Contents

Summary

1 Introduction .................................................................................................................. 1

2 Contractual responsibilities ......................................................................................... 2
   2.1 General .................................................................................................................. 2
   2.2 Authority levels ..................................................................................................... 3
   2.3 Contract Manager’s Authority ............................................................................... 3
   2.4 Contractor’s responsibilities .................................................................................. 4

3 Standard forms ............................................................................................................. 6
   3.1 General .................................................................................................................. 6
   3.2 Guidelines for working with Standard Forms ......................................................... 6

4 Award of Contract ......................................................................................................... 8
   4.1 General .................................................................................................................. 8
   4.2 Instructions to bidders ......................................................................................... 8
      4.2.1 Notification of award and signing of agreement ................................................. 8
      4.2.2 Signing of the Contract Agreement .................................................................. 8
   4.3 Transition from Instructions to Bidders to Conditions of contract ..................... 9
      4.3.1 Performance security ..................................................................................... 9
      4.3.2 Advance PAyment ......................................................................................... 9

5 Conditions of contract .................................................................................................. 11
   5.1 Conditions of Contract section: A – General ....................................................... 11
      5.1.1 Start Date (Clause 1.1) ................................................................................ 13
      5.1.2 Intended completion date (Clause 1.1) .......................................................... 14
      5.1.3 Appointment of Contract Manager ................................................................. 14
      5.1.4 Sub-Contracting (Clause 7) .......................................................................... 14
      5.1.5 Employer’s Approval ...................................................................................... 15
      5.1.6 Possession of Site (Clause 21) ..................................................................... 15
      5.1.7 Access to the Site (Clause 22) ..................................................................... 15
      5.1.8 Instructions (Clause 23) ................................................................................ 15
      5.1.9 Disputes (Clause 24) ...................................................................................... 16
5.2 Conditions of contract section B – Time Control  
5.2.1 Programme (Clause 27)  
5.2.2 Extension of intended completion date (Clause 28)  
5.2.3 Acceleration (Clause 29)  
5.2.4 Delays (Clause 30)  
5.2.5 Management meetings (Clause 31)  
5.2.6 Early Warning (Clause 32)  
5.3 Conditions of Contract Section c – quality control  
5.3.1 Identifying Defects (Clause 33)  
5.3.2 Tests (Clause 34)  
5.3.3 Correction of Defects (Clause 35)  
5.3.4 Uncorrected Defects (Clause 36)  
5.4 Conditions of contract section D - Cost control  
5.4.1 Changes in Quantities (Clause 38)  
5.4.2 Variations (Clause 39)  
5.4.3 Payment Certificates (Clause 42)  
5.4.4 Payments (Clause 43)  
5.4.5 Compensation Events.  
5.4.6 Daywork (Clause 53)  
5.5 Conditions of contract section E – finishing the contract  
5.5.1 Completion (Clause 55)  
6 Reports and records
6.1 General

6.2 Meetings

6.3 Daily Log Sheets

6.4 Progress Reports
Summary

The Government of Yemen (GOY), Ministry of Agriculture and Irrigation (MAI) has received a Loan for the Implementation of the Irrigation Improvement Project (IIP). Under this project, a number of civil works contracts will be executed under International Competitive Bidding (ICB) regulations of the World Bank (WB).

The Project Management Unit (PMU) of the IIP, in its desire to create uniformity in proceedings under the different contracts, has requested the Consultants to prepare a manual with guidelines to be implemented at each of the works.

The present manual is set up to cover the major aspects of the World Bank conditions of contract for small works. It is appropriate to mention here that the World Bank has adopted the FIDIC conditions of contract for their projects.

This Manual covers the responsibilities in Chapter 2. After a brief overview of various contract approaches, it elaborates on the Contract Manager’s authority.

In order to create uniformity in the various procedures under the contracts, the Manual makes use of Standard Forms. The method of working with these forms is presented in Chapter 3.

After a Request for Bids, or Invitation for Bids has been published, the Bids are prepared, submitted and evaluated. Once a Contract has been awarded, a transition takes in rules and regulations from the Instructions to Bidders to the Conditions of Contract. This transition and activities that take place in this period are discussed in Chapter 4.

