the Employer.

7.3 Inspection

It may be necessary for the Engineer and/or the Employer to inspect the progress of Plant under manufacture off-site. If the place of manufacture is in another country, the Employer will need to prepare a plan for how the inspection will be managed. Unless specifically stated otherwise in the Contract, the Contractor is not responsible for any costs incurred by the Engineer or the Engineer attending the inspection.

7.7 Ownership of Plant and Materials

‘Each item of Plant and Materials shall..... become the property of the Employer.... free from liens....

- (a) *when it is delivered to site*
- (b) *when the Contractor is entitled to payment of the value of the Plant and Materials in Event of Suspension’.*

Both ‘Plant’ and ‘Materials’ are defined in part as ‘Intended to form part of the Permanent Works’, Sub-Clauses 1.1.5.3 and 1.5.5.5 refer. Each item of Plant and Materials becomes the property of the Employer when it is delivered to site.

In contrast all Contractor’s Goods (Sub-Clause 1.1.5.2), which includes Contractor’s Equipment, Materials, Plant and Temporary Works, do not become the property of the Employer under the terms of the Contract.

The FIDIC Contracts Guide provides a warning *‘As a legal matter, it may be important to establish the ownership of Plant and Materials, particularly in case of bankruptcy/liquidation of the person who is in possession of them’.* And further *‘The owner of the goods may be liable for the payment of taxes and duties, and ownership may also be a factor in determining liability for care, custody and control’.*

Supply subcontracts are required to be consistent with the Contract. Any inconsistency may cause difficulties with the supply contractors attempting to recover goods already supplied if there is a failure by the Contractor.

Attention is also drawn to Sub-Clause 15.2, Termination by the Employer, which in part requires the Contractor on Termination to deliver *‘any required Goods... to the Engineer’.* Legal advice should be obtained in the event of any primary failure by the Contractor and before there is any attempt to remove any of the Contractor’s Goods from Site.

Clause 8 Commencement, Delays and Suspension

A number of sub-clauses under this heading relate to the activities of the Engineer and are discussed in detail in Chapter 2. Only the sub-clauses identified below require the direct involvement of the Employer.

8.1 Commencement of Work

The Engineer is required to give the Contractor 7 days' notice of the Commencement Date and will require the corresponding authority of the Employer to do so. The Commencement Date shall be not later than 42 days after the Contractor receives the Letter of Acceptance from the Employer. Thereafter the Contractor shall commence work as soon as reasonably practical.

If there is no Letter of Acceptance, Sub-Clause 1.1.1.3 states the expression 'Letter of Acceptance means the Contract Agreement and the date of issuing the Letter of Acceptance means the date of signing the Contract Agreement'. If the Contract Agreement specifies a Commencement Date, it is binding.

8.2 Time for Completion

It is the Contractor's fundamental time-related obligation to complete within the Time for Completion. The Time for Completion can only be extended in accordance with the procedures given in Sub-Clause 8.4, Extension of Time for Completion.

8.4 Extension of Time

This Sub-Clause identifies the circumstances which would entitle the Contractor to claim an Extension of Time for Completion. Most likely a successful claim will be accompanied by the presentation of a further claim for additional payment. The Employer and the Engineer will need to prepare an efficient strategy for administering such claims.

8.5 Delay Caused by Authorities

Public authorities frequently have difficulties in dealing expeditiously with the requests and requirements of the Contractor, even if the Contractor has adhered to the procedures laid down by the authorities. Frequently delays arise because the authority is under-resourced to cope with the additional workload arising from the Contractor's requirements. Additional complications occur invariably if more than one public authority is involved.

Provided that the Contractor has diligently followed the required procedures, the Contractor is entitled to claim both an extension of time and to additional compensation.

The Employer, particularly if he is also a state organisation, may be able to help resolve problems before they become critical, possibly by requesting practical assistance from the Contractor. This can be expected to be more cost effective than allowing delays to the Works.

8.6 Rate of Progress

Should the progress of the Works fall behind the current programme under Sub-Clause 8.3, Programme, essentially for reasons within the Contractor’s responsibility, then the Engineer can instruct the Contractor to submit proposals which will expedite progress and complete within the Time for Completion.

If the proposals of the Contractor cause the Employer to incur additional costs (in addition to Delay Damages Clause 8.7 refers) then, subject to Sub-Clause 2.5, the Contractor shall pay the Employer these additional costs.

8.7 Delay Damages

‘If the Contractor fails to comply with Sub-Clause 8.2 “Time for Completion”, the Contractor shall pay Delay Damages to the Employer for this default. The amount and limit for Delay Damages shall be as stated in the Appendix to Tender’.

‘These Delay Damages shall be the only damages due from the Contractor as a consequence of the default (excepting in the event of Termination by the Employer Sub-Clause 15.2’. The Employer cannot claim his actual costs, but equally does not have to demonstrate his actual loss.

The FIDIC Contracts Guide explains that *‘the Contractor cannot prevent the imposition of Delay Damages by submitting claims for extension of time. However, the Employer may lose his entitlement to claim delay damages if he prevents extensions of time being agreed or determined in accordance with Sub-Clause 20.1’* (cross-refer to possible restrictions placed on the authority of the Engineer Sub-Clause 3.1).

Should he wish to claim Delay Damages, the Employer is required to present a documented claim to the Engineer, as provided for in Sub-Clause 2.5. The Engineer is required to formally review the claim in accordance with the provisions of Sub-Clause 3.5. It should be noted that Sub-Clause 3.5 requires the Engineer to consult with each Party before making a ‘fair determination’. This procedure would give the Contractor the possibility to object should the Engineer be prevented by the Employer from making a determination in respect of the Contractor’s existing claims for extensions of time.

8.8 Suspension of the Works

A situation may arise which necessitates the Engineer instructing the Contractor to suspend the execution of the Works and to protect the Works against deterioration, loss or damage. The Engineer shall state the reasons for the suspension.

The Contractor is not entitled to an extension of time for any delay or payment of costs:

- if the suspension is due to a cause attributable to the Contractor
- if the delay or costs arise from a Contractor's faulty design, workmanship or materials
- if the delay or costs arise from a failure of the Contractor to protect (or store) the Works against deterioration.

If the reason for the suspension arises from a Contractor's risk event, then the provisions of the following Sub-Clauses 8.9, 8.10 and 8.11 do not apply.

8.9 Consequences of Suspension

Subject to compliance with the procedures given in Sub-Clause 20.1, the Contractor shall be entitled to an extension of time corresponding to the period of suspension, with due allowance for the time required to resume the Works, together with payment of costs incurred as a consequence of delay. Clearly it is mutually beneficial if the Engineer and Contractor agree to maintain detailed records of the consequences of suspension.

8.10 Payment for Plant and Materials in Event of Suspension

The Contractor is entitled to the payment of the value of Plant and/or Materials which have not been delivered to Site if:

- (a) *'the work on Plant and/or Materials have been suspended for more than 28 days and*
- (b) *the Plant and/or Materials have been marked as Employer's property as instructed by the Engineer.'*

It may happen that the manufacture of Plant and Materials cannot be immediately suspended or that it would be a more economical option to complete the manufacture rather than suspend the work.

8.11 Prolonged Suspension

Should the suspension under Sub-Clause 8.8 continue for a period exceeding 84 days, the Contractor may request permission to restart work. If the Engineer does not give permission to start within a further period of 28 days,

the Contractor has the option to give notice to the Engineer and treat the suspension as an omission of the affected part of the Works (refer to Sub-Clause 13, Variations and Omission). If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2, Termination by Contractor.

Prolonged suspension will give the Contractor considerable difficulties, particularly if the period of suspension cannot be predicted with reasonable certainty. For example, a decision may have to be taken to release workers or to send them on leave. Many of them may not return. A further consideration concerns the period of cover provided by the Contractor’s export credit guarantee insurance, which may be severely restricted in the event of a prolonged suspension.

8.12 Resumption of Work

Once the Engineer grants permission to the Contractor to restart work, the Engineer and Contractor are required to jointly examine the Works and Plant and Materials affected by the suspension. A detailed report is appropriate, since the project insurances may be activated. The Contractor is obligated to make good any deterioration or loss, the cost of which will ultimately be to the account of the Employer or the subject of an insurance claim.