The text, as well as the Standard Forms, covers the five main sections of the Conditions of Contract: General (section 5.1), Time Control (section 5.2), Quality Control (section 5.3), Cost Control (section 5.4) and Finishing the Contract (section 5.5).

Reports and Records are finally dealt with in Chapter 6.

The manual includes step-by-step descriptions of procedures to be followed in particular cases during construction supervision tasks. These step-by-step procedures have been included as flowcharts.
1 Introduction

Construction Management consists primarily of the total of activities that follow from an assignment to supervise works. Additionally it may include other project management tasks as assigned by the Employer.

There are a number of innovative developments in the field of Construction Management, including certification of contractors, performance tendering and design build contracts are used and for example, the New Engineering Contract, in which the Employer, the Contractor and Consultants are part of one team that cooperates to realize a project. The present document covers standard, or conventional assignments.

The Irrigation Improvement Project (IIP) of the Ministry of Agriculture and Irrigation issues this Manual for use by all Consultants engaged in the supervision of construction and maintenance works. The purpose of this Manual is to bring consistency and uniformity in all procedures and actions involving Contract Management during the construction of irrigation improvement works. The IIP’s objective is to have standardised documentation for all Engineering functions undertaken. This Manual is to ensure that there will be more coherence in the issue of documents whereby IIP and Consultants would get used to documents similar in setup, content and presentation, rather than documents that differ from time to time and from Contract to Contract.

Presently the emphasis of IIP’s work is the conduct, in Tuban and Zabid areas, improvement works to the existing Spate Irrigation Systems as constructed by British and Russian projects rather than the construction of new structures.

The execution of construction works goes through three distinct stages. These are:

- Phase 1 - Design and Preparation of Tender Documents
- Phase 2 - Tendering up to and including the Award of Contract
- Phase 3 - Construction and Supervision

It should be understood that this Contract Management Manual covers exclusively Phase 3 mentioned above.

The Reader should also be aware that:

- this document has been prepared for use in combination with supervision of civil works contracts for International Competitive Bidding.
- The Project Management Unit (PMU) of the Irrigation Improvement Project, in view of the various project managers already existing within the Ministry of Agriculture and Irrigation, has opted to divert from the standard World Bank Conditions of Contract by substituting the title “Project Manager” for “Contract Manager”.

2 Contractual responsibilities

2.1 GENERAL

In view of standardizing documents issued during the supervision of roads projects it is quite important to present an overview of the Contractual Responsibilities.

The World Bank distinguishes between Contract Manager and Contractor. This Manual applies to World Bank (FIDIC) based Contracts. With respect to IIP, the document covers the types of contracts that may be supervised by the consultants. I.e. NCB and small ICB.

An overview of the different denominations and responsibilities of the parties in a World Bank contract are presented in the following table:

<table>
<thead>
<tr>
<th>FIDIC (WB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
</tr>
<tr>
<td>Employer’s Representative</td>
</tr>
<tr>
<td>Contract Manager (Formerly: The Engineer)</td>
</tr>
<tr>
<td>Delegate</td>
</tr>
<tr>
<td>Adjudicator</td>
</tr>
</tbody>
</table>

Table 1 Overview of World Bank (FIDIC) contract approach
2.2  AUTHORITY LEVELS

On the supervision side three levels of authority can be distinguished below the employer:

1. The **Project Director**. His responsibilities are to make preparations for proper site supervision.
   a. Determine internal and external flows of information (who discusses with who in which type of coordination)
   b. Determine how internal and external communication is registered
   c. Determine which type of tasks, authorities and responsibilities have been established per gremial level
   d. Form the project team for this project phase
   e. Make project schedule for this project phase
   f. Inform the project team and other stakeholders
   g. Check whether specific procedures, work instructions, etc. from employer apply to this project and, if so, inform respective team members.

   After Defects have been corrected, he will review and submit the final report to the Employer.

2. The **Contract Manager** (Project Manager). He is appointed directly by the Employer to be responsible for supervising the execution of the works and administering the contract. The Contract Manager will normally be the only formal link between the Employer and the Contractor. Consequently, the Contract Manager will be the sole signatory to letters to the Contractor.

   The Contract Manager may appoint a Delegate to act on his behalf for a specific part of the supervision tasks. If so, the Contract Manager will inform the Contractor in writing. Notwithstanding this appointment, all correspondence between the delegated person and the Contractor should be seen and signed by the Contract Manager.