Clause 9 Tests on Completion

9.1 Contractor's Obligations

As an integral part of the Tests on Completion procedures, the Contractor is required to provide all documents described in Sub-Clause 4.1(d), Contractor's General Obligations. The preparation of these documents in an as-built condition may be a lengthy process and these will be subject to review by the Engineer.

The Contractor is to give the Engineer 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion which shall be carried out within 14 days of this date.

The Contractor is to provide the Engineer with a certified report of the Tests on Completion.

9.2 Delayed Tests

If the Tests on Completion are delayed by the Employer, Sub-Clauses 7.4 and 10.3 give the Contractor an entitlement to claim an extension of time and additional costs.

If the Tests on Completion are delayed by the Contractor, then the Engineer may give 21 days' notice requiring the Contractor to perform the tests. Thereafter the Employer's Personnel may proceed at the risk and cost of the Contractor. It must be considered if the Contractor is delaying the tests because the work is not complete and will not pass the Tests on Completion.

9.3 Re-testing

If the Works (or Section) fail to pass the Tests on Completion, the Engineer may require the tests to be repeated under the same terms and conditions.

9.4 Failure to Pass Tests on Completion

In the event of continued failure to satisfactorily complete the Tests on Completion, the Engineer may order further repeat testing (assumed to take place after checking and remedial work by the Contractor). If the continued failure to complete the Tests on Completion prevails, the Employer has available the remedies provided for in Sub-Clause 11.4(c). Alternatively, the Employer may authorise the Engineer to issue the Taking-Over Certificate, which carries the implication that the reasons for the failure to satisfactorily complete the Tests on Completion do not damage the Employer's interests.

Clause 10 Employer’s Taking Over

10.1 Taking Over of the Works and Sections

The Employer is obligated to take over the Works (or Section of the Works) once they have been completed by the Contractor and a Taking-Over Certificate issued by the Engineer. A Section is defined in Sub-Clause 1.1.5.6 as ‘*a part of the Works specified in the Appendix to Tender as a Section*’.

Once all work stated in the Contract is complete, excluding any minor outstanding work not materially affecting the Employer’s use of the Works or Section, then the Contractor may make a written application to the Engineer for a Taking-Over Certificate to be issued.

The Employer should be wary of occupying the Works (or Section or Part of the Works) without following the given taking-over procedure since unilateral occupation is likely to be interpreted as an act of taking over.

Contrary to the procedures governing the Employer’s taking over described in this sub-clause, differing practices apply in a number of countries. For example, in a number of former socialist countries in Eastern Europe the taking-over procedure is governed by local law which is likely to over-rule the standard FIDIC procedure. In these countries the taking-over procedure is conducted by a committee (and not by the Engineer) who have the duty not only to supervise the actual taking-over process, but also to confirm that the Works have been constructed in accordance with the technical standards specified in the Contract. The Employer will necessarily need to take a leading role in the provision of information to this committee.

10.2 Taking Over of Parts of the Works

Circumstances may arise where the Employer will consider taking over of a part of the Works which is not otherwise identified as a Section of the Works in the Appendix to the Tender.

It is likely that the Employer will only consider taking over a part of the Works where the part has value or usefulness to the Employer.

The Contractor has no contractual right to insist that the Employer takes over a part of the Works unless exceptionally the Employer has occupied that part. The Engineer cannot issue a Taking-Over Certificate for a part of the Works unless authorised to do so by the Employer.

The issue of a Taking-Over Certificate for a part of the Works requires an adjustment of the Delay Damages for the Works (or Section of the Works incorporating the part handed over). The Delay Damages shall be proportionately reduced according to the proportion that the value of the part taken over has to the value of the Works (or Section of the Works incorporating the part handed over).

The Employer is to be aware that the Contractor has an entitlement to payment in respect of additional costs incurred as a consequence of the Employer requiring the use and/or the taking over of a part of the Works unless such use is specified in the Contract.

10.3 Interference with Tests on Completion

Tests on Completion are the tests which are required to determine whether the Works (or a Section, if any) have reached the stage at which the Employer should take over the Works or Section. (Refer to Sub-Clause 9.1.)

Should the Employer prevent the Contractor from carrying out the Tests on Completion for a period exceeding 14 days, the Employer is deemed to have taken over the Works or Section on the date when the Taking-Over Certificate would otherwise have been completed. Should the Contractor suffer delay and/or incur additional costs, he is entitled to give notice of claim in accordance with the procedures given in Sub-Clause 20.1.

Clause 11 Defects Liability

11.1 Completion of Outstanding Work and Remedying Defects

The Contractor is obliged to complete any outstanding work stated in a Taking-Over Certificate. In addition, the Contractor is required to remedy defects and damage (which fall under his contractual responsibility) which may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Notification Period.

The Contractor does not have responsibility to provide for the rectification of defects and damage caused by the Employer as a consequence of his use of the Works, although the Contractor may be willing to assist for additional payment.

11.2 Cost of Remedying Defects

The Contractor is responsible for the cost and remedying defects and damage which fall under his contractual responsibility, whereas the Employer is responsible for the cost of remedying defects and damage not the responsibility of the Contractor.

Should the Contractor be required to remedy defects and damage which he considers fall under the Employer’s responsibility, then he is required to carry out the work and give notice under Sub-Clause 20.1. If there is agreement that the Employer will pay the Contractor’s costs, then Sub-Clause 13.3, Variation Procedure, shall apply.

11.3 Extension of Defects Notification Period

Should the Employer be unable to use the Works or Section or a major item of Plant for their intended purpose as a consequence of defects falling under the Contractor’s responsibility, then, subject to the giving notice under Sub-Clause 2.5, Employer’s Claims, the Employer is entitled to an extension of the Defects Notification Period of equal duration to the period of non-availability.

The Defects Notification Period shall not be extended by more than two years. Other limitations apply in the event of Suspension of the Works.

11.4 Failure to Remedy Defects

If the Contractor fails to remedy any defect or damage within a reasonable time fixed by the Employer, then the Employer has three options:

- (a) to carry out the work himself (or by others) at the Contractor’s cost. Subject to the requirements of Sub-Clause 2.5, Employer’s Claims, the Contractor shall pay to the Employer his costs incurred in carrying out the work, or

- (b) require the Engineer to agree to determine a reduction in the Contract Price in accordance with Sub-Clause 3.5, Determinations, or
- (c) if the defect or damage is so serious that the item cannot be put to its intended use, then the Employer shall be entitled to recover all sums paid for the Works or parts thereof plus financing costs, dismantling costs, clearance costs and the cost of returning the defective items to the Contractor.

11.5 Removal of Defective Work

It may happen that a defective or damaged item of Plant has to be removed from Site for the purposes of investigation and repair. The Employer's consent in writing has to be obtained by the Contractor and the consent document should identify any specific conditions governing the removal from Site.

The Employer should consider whether it is appropriate to request a financial security in the form of a bank guarantee or equal.

11.9 Performance Certificate

'Performance of the Contractor's obligations shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Contractor...' and *'Only the Performance Certificate shall be deemed to constitute acceptance of the Works'*.

In consideration of the importance of the Performance Certificate, which signifies that the Contractor has completed his obligations under the Contract and that the Works are accepted, it is evident that the issue of the Performance Certificate will be subject to a joint prior review by the Employer and the Engineer before it is issued.

11.10 Unfulfilled Obligations

After the Performance Certificate has been issued, both the Employer and the Contractor are obliged to fulfil any obligations outstanding at that time. These obligations will include the settlement of all financial issues, including outstanding claims.

11.11 Clearance of Site

The Contractor is obliged to clear the Site of all remaining Contractor's Equipment, Temporary Works and site debris within 28 days of receipt of the Performance Certificate.

It can be anticipated that the Contractor will already have removed the bulk of his property from the Site prior to the issue of the Performance

Certificate. The Employer may decide to allow the Contractor to leave some items on site, with or without an additional payment. Otherwise the Employer is entitled to clear the Site and sell or otherwise dispose of all remaining items and restore the Site, all at the Contractor’s expense. Any surplus funds shall be paid to the Contractor by the Employer.