   The Contract Manager is responsible to ensure that the Contractor carries out the work in accordance with the Contract and to inform the Employer. He will be actively involved in coordinating site supervision activities such as checking of levels, grades and lines and quality control. The Contract Manager will administer the contract, issue certificates, and keep records as well as writing of reports.

   Nearing completion of the Contract, the Contract Manager will organize the checking of Defects and after Defects have been corrected, he will prepare and submit the final report to the Project Director.

3. The **Contract Manager’s delegate**. This person has been appointed by the Contract Manager and shall be responsible for a specific part of site supervision e.g. surveyor, laboratory assistant, quantity surveying. The Delegate will assist the Contract Manager with Site Supervision tasks and inform the Contract Manager on quantities and quality of work.

   The authority levels and tasks corresponding to each of them is shown in Figure 1 on page 8.

2.3  CONTRACT MANAGER’S AUTHORITY

The Authority of the Contract Manager is no longer an impartial player between the Contractor and the Employer. His authority is less restricted, as used to be the case under FIDIC’s Sub-Clause 2.1 of the Conditions of Particular Application.
The Contract Manager is, under the present Conditions of Contract, considered to represent the Employer’s interests and has been empowered accordingly.

The Contract Manager must however, obtain the specific approval of the Employer before taking any of the following actions specified in the Conditions of Contract:

a. Adjusting unit rates from changes in quantities which cause the Initial Contract Price to exceed 15 percent under Clause 38.2 (Changes in the Quantities);

b. Terminating the Contract under Clause 59 (Termination);

It should be noted that the Employer could of course vary the above restrictions at the time of preparing Contract Data for new Contracts.

Needless to say that the Contract Manager is required to establish and maintain good information and coordination channels with the Employer. This especially applies to those decisions of the Contract Manager that affect the Contract Price and/or the Construction Period.

2.4 CONTRACTOR’S RESPONSIBILITIES

The Contractor, on the other hand, is required to construct the works under the contract within the contractual time frame, within the contract price and in accordance with the specifications, drawings and standards specified in that contract.
Figure 1: Construction supervision authority levels and tasks
3 Standard forms

3.1 GENERAL

In the following Chapters the issue of specific Contract Management Documents covering the Supervision of construction and management is described. The manual follows the usual procedure from award of contract (chapter 4) through the Conditions of contract (chapter 5) and finally gives attention to Reports and Records. Chapter 5 is set up in accordance with the World Bank (FIDIC) Conditions of Contract for small works:

- Section A – General
- Section B – Time Control
- Section C – Quality Control
- Section D – Cost Control
- Section E – Finishing the Contract

The manual aims at giving a clear procedural display of matters that arise throughout the execution of a contract. This has been done by use of Standard forms an flow charts giving a step by step procedure for most relevant matters.

A guide as to how to apply and interpret the relevant Standard Forms is given in the next sub-chapter.

3.2 GUIDELINES FOR WORKING WITH STANDARD FORMS

The Standard Forms always provide the Name of the Ministry and the Irrigation Improvement Project with the Logo of the Republic of Yemen.

Furthermore the Forms will show at all times the Names of the Contract Manager, the Contractor, the Project Name and the Number of the Works Contract. As the Standard Forms will be issued to Staff of the Irrigation Improvement Project and Consultants in a digitized format (i.e. on diskette or on CD-ROM) it should be possible for the User to insert automatically the repetitious text with the Names and Number. This can be done for example by applying Insert / AutoText in Word.

Text shown in Italics and in red colour should be replaced by the applicable correct information.

The Logo of the Contract Manager’s Company or Firm may be inserted at the bottom of the page.

At times it will appear that the text presents more than one choice option to be selected. A small rectangular box indicates these choices as follows.

- Choice 1 (text)
- Choice 2 (text)
- Etc.
One of the boxes applying should then be ticked or cross-marked. Alternatively, when using the computer the non-applicable choice option can simply be deleted.

Last but not least it is emphasized here that IIP Staff or Consultants’ Staff are free to divert from the text in the Standard Forms. Where conditions or circumstances dictate a different text the User of these Forms should feel encouraged to introduce his own approach and solution. Provided there are good reasons to deviate from the Standard Text and provided always that the principle format and headings of the Standard Forms remain unchanged.
4

Award of Contract

4.1 GENERAL

A Construction Supervision task starts from the moment of Award of Contract and ends with the issuance of the Completion Certificate. Once the Contract is awarded, there are a number of requirements that are usually set out in the Instructions to Bidders, which the contractor must fulfill before the Conditions of Contract start to govern supervision tasks.

The step by step procedure of the events is presented in flowchart number 1, below.

Flowchart 1: Procedure of establishing a 'binding' Contract

4.2 INSTRUCTIONS TO BIDDERS

4.2.1 NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT

Once the tenders have been evaluated and the lowest evaluated bid has been established and approved by the Employer and World Bank, the Employer will notify the successful bidder by the Letter of Acceptance. The letter of acceptance states the Contract Price for which the contractor will construct the Works.

The Letter of Acceptance will not form a binding contract between the Employer and the Contractor until the Contractor has submitted an acceptable Performance Security and both parties have signed the Contract Agreement.

4.2.2 SIGNING OF THE CONTRACT AGREEMENT

The Employer sends the signed Contract Agreement within a maximum period of 28 days after the Notification of Award with the Letter of Acceptance to the Contractor. Within 21 days, the contractor will sign the Agreement and return it to the Employer.
This signature, together with the submitted Performance Security officially constitute a binding contract between the Employer and the Contractor.

4.3 TRANSITION FROM INSTRUCTIONS TO BIDDERS TO CONDITIONS OF CONTRACT

The following two sections regard conditions of contract that also refer to the instructions to bidders.

4.3.1 PERFORMANCE SECURITY

The Contractor must submit a performance security within 21 days of receipt of the Letter of Acceptance and in accordance with Clause 52 of the Conditions of Contract. Standard forms for Performance Securities are usually enclosed with the Tender Documents. The Employer (if already appointed, his Contract Manager) should carefully check the wording of the Performance Security with the wording of the standard form as included in the tender document and the relevant clause of the instructions to bidders.

Once the Performance Security has been submitted, the Employer will notify other bidders that their bid was not successful.

If the Performance Guarantee is not submitted within the period of 21 days of receiving the Letter of Acceptance, or the Performance Security is not in accordance with the amount and form stipulated in the Bidding Data, the Employer may cancel the award and forfeit the Bid Security.

4.3.2 ADVANCE PAYMENT

The step-by-step procedure for Advance Payment is given in flow chart 2 on page 10.

Before paying the Advance Payment, the Contractor has to furnish an Advance Payment Security. The maximum amount of the Advance Payment Security is stated in the Bidding Date, which form part of the Instructions to Bidders.

However, the Advance Payment Security obeys to conditions specified in the Conditions of Contract. Such conditions concern the form of the guarantee, the duration of the guarantee and the amounts by which the Advance Payment shall be repaid.

The Advance Payment may only be used for payment of Equipment, Plant, Materials and mobilization expenses required specifically for the execution of the Contract.
Flowchart 2: Procedure for Advance Payment
5 Conditions of contract

The Contract has been awarded and the Contractor has signed the Agreement and submitted a satisfactory Performance Guarantee. From this moment onwards, there is a binding contract between parties, which is governed by the Conditions of Contract.

The Conditions of Contract have been sectionalized into the following 5 parts:

A - General
B - Time Control
C - Quality Control
D - Cost Control
E - Finishing the Contract

The step by step procedures for the first tasks to be carried out in a contract are presented in flowchart number 3 on page 12.

5.1 CONDITIONS OF CONTRACT SECTION: A – GENERAL

The contents of the General conditions section are presented in flowchart 4. In this diagram the clauses have been grouped thematically.

The “General” section of the Conditions of Contract provides 26 clauses covering basic definitions and regulation of generally applicable procedures and formats. Those general items that require further specification are referred to in the Contract Data.

A particularly important clause in this section is Clause 4. Contract Manager’s Decisions, which gives the Contract Manager the authority to decide matters between the Employer and the Contractor in the role representing the Employer. This authority is given to him by the Employer in all matters, except:

1. in respect of Clause 38.2, adjusting the unit rates from changes in quantities, if thereby the initial Contract Prices is exceeded by more than 15% and
2. in respect of Clause 59, termination of the Contract.