Clause 12 Measurement and Evaluation**12.1 Works to be Measured****12.2 Method of Measurement****12.3 Evaluation****12.4 Omissions**

The Employer is not required to be involved in the process of Measurement and Evaluation. However, he should be aware of the provisions of Sub-Clause 12.3 which provides rules governing the evaluation of new rates and prices (where there is no rate specified in the Contract for similar work) and for the valuation of works instructed under Clause 13, Variations and Adjustments.

The Employer may consider specifying the use of a published method of measurement, such as the Standard Method of Measurement, published by the Institution of Civil Engineers, London. Local methods of measurement may also be available.

Clause 13 Variations and Adjustments

13.0 General

As the FIDIC Contracts Guide acknowledges, ‘... *Variations are the source of many disputes*’.

The clauses of the Conditions of Contract dealing with Variations and Adjustments are written in a manner which in theory requires minimal input from the Employer. In general it is the duty of the Engineer to instruct and evaluate Variations with the necessary involvement of the Contractor. However, for a number of reasons noted elsewhere, the Employer is now frequently deeply involved in the processing of Variations and Adjustments. The reasons for this greater involvement are complex, but the dominant factor is that Employers in general, and public authorities in particular, are increasingly required rigorously to ensure that all expenditure is strictly controlled and budgets are not exceeded without full justification.

As a consequence, the Particular Conditions of Contract frequently contain supplementary provisions which prevent the Engineer from authorising variations without the prior authority of the Employer.

Employers generally and public authorities in particular will have mandatory internal procedures before additional payments can be made and to ensure that appropriate funding is available in respect of additional expenditure. As a consequence there can be a significant interval between the date when the need for a Variation is recognised and the date when the Engineer is finally authorised to process the Variation.

The Contractor may be reluctant to commence or continue with varied or additional work, the subject of the Variation, without assurance of payment which the Employer may not always be able to immediately provide.

In such circumstances there is a real risk that there will be delays to the execution of the Contract and an expectation that the Contractor is likely to submit claims consequent upon delay and disruption.

Consequently, should the Employer require that he is to be deeply involved in the administration of Variations and Adjustments, it is required that he has an administrative organisation that can deal with Variations and Adjustments in a most expeditious manner. The Engineer and his staff are necessarily a key part of that organisation.

Because of the requirement for strict control of expenditure, the practice of ‘on account’ payments to contractors is now neglected (and may be prohibited in some jurisdictions). ‘On account’ payments have the advantage of effectively confirming that the Variation was being processed and, importantly, provide the Contractor with interim funding, thereby reducing the likelihood that the Contractor will notify financial claims and/or request an extension of Time for Completion.

13.1 Right to Vary

This sub-clause states ‘*Variations may be initiated at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal*’.

Although not so stated in the wording of this clause, there is another major issue experienced with many contracts which arises as a consequence of errors and omissions in the original design presented to the Contractor for construction purposes.

The designer of the Works is frequently directly engaged by the Employer under an individual design contract distinct from the engineering contract for the supervision of the construction of the Works. In many instances the Employer will have specified that the design will not only be suitable for tender purposes, but also for construction purposes. This philosophy is particularly true of many smaller infrastructure projects executed with strictly controlled funding provided by international financing organisations.

In some jurisdictions the description ‘designer’ describes suitable qualified persons, who are legally registered and approved to practice as designers. They are legally authorised to prepare and, if necessary, to amend designs. The FIDIC engineer has no authority to interfere in this process and act himself as a ‘designer’, unless he is legally registered to do so.

Problems will arise during the construction stage, if the design is found to be in error or otherwise requires amendment. The designer may not be readily available and may not have a contractual responsibility for amending his design. The Engineer supervising the construction is unlikely to have responsibility (contractually and/or legally) for materially amending the design produced by another engineer. Quite unexpectedly the Employer may be faced with having to not only arrange for a design change, but also to expeditiously arrange the documentation for a formal Variation to be compiled, internally approved and issued to the Contractor. There is the inevitable risk that the project may be delayed and the Contractor will submit claims for both additional payment and an extension of the Time for Completion.

Therefore it would be prudent for the Employer to have in place procedures (including provision for the participation of the designer), so that events as described above can be dealt with expeditiously.

Throughout this process of identifying and authorising of Variations and Adjustments it is pertinent to draw attention to the last paragraph of this sub-clause, which states ‘*The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Engineer instructs or approves a Variation*’.

Should the Employer elect to control the variation procedure, it is important that he has an organisation that is able to proceed expeditiously if delays of the Works are to be avoided.

13.4 Payment in Applicable Currencies

Prior to the issue of tenders, the Employer will have decided the principles that are to be adopted in the calculation of the amounts of foreign currency to be paid to the Contractor.

There are a number of possible variations, but the standard approach is for all payments due to the Contractor to be valued entirely in local currency with a fixed portion to be paid in foreign currency at a fixed exchange rate. The portion to be paid in foreign exchange is invariably selected by the

Contractor and is intended to reflect the anticipated amount of foreign expenditure included in his tender price.

There are a number of potential exceptions to the general rule described above, including:

- payment for some elements of varied works, particularly where their price evaluation is not based on existing bill items (Sub-Clause 13.1)
- payment derived from the process of Value Engineering (Sub-Clause 13.2)
- payments to Nominated Subcontractors (Sub-Clause 5.3)
- payments in respect of Provisional Sums (Sub-Clause 13.5)
- payments for dayworks (Sub-Clause 13.6).

13.5 Provisional Sums

‘Provisional Sum’ is defined in Sub-Clause 1.1.4.10 as ‘... a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5...’.

The inclusion of Provisional Sums in the Bill of Quantities identifies parts of the Works which are not required to be priced at the risk of the Contractor. The FIDIC Contracts Guide emphasises that ‘*It is important to define the scope of each Provisional Sum, because the scope will be excluded from the other elements of the Contract Price*’.

The FIDIC Contracts Guide further points out that this sub-clause opens with the wording ‘*Each Provisional Sum shall only be used, in whole or part...*’, which means that the valuation of a Provisional Sum cannot be in excess of the amount provided in the Contract.

‘*The Engineer or the Employer cannot increase the amount of a Provisional Sum by Variation or otherwise*’. Then rather ambiguously the FIDIC Contracts Guide states ‘... *if the amount stated in a Provisional Sum is exceeded, the Contractor must comply with the Engineer’s instructions... but he may not be bound by the financial consequences... in respect of the excess*’.

Without further explanation on the matter of ‘excess’ the FIDIC Contracts Guide concludes ‘... *the amount to be included in each Provisional Sum should include a realistic estimate of the final amount which is anticipated to be used*’.

The FIDIC Red Book does not make any provision for the Employer or Engineer to introduce additional Provisional Sums once the Contract is finalised. Should a need arise for additional work with the characteristics of a Provisional Sum, it will be dealt with as a Variation as described elsewhere in this Clause 13 and consequently may be subject to different price arrangements.

In addition to reimbursement of the actual amounts expended in complying with the requirements of Provisional Sums, the Contractor is to be paid ‘*a sum of overhead charges and profit, calculated as a percentage of the actual amounts...*’.

This percentage sum is pre-determined by the Employer and is given in the tender documents in a Schedule of Provisional Sums (if any) or more conventionally in the Appendix to Tender. Should the Employer fail to ensure that a percentage sum is included somewhere in the tender, he may anticipate an adverse reaction from the Contractor if it is later asserted that the absence of an appropriate percentage sum is to be interpreted as 'nil'.

13.6 Daywork

Dayworks are intended to be limited to minor or incidental work which cannot be conveniently valued by any other means.

In arranging the preparation of the tender documents, the Employer has two basic choices:

- He may decide that the Contractor shall provide his own priced listing of standard daywork items. A variation is that the Employer provides a standard listing which the Contractor is required to price. The disadvantage of this method is that it is very difficult for the Employer to compare the unit prices offered by tenderers, nor yet to evaluate the net effect on the tender prices.
- A more sophisticated approach is for the Employer to include, as part of the tender documents, his own fully pre-priced listing of daywork items and require each tenderer to provide a percentage adjustment on a notional value of the total amount likely to be expended on dayworks. This method has the advantage that it permits the Employer to not only compare daywork rates, but also to evaluate the net effect on tender prices.

13.7 Adjustments for Changes in Legislation

This sub-clause provides for adjustments of the Contract Price to take account of any increase or decrease in cost arising either from a change in the Laws of the Country or from a change in the interpretation of existing laws, which affect the Contractor's performance of the Contract. Typically there may be statutory increases in the cost of fuels, labour rates and other items where the price of the resource is controlled by the Government.

Occasionally a change in legislation may cause delays to the Works.

The Contractor is required to give formal notice (as required by Sub-Clause 20.1) of his entitlement to claim both reimbursement of his additional costs and an extension of time.

13.8 Adjustment for Changes in Cost

This sub-clause provides formulae to adjust the contract values to reflect escalation of costs due to inflation.

In the preparation of tender documents the Employer is required to decide if the amounts payable to the Contractor shall be adjusted for rises or falls

in the cost of labour, goods and other inputs required for the execution of the Works. For contracts with a short duration (typically of one year or less duration) it is unlikely that there will be provision for adjustment for changes in Cost, on the assumption that it is reasonable that the Contractor will be able to predict changes in Cost over short periods with reasonable accuracy.

For longer periods predictions for changes in Cost become increasingly speculative and this uncertainty will be reflected in higher tender prices. The assumption of this risk by the Employer will not only reduce tender prices, but will also enable tenderers to offer tender prices of greater certainty and accuracy.

Adjustments for changes in Cost in its most simple form could take the form of evaluating those changes in Cost by comparing the cost shown on the supplier invoices with the base cost on which the tender price is based. This may have applicability in a country where the adjustment is restricted to a limited number of items and where the means of production and pricing are controlled by the State, but it is unsuitable in a situation where there is a large content of foreign labour, goods and services incorporated in the Contract Price.

FIDIC has elected to use a method based on the use of formulae to calculate the adjustments for changes in Cost.

The amounts to be paid to the Contractor under this sub-clause are adjusted for rises or falls in the various inputs required for the performance of the Works. These amounts are evaluated by the addition or deduction of the amounts determined from the comparison of index values included in the formulae given in the sub-clause.

The Employer is to decide which resources shall be subject to the provisions of this sub-clause and the relative value of the factors to be used, only requiring tenderers to identify which indices best relate to his anticipated sourcing of the specified resources.

Alternatively the Employer may permit tenderers to identify their own factors and which indices shall be used, again because this selection relates to the tenderers’ anticipated sourcing of specified resources.

The Employer should be aware that the division between local and foreign indices will proportionately determine the amounts of foreign currencies requiring financing.

It is possible that the event giving rise to an adjustment of the contract price could be attributed to either Sub-Clause 13.7 or Sub-Clause 13.8, but payment is only due once.

Clause 14 Contract Price and Payment

14.1 The Contract Price

This sub-clause describes how the Contract Price is to be defined and evaluated. There are no special duties allocated to the Employer, although it is recommended that the Employer familiarises himself with the fundamental principles described herein.

14.2 Advance Payment

The Employer undertakes to provide the Contractor with an interest-free loan for mobilisation. The total advance payment (usually 10% of the Contract Price) is to be stated in the Appendix to the Tender. If there is no provision for an Advance Payment provided in the Appendix to the Tender, then it signifies that no Advance Payment will be made.

The Contractor shall provide the Employer with a guarantee issued by an entity (usually a first class bank) in the country where the project is to be executed. It is recommended that, subject to a review of the requirements of the local law, the Employer specifies the use of FIDICs own standard form of the Advance Payment Security (Annex H in the standard Conditions of Contract for Construction – the ‘Red Book’).

This sub-clause specifies that the Advance Payment Guarantee is to remain valid until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid. The Employer should be wary of non-standard guarantees, particularly those which have a fixed expiry date (usually corresponding to the Time for Completion, Sub-Clause 8.2). There may be later difficulties in obtaining an extension to the advance payment guarantee, should the Contractor not be in good financial health.

The Employer (not the Engineer) is responsible for approving or otherwise rejecting the offered Advance Payment Guarantee and must keep the Engineer informed of developments, since the Engineer cannot action any application for an Interim Progress Payment containing Advance Payment until the Advance Payment Guarantee is provided and approved.

There have been a number of instances where unscrupulous contractors have offered bogus documentation purporting to be an Advance Payment Guarantee. Unless the Contractor is of the highest reputation or otherwise well known to the Employer, it is recommended that the Employer cross-checks with the provider bank that the documentation offered by the Contractor is genuine and registered in the appropriate bank registry.

It is also recommended that the Employer periodically requests documentary evidence demonstrating that the Advance Payment has been used for its stated purpose, namely to finance the Contractor’s mobilisation costs and has not been improperly diverted for other purposes.

Sub-Clause 14.2 provides a standard method and timetable for the repayment of the advance payment. The standard method provides maximum

benefit to the Contractor at the commencement of the contract when mobilisation is under way and yet ensures that the Advance Payment is completely repaid prior to the issue of the Taking-Over Certificate.

Once an Interim Payment Certificate has been issued, it is appropriate that the Employer informs the provider of the Advance Payment Guarantee in writing of the amount of the Advance Payment repaid by the Contractor.

14.3 Application for Interim Payment Certificates

The form of the Statement to be prepared and used by the Contractor requires the approval of the Engineer and although not so stated, will also need to meet the requirements of the Employer. The FIDIC Red Book requires the Contractor to submit the Statement at the end of each month. Should the Employer require that the Statements be submitted at other intervals, this has to be stated in the tender documents. The Issue of Interim Payment Certificates is the subject of Sub-Clause 14.6.

It is not required to include the Advance Payment in an Interim Payment Certificate, since such payment is subject to special payment conditions (refer to Sub-Clause 14.7). The Employer should consider if a separate Payment Certificate would satisfy his administrative requirements.

14.4 Schedule of Payments

This sub-clause describes the procedures to be followed when payments to the Contractor are to be evaluated by reference to a schedule of payments instead of a measurement process as described in Sub-Clause 14.3.

No specific duties or responsibilities are allocated to the Employer.

14.5 Plant and Materials Intended for the Works

This sub-clause entitles the Contractor to claim for a further interim advance payment in respect of Plant and Materials which have been sent to Site for incorporation in the Works. Sub-Clause 14.5 describes the terms and conditions governing any request made by the Contractor for payment under this heading. This is discussed further in Chapter 2 of this book.

No specific duties or responsibilities are allocated to the Employer.

14.6 Issue of Interim Payment Certificates

This sub-clause opens with the statement ‘*No amount will be certified or paid until the Employer has received and approved the Performance Security*’.

Considering that Sub-Clause 4.2, Performance Security, requires the Contractor to provide the Employer with an acceptable Performance Security within 28 days of the Contractor receiving the Letter of Acceptance

(or Contract Agreement), the Employer should be in a position to give his assent expeditiously, so that the certification and subsequent payment of Interim Payment Certificates need not be delayed.

Within 28 days of receiving a Statement from the Contractor, the Engineer is required to issue an Interim Payment Certificate to the Employer with a copy to the Contractor. The period of 28 days is not to be extended because of any internal requirements of the Employer.

It may be an internal regulation of the Employer that the Contractor adds his signature to the summary sheet of an Interim Payment Certificate, even though there is no contractual requirement. Other Employers may require the Contractor to provide a commercial invoice separate to the Interim Payment Certificate for accounting purposes.

To avoid misunderstandings and delays, it would be appropriate for the Employer to advise both the Contractor and the Engineer of his requirements at an early stage of the Contract.

14.7 Payment

The Employer is obligated to pay to the Contractor:

- (a) the Advance Payment (refer to Sub-Clause 14.2), provided that the Contractor has complied with the requirements of Sub-Clause 4.2 (Performance Security) and Sub-Clause 14.2 (Advance Payment)
- (b) the amount certified in each Interim Payment Certificate within 56 days after the date the Engineer receives the Statement and supporting documents. It will be noted that Sub-Clause 14.6 provides that the Engineer has to issue his Interim Payment Certificate within 28 days of receipt of the Contractor's Statement. Any delay by the Engineer in providing the Interim Payment Certificate will impact on the time available for the Employer to make payment
- (c) the amount certified in the Final Payment Certificate within 56 days of receipt of this Final Payment Certificate (refer to Sub-Clause 14.11).