Other more specific clauses that shall be dealt with in more detail are the following:

- Start Date
- Intended Completion Date
- Appointment of Contract Manager
- Sub-Contracting
- Employer’s Approval for certain communications having cost consequences or other significant consequences to the execution of the Contract
- Possession of Site
- Access to the Site
- Instructions
--- Disputes ---

**Flowchart 3: First tasks in a Contract**

- **Binding Contract Agreement**
- **Time stated in Contract Data**
- **Appointment of Contract Manager**
- **Insurance policies and certificates**
- **After Contract is formed**
  - Employer to nominate
  - Standard Form F.2
  - Clause 1.1
  - Contract Data
- **Program of Work**
  - Clause 27
  - Prepared by Contractor
  - Contract Manager to Approve (Cl 27.1)
  - From Start Date to Intended Completion Date
  - Including methods, arrangements, order and timing
  - Update as per Contract Data (Cl 27.3)
  - Penalty applies for late submission (Cl 27.3)
  - Updates include variations and Compensation Events (Cl 27.4)
- **Program of Work**
  - Clause 22
  - Contractor to give access
to Contract Manager and Delegates
- **Possession of Site**
  - Clause 21
  - Employer to give possession to Contractor
  - If (part) not given in time specified in
  - Contract Data: Compensation Event
- **Access to Site**
  - Clause 21
  - Contractor to give access
to Contract Manager and Delegates

**Clause 13**
- Construction can not start without insurances
- Jointly in name of Employer and Contractor
- Period from Start Date to end of Defects Liability Period
- Loss or Damage to Works, Plant, Materials
- Loss or damage of Equipment
- Loss or damage to Property
- Personal injury or death
- If contractor does not provide, Employer may effect
  and deduct

**Clause 1.1 Definitions**
- Fixes beginning of Works and Intended Completion Date
- Possession of Site
- Time stated in Contract Data

**Clause 17**
- Works to be completed by Intended Completion Date
- Possession of Site

---
Flowchart 4: Contents Section A - General

Most of the clauses of the General section refer to Contract Administrative matters, which have the intent to manage and control instructions or any other type of communication having a Contractual impact on the execution of the Works.

Each of the above subjects will be dealt with in some greater detail in the subchapters hereinafter.

A number of additional administrative documents could be added, but are not specifically mentioned in the Conditions of Contract. E.g. Requests For Approval. Usually, the section on technical specifications includes a clause that requires the Contractor to propose suppliers of manufactures items and material sources and suppliers for approval by the Project/Contract Manager. An example of such a request has been included in the Standard Forms as well.

5.1.1 START DATE (CLAUSE 1.1)

Under World Bank conditions of contract the usual practice is that the Employer communicates to the Contract Manager that he may inform the Contractor of the Start Date. The Start Date must be indicated in the Contract Data and is usually defined as a date within a period after issuance of the Letter of Acceptance.

Before the Start Date, the Contractor must have submitted the required policies and certificates of insurances (Clause 13.2)

The significance of the Start Date is that it fixes the Contractual Date of Commencement and, more importantly, the resulting Intended Completion Date of the Works.
After having been informed of the Start Date, the Contractor shall proceed with the Works with due expedition and without delay.

Standard form no. F.1 refers.

5.1.2 INTENDED COMPLETION DATE (CLAUSE 1.1)

The Intended Completion Date is defined in Clause 1.1 of the Conditions of Contract and is specified in the Contract Data. The Contract Manager is the only one that can revise the Intended Completion Date through an extension of time or an acceleration order.

The communication of Start Date includes the Intended Completion Date (See standard form no. F.1)

The Contractor is held to complete the Works before the Intended Completion Date.

Under the conditions of contract, section B, Time Control, the Contract Manager may modify the Intended Completion Date, either through extension or acceleration.

5.1.3 APPOINTMENT OF CONTRACT MANAGER

At the start of the Works the Employer will appoint the person who is to act as the Contract Manager as defined in Clause 1.1. Except where this is otherwise specifically stated, the Contract Manager has the authority to decide upon contractual matters between the Employer and the Contractor in the role representing the Employer.

Standard Form no.F.2 provides a standard format for the appointment of the Contract Manager wherein it is specifically stated what the power and authority of the Contract Manager under the Contract shall be and mentions when prior approval of the Employer is required for the issuing of Instructions or Certificates.