14.8 Delayed Payment

If the Contractor does not receive payment from the Employer when due, in accordance with Sub-Clause 14.8 he is entitled '*to receive financing charges compounded monthly on the unpaid amount*'. This entitlement is irrespective of any claim the Employer may have against the Contractor. These financing charges shall be calculated based on an interest rate three percentage points above the discount rate of the central bank in the country of the currency of payment and shall be paid in such currency.

Typically the Contractor will have elected to be paid in both local and foreign currencies. Due to a lack of foreign currency, the delayed payment is most likely to occur with the foreign currency portion of the Contractor's payment entitlement.

The applicable discount rates of the major central banks are widely published.

The Contractor is not required to give notice of his entitlement to payment of these financial charges. These charges may be conveniently included as a separate item within any Interim Payment Certificate.

This sub-clause does not provide for the Contractor to claim an extension of time arising as a consequence of delayed payment.

14.9 Payment of Retention Money

Following the issue of the Taking-Over Certificate the Engineer has the duty to calculate the amount of the Retention Money to be repaid to the Contractor in the next Interim Payment Certificate (see also Appendix F).

There is no involvement of the Employer in the preparation of this calculation.

14.10 Statement at Completion

‘Within 84 days of receiving the Taking-Over Certificate for the Works, the Contractor is required to submit a Statement showing’:

- the value of work done up to the date of the Taking-Over Certificate
- any further sums which the Contractor considers to be due (including outstanding claims)
- an estimate of other amounts which may become due (including the value of any outstanding works).

There is no direct involvement of the Employer.

14.11 Application for Final Payment Certificate

‘56 days after receiving the Performance Certificate the Contractor is required to submit to the Engineer a draft Final Statement showing’:

- the value of work done
- any further sums which the Contractor considers are due to him.

The Engineer and the Contractor are required to discuss any outstanding matters in dispute (which discussions are very likely to require the involvement of the Employer) in order to reach a final agreement. If this is not possible, the Engineer shall prepare and deliver an Interim Payment Certificate to the Employer for payment and any remaining disputes shall be resolved by the DAB (Sub-Clause 20.4) or by amicable settlement (Sub-Clause 20.5) or by Arbitration (Sub-Clause 20.6), which will then permit the Engineer to issue a Final Statement.

14.12 Discharge

‘When submitting the Final Statement, the Contractor shall submit a written discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract’.

A sample form of discharge is provided in the FIDIC Contracts Guide on page 253.

14.13 Issue of Final Payment Certificate

Within 28 days after receiving the Final Statement and the written discharge, the Engineer shall issue the Final Payment Certificate and the Employer shall pay any outstanding amounts due to the Contractor with due allowance for any credits due to the Employer from the Contractor.

14.14 Cessation of Employer’s Liability

The Contractor is obliged to include an item in the Final Statement (Sub-Clause 14.11) and also in the Statement on Completion (Sub-Clause 14.10) which defines any matter (including claims) that he considers to be unresolved and therefore remaining an Employer’s liability.

This requirement provides a limit to the remaining liabilities of the Employer (excepting for the Employer’s liability for indemnification and any liabilities arising from cases of fraud, default or misconduct).

14.15 Currencies of Payment

The Employer is required to pay the Contractor any amount due in the currencies named in the Appendix to the Tender. The exchange rates given in the Appendix to the Tender shall be applicable. If no exchange rates are given in the Appendix to the Tender, then the exchange rates prevailing on the Base Data and determined by the central bank of the country shall be applicable.

If only one currency is specified, then this sub-clause is inapplicable.

The Engineer has the primary responsibility for determining the amount of each currency due to the Contractor.

Clause 15 Termination by the Employer

15.1 Notice to Correct

‘If the Contractor fails to carry out any obligation under the Contract, the Engineer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time’.

The giving of a notice to correct by the Engineer can – in the event of continuing non-compliance by the Contractor – be regarded as a prelude to the Employer issuing a notice of Termination.

Consequently the giving of a notice to correct is an important event and should not be trivialised. As a minimum it should reference this sub-clause, identify the nature of the Contractor’s failure and specify a reasonable time for the Contractor to take corrective action.

However, there is no obligation for the notice to be given under this sub-clause before the Employer terminates the Contract. The issue of a notice to correct is frequently the inevitable outcome of the Contractor persistently failing to execute the Works expeditiously and to the required standard specified in the Contract.

The Contractor should be made aware that the giving of a notice to correct by the Engineer is a significant event and that he ignores it at his own peril.

15.2 Termination by the Employer

Termination of the Contract by the Employer is evidently a serious matter and the Employer should seek legal advice prior to the giving of the notice to ensure that all legal formalities are correctly observed.

Termination of the Contract may be an inevitable consequence of non-performance by the Contractor, but it leaves the Employer with the consequential problems of having to appoint a replacement contractor with attendant delays and increases in cost. The provision of continued funding of the Contract, particularly by the international financing agencies, may be jeopardised. These negative aspects of termination have to be evaluated by the Employer prior to the issue of the termination notice.

Summarised, the Employer shall be entitled to terminate the Contract if the Contractor:

- (a) (i) fails to provide a Performance Security (Sub-Clause 4.2)
- (ii) fails to comply with a Notice to Correct (Sub-Clause 15.1) or
- (b) abandons the Works or
- (c) (i) fails to proceed with the Works in accordance with Clause 8 (Commencement, Delays and Suspension)
- (ii) fails to comply with a notice issued under Sub-Clause 7.5 (rejection) or Sub-Clause 7.6 (Remedial Works) or
- (d) subcontracts the whole of the Works or assigns the Contract without prior agreement or

- (e) becomes bankrupt or insolvent or
- (f) gives or offers bribes.

The Employer is required to give the Contractor 14 days' notice of termination of the Contract. However, the termination can be immediate in respect of events covered by items (e) and (f) above. The notice can be withdrawn if the Parties agree that the notice shall be of no effect.

After termination the Contractor is required to leave the Site and deliver all Goods, all Contractor's Documents and other design documents to the Engineer.

Further, this sub-clause states that *'the Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site'*. In reality, the Contractor – having received notice of termination – will immediately seek to remove these items for the Site.

The on-site situation can become quite fraught and difficult as subcontractors and the Contractor's own employees will also leave the Site, carrying their own possessions. The subcontractors in particular may attempt to remove Plant and Materials which are already subject to payment made under the Contract.

Consequently, the Employer may find it necessary to immediately install his own security force both to guard the Site and to control removals. The Engineer will be in a position to advise the Employer which Plant and Materials are already the subject of payments under the Contract or which would become the subject of future payments. In any event detailed records need to be maintained for evaluation, should future disputes arise.

Even a controlled demobilisation will not necessarily clear the Site of unwanted items and scrap. Further, the Employer may elect to maintain the basic infrastructure of the Site for use by a potential replacement Contractor. This may entitle the Contractor to compensatory payments.

Finally the Employer will need to consider the need for continuation of the supply of water and electricity to the Site and make provisions for ongoing payment for these utilities.

Termination, particularly for large, more complex sites can result in complicated issues to be resolved by the Employer and it is appropriate that the Employer has in hand a detailed action plan in readiness for the termination.

In parallel with the above activities, the Employer (not the Engineer) will need to give formal notice to the providers of both the Performance Guarantee and the Advance Payment Guarantee that the Contract has been terminated and that the Employer intends to request payment in respect of additional costs consequent upon termination and/or outstanding amounts due for repayment. Initially there is no requirement for the Employer to quantify the amount requested, since this will not be immediately known.

15.3 Valuation at Date of Termination

This sub-clause requires the Engineer, as soon as practical after termination under Sub-Clause 15.2, *'to proceed in accordance with Sub-Clause 3.5, Determinations, to agree or determine the value of the Works, Goods and*

Contractor’s Documents, and any other sums due to the Contractor for work executed in accordance with the Contract’.

Sub-Clause 3.5, Determinations, requires that in making his determination *‘the Engineer shall consult with each Party in an endeavour to reach agreement...’.*

Consequently, the Engineer, in carrying out his duties under this sub-clause, has the duty to consult with the Parties in making his determination. Considering that there are likely to be a number of contentious items to be evaluated, including existing claims, it is quite possible that the Engineer will only be able to produce a qualified valuation at date of termination. This implies that there could be items to be finally settled by a DAB board or formal arbitration if that is practical.

Since Sub-Clause 15.3 requires the Engineer to proceed *‘as soon as practical’*, it may be appropriate for the Engineer to issue his determination in sections or parts in anticipation that they may be accepted by the Parties, it being noted that there is no requirement for the Engineer to ‘agree’ his Determination with the Parties.

The Engineer may request confirmatory instructions from the Employer should the preparation of the valuation exceed his duties defined in his service contract.

15.4 Payment after Termination

After a notice of termination under Sub-Clause 15.2, the Employer is entitled to:

- (a) *proceed to present any claims under Sub-Clause 2.5 (Employer’s Claims)*
- (b) *withhold further payments to the Contractor until the costs of execution completion, remedying of any defects etc. have been established*
- (c) *recover from the Contractor any losses or damages incurred by the Employer and any costs of completing the Works after allowing for any amounts due to the Contractor (refer to Sub-Clause 15.3).’*

From the above it is unlikely that any further amounts will be paid to the Contractor until all costs consequent upon termination are established and finalised.

15.5 Employer’s Entitlement to Termination

The Employer is entitled to terminate the Contract at any time for the Employer’s convenience, by giving notice of such termination to the Contractor.

The termination takes effect 28 days after the Contractor receives the notice of termination or the Employer returns the Performance Security, whichever is the latest.

The Employer may not terminate the Contract in order to execute the Works himself or have the Works executed by another contractor.

The FIDIC Contracts Guide recommends *‘In the rare event of having to invoke this Sub-Clause, the Employer should take prior legal advice’.*

Clause 16 Suspension and Termination by the Contractor

16.1 Contractor's Entitlement to Suspend Work

The Contractor's entitlement to suspend work relates to financial matters which can be summarised as follows:

- (i) the failure of the Employer to provide details of his financial arrangements (Sub-Clause 2.4)
- (ii) the failure of the Engineer to certify an Interim Payment Certificate (Sub-Clause 14.6)
- (iii) the failure of the Employer to pay an Interim Payment Certificate when due (Sub-Clause 14.7).

The Contractor is entitled to suspend work or reduce the rate of the work 21 days after having given notice. He shall restart work as soon as possible after receiving payment.

The Contractor is entitled to an extension of time for any delay incurred and payment of any additional costs incurred as a consequence of the suspension plus profit.

16.2 Termination by the Contractor

'The Contractor is entitled to terminate the Contract under the following circumstances:

- (a) *the Contractor does not receive reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 in respect of a failure to comply with Sub-Clause 2.4 (Employer's Financial Arrangements)*
- (b) *the Engineer fails, within 56 days after receiving a Statement... to issue the relevant Payment Certificate*
- (c) *the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 (Payment)*
- (d) *the Employer substantially fails to perform his obligations under the Contract*
- (e) *the Employer fails to comply with Sub-Clause 1.6 (Contract Agreement) or Sub-Clause 1.7 (Assignment)*
- (f) *A prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 (Prolonged Suspension)*
- (g) *the Employer becomes bankrupt or insolvent, or goes into liquidation...'*

In any of these events or circumstances the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub-paragraphs (f) or (g) the Contractor may by notice terminate the Contract immediately.

The FIDIC Contracts Guide states *'If the Contractor gives notice and then wishes to withdraw it, the Parties may agree that the notice may be of no effect and that the Contract is not terminated'*.

16.3 Cessation of Work and Removal of Contractor’s Equipment

This sub-clause itemises the actions required of the Contractor in the event of his termination of the Contract:

- (i) Cease all work unless instructed by the Engineer to protect life or property.
- (ii) Hand over all Contractor’s Documents for which the Contractor has been paid.
- (iii) Remove all other Goods from Site.

16.4 Payment on Termination

‘After the notice of termination has taken effect, the Employer shall promptly

- *return the Performance Security to the Contractor*
- *pay the Contractor in accordance with Sub-Clause 19.6*
- *pay the Contractor the amount of any loss of profit or other loss or damage sustained by the Contractor as a result of this termination.’*

The Employer is required to return the Advance Payment Guarantee to the Contractor once the Advance Payment has been repaid in full. The Employer is entitled to receive repayment of the outstanding amount of the Advance Payment immediately on termination.

Clause 17 Risk and Responsibility

17.1 Indemnities

This sub-clause requires each Party to indemnify the other Party from any claims arising out of the Contractor's execution of the Works. This obligation extends to any claims of third parties.

The Contractor

The Contractor is required to indemnify the Employer, the Employer's Personnel and their agents against and from all claims, damages, etc. in respect of:

- (a) injury, sickness, disease or death of any person arising from the Contractor's execution of the Works, including any consequences arising from the Contractor's Design (if any). The Contractor is not required to provide indemnity in respect of any negligence or wilful act of the Employer, Employer's Personnel or their agents
- (b) damage to or loss of property to the extent that such damage or loss
 - (i) arises out of or as a consequence of the Contractor's design, the execution of the Works and the remedying of defects
 - (ii) is attributable to the negligence or a wilful act of the Contractor, the Contractor's Personnel or his agents.

The Employer

The Employer is required to indemnify the Contractor, the Contractor's Personnel and their agents from all claims in respect of

- (a) injury, sickness, disease or death attributable to any negligence by the Employer, the Employer's Personnel and their agents
- (b) those matters for which liability may be excluded for insurance cover (refer to Sub-Clause 18.3(d)).

17.2 Contractor's Care of the Works

The Contractor is responsible for the care of the Works and Goods until the Taking-Over Certificate (for the whole or any section or any part) of the Works is issued, when responsibility passes to the Employer. After the issue of a Taking-Over Certificate the Contractor remains responsible for the care of any outstanding work until it is completed and for any damage caused by his actions in completing the outstanding work.

In the period when the Contractor is responsible for care of the Works, should a loss or damage occur, then the Contractor is obliged to rectify the loss or damage at his own cost, unless it can be demonstrated that the loss or damage arose as a consequence of a risk attributable to the Employer.

The FIDIC Contracts Guide comments that it is important to precisely define the geographical extent of anything taken over by the Employer, in order that the Party having responsibility is clearly identifiable. The use of marked-up drawings may be a useful and convenient means of recording the extent of a taking over by the Employer.

17.3 Employer’s Risks

Employer’s risks (which may also be Force Majeure events) are identified in this sub-clause as:

- (a) *war, hostilities, invasion, act of foreign enemies*
- (b) *rebellion, terrorism, revolution, civil war within the Country*
- (c) *riot, commotion, disorder in the Country by persons other than the Contractor’s Personnel and other employees*
- (d) *munitions of war, explosive materials...*
- (e) *pressure waves caused by aircraft...*
- (f) *use of occupation by the Employer of any part of the Permanent Works, unless specified in the Contract*
- (g) *design of any part of the Works by the Employer’s Personnel or other for whom the Employer is responsible*
- (h) *forces of nature which were Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions’.*

Note: With reference to (h) above, adverse climatic conditions are specifically excluded from the scope of Sub-Clause 4.12 ‘Unforeseeable Physical Conditions’ and consequently such matters need to be referred to this Sub-Clause.

17.4 Consequences of Employer’s Risks

In the event of the occurrence of an Employer’s Risk as listed in Sub-Clause 17.3, the Contractor is required to give notice to the Engineer in accordance with the procedures stated in Sub-Clause 20.1. The Contractor is entitled to an extension of Time for Completion and payment of his Costs plus profit. If the occurrence results in loss or damage to the Works, then the Contractor is entitled to receive instructions from the Engineer.

17.5 Intellectual and Industrial Property Rights

The Employer is required to indemnify the Contractor from any claim alleging an infringement which results from the Contractor’s compliance with the Contract or which arises from the Employer using the Works for purposes not indicated in the Contract or its use in conjunction with anything not supplied by the Contractor.

The Contractor is required to indemnify the Employer against any claim which arises out of the manufacture, use, sale or import of any Goods or design for which the Contractor is responsible.

The Employer is obligated to give notice to the Contractor within 28 days of having received a claim from a third party alleging infringement.

17.6 Limitation of Liability

Neither Party is liable to the other Party for any consequential losses.

The total liability of the Contractor to the Employer in connection with the Contract (exceptions are noted) shall not exceed the sum indicated in the Particular Conditions or (if a sum is not so stated) the Accepted Contract Amount.