5.1.4 SUB-CONTRACTING (CLAUSE 7)

The Contractor may sub-contract part of the Works (usually a small and/or specialized part) to a sub-contractor with the approval of the Contract Manager. The Contractor has to assure the that sub-contracting small, usually specialized parts of the Works is a matter that doesn’t jeopardize a proper execution of the Works. The Contract Manager may approve sub-contracting of a small and/or specialized part of the Works to a Sub-Contractor.

Secondly the assurance must be that the Sub-Contractor is capable of undertaking the part of the Works assigned to him. In other words the Sub-Contractor must qualify.

However, the Contractor may not assign the Contract to a sub-contractor without the written approval of the Employer.

Sub-contracting does not relieve the Contractor of his obligations under the Contract.

Standard Form no. F.3 refers.
5.1.5 EMPLOYER’S APPROVAL

Under World Bank Conditions of Contract, the instances in which the Contract Manager is not empowered to issue instructions to the Contractor are:

- **Adjusting unit rates** from changes in quantities which cause the Initial Contract Price to exceed 15 percent under Clause 38.2 (Changes in the Quantities);
- **Terminating the Contract** under Clause 59 (Termination);

Standard Form no.F.4 gives the form for requesting the Employer for either of the above named actions.

Nevertheless it should be understood that the constraint of the above is that the consultation process between Contract Manager and Employer takes time. An Employer bound by circumstance to postpone deciding on the Contract Manager’s requests for approval in effect may cause problems on site in case the Contractor expects instructions urgently on whether to go ahead with the execution of work.

It goes without saying that the Contract Manager must establish and maintain excellent channels of communication regarding the Contract, particularly where matters affecting the Contract Price or Completion arise (i.e. Compensation Events or Variations).

5.1.6 POSSESSION OF SITE (CLAUSE 21)

Also, at the start of the Works, the Employer shall, in accordance with Clause 21 of the Conditions of Contract, give possession of the Site, and access thereto, to the Contractor.

The Contract Data should specify the date by which the Employer should have given possession to all parts of the Works. If Possession of Site has not been given by the date stated in the Contract Data, the Contractor is entitled to a Compensation Event.

Standard Form no.F.5 refers.

5.1.7 ACCESS TO THE SITE (CLAUSE 22)

The Contract Manager and his Delegated staff must be allowed access to the Site and any place where work in connection with the Contract is carried out.

5.1.8 INSTRUCTIONS (CLAUSE 23)

Instructions given to the Contractor should be issued in writing. The effect of issuing these in writing is that there can be no disputes at any later stage. It could even be relevant to have such instructions as a written record of past events at the time of having to resolve disputes or even during adjudication proceedings.

In case the Instruction has a cost effect this should be mentioned in the relevant Standard Form. In case the Instruction has an effect on the Time for Completion this should also be mentioned.
According to Sub-Clauses 6.1 and 23.1 Instructions given by the Contract Manager shall only become effective when they are passed in writing. If for any reason the Contract Manager considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause.

The provisions of this Sub-Clause shall equally apply to instructions given by the Contract Manager and any delegate of the Contract Manager appointed pursuant to Sub-Clause 5.1.

Standard Form F.6 refers.

5.1.9 DISPUTES (CLAUSE 24)

Flowchart 5 presents the step-by-step procedure for Disputes.

The nature of Civil Engineering Works can often be unpredictable where it concerns unforeseen site conditions or other unforeseen circumstances. These may prompt the Contractor to argue that he is entitled to additional payment or time. Also Contract Manager’s Instructions or the interpretations of the Conditions of Contract are all causes for the Contractor to request for compensation in the form of extra payment and or extra time. Day-to-day practice is that the Contract Manager has to deal with a, sometimes considerable, number of smaller and larger events, which he has to resolve. It is of prime importance to keep a record of all written communications concerning Compensation Events as it may be necessary to refer to these in case the dispute escalates.

Normally though the Contract Manager will be able to resolve the Contractor’s Compensation Events on site without much need to refer the issues to the Employer, excepting that it is normal practice to copy all correspondence to the Employer in order to keep him informed.

The Contract Manager shall decide that the Contractor is entitled to a Compensation Event under Clause 44, or not. If so, the Contract Manager shall determine whether and by how much the Contract Price should be adjusted and whether and by how much the Intended Date for Completion should be extended.