The Employer's liability is subject to the provisions of Sub-Clause 14.14, Cessation of Employer's Liability.

The FIDIC Contracts Guide notes that the application of this sub-clause may be limited by the applicable law.

Clause 18 Insurance

18.1 General Requirements for Insurances

In the preparation of the Tender Documents the Employer is required to specify his insurance requirements in detail. The Employer will need to specify who will be the ‘insuring Party’ for each category of insurance required by the terms of the Contract.

Whenever the Contractor is designated as the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with the requirements given in the Contract Documents (or as may be otherwise agreed between the Employer and the Contractor prior to the issue of the Letter of Acceptance or signing of the Contract).

For complex projects, where the Employer intends to enter into a number of separate contracts, the Employer may find it convenient and more economical to arrange for himself the required insurances. These Employer-provided insurances will be designed to provide insurance cover to all the contracts forming the project in its totality. In making his arrangements for the Contract insurances, the Employer should ensure that the insurances make provision for payment in foreign currencies where appropriate. The insurance premiums will in part be determined by the amount of policy excesses. The Employer will need to advise tenderers of the value of these policy excesses, so that they may make allowance for any non-reimbursable excess in their tender price.

Whenever the Parties are to be jointly insured, then each Party has the right to submit his own claims under the terms of the insurance policy. In such cases the insurer will most likely be required to make payments directly to the Party making the claim. Alternatively the Contract Documents may require that all insurance payments shall be paid into a special bank account created for the sole purpose of receiving insurance payments, which is to be jointly administered by the Parties. Any distribution from the special bank account is subject to the approval of both Parties.

Each Party shall be entitled to receive evidence from the insuring Party, confirming that insurance premiums are properly maintained throughout the period of the Contract.

It is recommended that the insuring Party uses the services of a specialist advisor, well experienced in this type of insurance, to negotiate the detail of the terms and conditions of the insurances with the proposed insurer.

18.2 Insurance for Works and Contractor’s Equipment

The wording of this Sub-Clause 18.12 assumes that the Contractor will be the insuring Party and will require modification should the Employer decide that he will be the insuring Party.

This requirement covers two differing categories of insurance which can be taken separately.

(a) Insurance for Works

The insuring Party shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement costs. This type of insurance is frequently referred to as 'Contractor's All Risk' (or CAR) insurance. The insurance premium is likely to be calculated as a percentage of the Accepted Contract Amount and consequently the Employer may consider it appropriate to specify that the Contractor shall ensure that the amount of the insurance shall be for the Accepted Contract Amount plus an additional percentage (often 15%) to cover the likely cost of additional works which may be required and any subsequent inflationary increases in cost. The wording of the insurance policy shall cover the full cost of reinstatement of the cost of damage or loss to the Works, including the cost of any demolition, debris removal, and engineering costs. Policy excesses are to be stated.

The insuring Party shall maintain this insurance until the date of issue of the Performance Certificate, to cover any loss or damage arising from a cause for which the Contractor is liable prior to the date of issue of the Taking-Over Certificate and any loss or damage caused by the Contractor during any other operations, included those operations undertaken during the Defects Liability Period.

(b) Contractor's Equipment

The insuring Party shall insure the Contractor's Equipment for not less than the full replacement cost, including delivery to site.

Where the Contractor is nominated as the insuring Party, he may elect to provide this type of insurance in one of a number of ways:

- (i) by obtaining the insurance from a suitable provider covering only the specific needs of the Contract
- (ii) many international contractors operate a plant pool from which the individual contracts lease equipment. To facilitate the movement of equipment, it is likely that the Contractor already has continuous insurance covering all his equipment. Thus the Contractor may have no need to obtain a separate insurance specific to any given project. The Contractor will be required to provide appropriate evidence of his arrangements
- (iii) larger projects are more likely to be executed by joint ventures formed solely for the purpose of executing the Contract. The sponsor company of the joint venture will arrange the required insurance on behalf of the joint venture.

Sub-Clause 18.2 further states, inter alia, that these insurances shall cover all loss and damage from any cause not listed in Sub-Clause 17.3, Employer's Risks, but excludes any part of the Works taken over by the Employer (excepting defects liability operations) and any loss or damage to a part of the Works which is defective as a consequence of a design defect (where the Contractor is not responsible for the design).

It is preferable that the Contractor includes for insurance of the Subcontractor’s Equipment within the scope of his insurance. This is a convenient arrangement, since the Contractor may not have established the full scope of Subcontractor involvement.

Some subcontractors may prefer to provide their own insurances, but these will need constant monitoring by the Contractor to ensure compliance with the requirements of the Contract and consequently is not an administratively convenient arrangement.

In contrast, very large specialised items of Subcontractor Equipment, e.g. very large cranes, may be on site for a very limited period and it would be convenient for the Subcontractor to provide the required insurances.

18.3 Insurance against Injury to Persons and Damage to Property

The Insuring Party is required to *‘insure against each Party’s liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.4) which may arise out of the Contractor’s performance of the Contract...’*

and

‘This insurance shall be for a limit per occurrence of the amount stated in the Appendix to Tender, with no limit on the number of occurrences.’

Additionally the insurance shall *‘cover liability for loss or damage to the Employer’s property (excluding things insured under Sub-Clause 18.2) arising out of the Contractor’s performance of the Contract’*, but excludes:

- the Employer’s right to execute the Permanent Works on, over and under any land, and to occupy this land
- damage unavoidably caused by the Contractor executing the Works
- a cause listed in Sub-Clause 17.3, Employer’s Risks.

18.4 Insurance for Contractor’s Personnel

The Contractor is responsible to provide insurance against any liability for claims, losses, etc. arising from claims, losses, etc. which may arise from injury, sickness, disease or death of any of his employees for the full period the personnel are on site. Subcontractors may provide their own separate insurances, but the Contractor is responsible to ensure they comply with the requirements of this sub-clause.

In many countries the provision of this type of insurance is likely to be a legal obligation. As a general rule, international contractors provide appropriate insurance for their expatriate personnel as part of their employment package, independently of the country in which they are employed. Local workers are likely to be insured as required by local law, which obligation may be supplemented by the Contractor as an employment inducement.

Clause 19 Force Majeure

19.1 Definition of Force Majeure

This sub-clause of the Contract notes that *‘in the laws of most countries, a Party may be relieved from its contractual obligations in a very narrow range of events’*. However, in the FIDIC contract forms *‘the expression “Force Majeure” has a more broadly defined meaning, namely an exceptional event or circumstance..’* which satisfies the following criteria:

- *must be beyond the control of the Party who has been affected by it and who will need to give due notice (Sub-Clause 19.2)*
- *the affected Party could not reasonably have provided against it before the Contract was made*
- *the affected Party could not reasonably have avoided or overcome it*
- *it must not have been substantially attributable to the other Party (which may for example include breach of Contract by such other Party, entitling the affected party to more favourable relief due to the breach of Contract.*

The FIDIC Contracts Guide emphasises that for an event or circumstance to constitute Force Majeure it must be ‘exceptional’ and not merely ‘unusual’. Whether it is unforeseeable is irrelevant.

The text of this sub-clause provides an illustrative list of events or circumstances which would constitute Force Majeure. Other events or circumstances may constitute Force Majeure provided that they fulfil the criteria listed above.

19.2 Notice of Force Majeure

If a Party is or will be prevented from performing any obligations under the Contract, then the Party shall give notice to the other Party within 14 days of the event or circumstance constituting the Force Majeure. Note that this 14 days’ notice period differs from the 28 days’ notice period for claims notified in accordance with Sub-Clause 20.1.

The Party giving the notice shall identify which obligations are prevented.

19.3 Duty to Minimise Delay

Each Party has a duty to minimise delays arising as a result of Force Majeure. A Party shall give notice to the other Party once the cause of Force Majeure ceases.

19.4 Consequences of Force Majeure

Having given notice of Force Majeure, the Contractor is entitled to claim an extension of Time for Completion (Sub-Clause 8.4) and to payment of Costs (Sub-Clause 19.1 (i) to (iv)).

19.5 Force Majeure Affecting Subcontractor

Should the terms of a Subcontract entitle a Subcontractor to relief on additional and/or broader terms than are available to the Contractor under the Contract, then the Contractor is not entitled to rely on the Subcontract to provide relief under the Contract.

19.6 Optional Termination, Payment and Release

‘If the execution of substantially all of the Works is prevented for a continuous period of 84 days by reason of Force Majeure or multiple periods totalling more than 140 days due to the same Force Majeure, then either Party may give the other Party notice of termination of the Contract’. Termination shall take place 7 days after the giving of the notice.

Thereafter the Engineer shall value the work done and issue a Payment Certificate to include:

- all work done at Contract Prices
- the cost of Plant and Materials delivered or ordered
- all other cost or liability... reasonably incurred in anticipation of executing the Works
- the cost of repatriating the Contractor’s labour and staff.

19.7 Release from Performance by Law

If any event or circumstance including Force Majeure makes it impossible or unlawful for either Party to fulfil their contractual obligations or which under the governing law entitles the Parties to be released from further performance, then upon notice being given by one Party to the other Party

- the Parties shall be released from further performance
- the sum payable to the Contractor shall be evaluated as described in Sub-Clause 19.6.

Clause 20 Claims, Disputes and Arbitration

20.1 Contractor's Claims

This sub-clause describes the procedure to be followed by the Contractor in the presentation of his claims. There is no direct involvement by the Employer in the administration of these procedures. The FIDIC Contracts Guide comments, inter alia, that in the event of the Contractor giving notice of claim, this should not be regarded as *'an aggressive act... but merely as an act which enables the Employer to be aware of the possibility of the Contractor's enhanced entitlement'*.

20.2 Appointment of the Dispute Adjudication Board (DAB)

In the preparation of the tender documents, the Employer has to give consideration to the composition of the DAB entrusted to promote a resolution of disputes.

The FIDIC Conditions of Contract describe three different procedures:

- *'a "full term" DAB which comprises one or three members and which is to be appointed before the Contractor commences executing of the Works*
- *an ad hoc DAB, which comprises one or three members who are only appointed if and when a particular dispute arises'*
- the engagement of an independent consulting engineer with appropriate experience and able to prepare a pre-arbitral award.

In deciding which of these alternatives shall be specified in the tender documents, the Employer and his advisors will need to take into account a number of factors:

- If the initial stages of a contract are concerned largely with off site manufacturing and not site work, the choice of composition of the DAB could be delayed or restricted to one member.
- Projects requiring major or difficult excavations, including tunnelling work, are more likely to give rise to disputes falling under the scope of Sub-Clause 4.12, Unforeseeable Physical Conditions. The early appointment of a three member DAB is appropriate.
- The commencement of site operations including site hand-over and the provision of access to site frequently give rise to delays, particularly in built-up areas and areas with security restrictions. These difficulties are amplified by delays in expropriation procedures, even if the delayed expropriation is limited to a relatively small portion of the Site. The early appointment of a three member DAB is appropriate.
- If it is anticipated that there will be a large number of variations and re-measurement issues, the more likely a three member DAB is appropriate.
- The greater the magnitude of the Contract, the greater the likelihood a three member DAB is required. As a rough guide, The FIDIC Contracts

Guide proposes if the value of the monthly Payment Certificate exceeds a range of two to three million US dollars (at year 2000 prices), then a three member DAB is more likely to be appropriate.

- Should the Parties be of different nationalities, FIDIC considers that a DAB is more effective if the DAB members are of different nationalities to the Parties and to each other.

The choice of DAB members may in any event be restricted by the experience and training of the prospective members in arbitration procedures and by language abilities.

Evidently it is preferable that the DAB is selected and functional as soon as practical after the Contract is awarded. However, the selection of board members and conclusion of their service agreements do require time to execute. The time for execution could be reduced if both the Employer and the Contractor were to nominate their preferred members in the tender documents. For single member DABs some Employers often do nominate the selected member. This may be convenient and economical, but does depart from the concept of the appointment being subject to consensus between the Parties and can raise Contractor suspicions of collusion between the Employer and the member.

A principal feature of the three member DAB is that the Parties, having nominated their proposed member (and had the same accepted by the other Party), leave the two selected members to agree and nominate a third member, who is most likely to act as the Chairman of the Board, for the approval of the Parties.

20.3 Failure to Agree Dispute Adjudication Board

In the event that the sole member of a one member DAB or one member of a three member DAB has to be replaced, the Parties shall agree a replacement member.

Should the Parties be unable to agree the appointment of a replacement member, then the appointing entity named in the Appendix to Tender (e.g. FIDIC, Institute of Civil Engineers [ICE], London) shall, after consultation, be requested to nominate the replacement member.

Both FIDIC and ICE have available a list of dispute adjudicators for consideration.

20.4 Obtaining Dispute Adjudication Board’s (DAB) Decision

- 1 No matter can be referred for a formal decision of the DAB unless the matter is in dispute. Consequently, if a Party refers a matter to the DAB and this is disputed by the other Party, then the DAB must first consider if a dispute exists. Typically a claim will have been notified under Sub-Clause 2.5, Employer’s Claims, or Sub-Clause 20.1, Contractor’s Claims, and will have been subject to determination by the Engineer in

accordance with Sub-Clause 3.5, Determinations. If then there is no agreement reached, a dispute exists and either Party is entitled to request the DAB to make a decision on the matter.

Such referral to the DAB has to be in writing, in accordance with the directions of the DAB who will hear the respective pleadings of the Parties at a formal hearing.

After completion of the formal hearing, the DAB will privately consider their findings and in due course will provide the Parties with their decision.

- 2 As part of their routine visits to site, the DAB is likely to ask the Parties if there are any matters affecting or likely to affect the execution of the Contract, to which either Party would like to draw their attention. The DAB may be willing to offer informal advice or opinion on any matter (including claims), with the intention of encouraging the Parties to find ways and means of settling disputes without recourse to requesting a formal decision from the DAB.
- 3 Strict time limits apply to an application for a formal decision of the DAB.
 - (a) Firstly the DAB will establish a date by which all documentation forming the presentations of the Parties has to be provided. The DAB will consider if a formal hearing is required and, where necessary and after consultation, will notify the Parties of the date of the hearing.
 - (b) The DAB is required to give its directions within 84 days of receiving a referral from a Party. This period may be varied if the Parties are in agreement.
 - (c) After the DAB has given its decision, each Party has a further 28 days to give notice of its dissatisfaction.

The Employer must ensure that the submissions to the DAB are not only correctly prepared to a high standard, but are presented by a date set by the DAB.

The Engineer will be a key part of the Employer's team and will be able to provide detailed information on behalf of the Employer.

The quality of presentation of the Employer's case to the DAB is important and may require that suitable additional staff is available to oversee the preparation and presentation of the Employer's case.

20.5 Amicable Settlement

Where a Party has given notice of dissatisfaction under the provisions of Sub-Clause 20.4, both Parties are required to attempt to settle the dispute amicably before commencing arbitration. There is no formal role for the Engineer in this procedure, although the Employer is likely to use his services as an advisor.

There may be a number of discussions and meetings following a Party giving notice of dissatisfaction and it may not always be clear if the process

of amicable discussion has taken place or indeed has been completed. Consequently a degree of formality, recording that amicable discussion has taken place is appropriate, particularly if there is no settlement.

20.6 Arbitration

Unless settled amicably, any dispute in respect of which the DABs decision has not become final shall be finally settled by international arbitration.

The cost of arbitration will be significantly greater than the similar process already conducted by a DAB. Consequently both Parties will have to balance the likelihood of obtaining a more satisfactory conclusion in arbitration against the likely cost of arbitration. Essentially it is necessary for the Party requesting arbitration to judge whether the arbitration panel will provide an award that is more or less satisfactory than that provided by the comparable members of the DAB. It has been claimed that DAB have been successful in resolving approximately 90% of the disputes referred to them for their decision.

20.7 Failure to comply with Dispute Adjudication Board’s Decision

If neither Party has given notice of dissatisfaction within the prescribed period, the decision becomes final and binding. In the event that a Party fails to give effect to the decision, then the other Party may refer this failure to arbitration without referring further to the DAB.

20.8 Expiry of Dispute Adjudication Board’s Appointment

If a dispute arises and there is no DAB in place for whatever reason, either Party may refer the dispute directly to arbitration in accordance with Sub-Clause 20.6, Arbitration, without reconvening the DAB.