However in case the Contractor does not accept the decision of the Contract Manager on site a Dispute has arisen and the Contractor then may refer the matter to the Adjudicator stating his disagreement with the decision of the Contract Manager. Such referral shall be issued within 14 days of the Contract Manager’s decision.

The Adjudicator will have to issue a written decision within 28 days of a notification of a dispute.

Should either Party (Contractor or Contract Manager/Employer) fail to accept the Adjudicator’s decision then further communication may lead to the matter being referred to Arbitration. Obviously this will be a path, which neither Party will be desirous to pursue as Arbitration normally takes years and is a costly affair. These procedures fall beyond the scope of this Manual. In any case the approach must remain at all times to resolve Disputes amicably.
Flowchart 5: Procedure for Disputes

5.2 CONDITIONS OF CONTRACT SECTION B – TIME CONTROL

Section A, in combination with the respective Contract Data have fixed the fundamental time issues, such as Start Date and Intended Date for Completion. Based on these data, the Contractor has submitted his bid. Section B – Time Control, provides 6 clauses that aim at controlling time aspects of a contract.

Flowchart 6 below, presents the clauses of the Time Control section of the Conditions of Contract. Of these clauses, clause 28 and 29 have been detailed in flowcharts 7 and 8 respectively.
Flowchart 6: Contents Section C - Quality Control

First of all in Clause 27, a programme is requested, next clauses 28 and 29 allow for extension or shortening of the completion date. Finally, clauses 30, 31 and 32 provide tools to control contract related time aspects.

5.2.1 PROGRAMME (CLAUSE 27)

Section B of the Conditions of Contract deals with issues regarding Time Control. The Employer has fixed the Start Date and the Intended Completion Date in the Contract Data. While preparing his Bid, the Contractor will usually already prepare a tentative programme. Within the time specified in the Contract Data, the Contractor has to submit a programme in accordance with Clause 27 that shows the general methods, arrangements, order and timing for all the activities in the Works.

The programme is usually presented as a bar chart, but also includes general method statements, Site plans and a cashflow forecast.

The Contract Manager should review the programme carefully before giving his approval. Anything can be put on a piece of paper, but the review should carefully analyze whether the activities in the programme are complete, whether they can start at the indicated times, whether the resources are sufficient to actually finish a task within the time presented, etc.

Most importantly, the programme should show that the Works will be completed at the Intended Completion Date. A number of software packages, which allow monitoring of project progress are available. MS-Project is one that is relatively easy to use and sufficiently detailed for small works, whereas packages like Primavera are more sophisticated. However, bar-charts and PERT-CPM diagrams...
can also be made manually. Any variations to the Works (see chapter 5.4.2) must be incorporated in the updated programmes.

### 5.2.2 Extension of Intended Completion Date (Clause 28)

Reference is made to flowchart 7, below, for a step-by-step approach of extension of the Intended Completion Date.

**Flowchart 7: Extension of Intended Completion Date**
Sub-Clause 28.1 (Extension of the Intended Completion Date) specifies that the Contract Manager shall extend the Intended Completion Date if a Compensation Event or a Variation has occurred, which makes it impossible to complete the Works before the Intended Completion Date.

Sub-Clause 28.2 then clarifies that the Contract Manager decides whether and by how much the Intended Date for Completion shall be extended.

If the Contractor has given an early warning (Clause 32), he shall be entitled to full time extension. However, if he has failed to do so, then the delay by his failure shall not be considered in determining the new Intended Date for Completion.

Standard Form no.F.7a presents the prescribed format for the Certificate of Extension of Time for Completion.

5.2.3 ACCELERATION (CLAUSE 29)

Reference is made to flowchart 8, below, for a step-by-step approach of acceleration process.

It is possible for the Contract Manager to instruct the Contractor to complete the Works before the Intended Completion Date. In this case he will instruct the Contractor to prepare a priced proposal in accordance with Clause 29.1. If the Contract Manager accepts such a proposal, the Contract Price shall be adjusted and this shall be treated as a Variation (Clause 29.2). For this purpose the Contract Manager will also issue a certificate (Refer to Section 5.2 Completion and Standard Form No.F.7b)
Flowchart 8: Procedure for acceleration of Works

5.2.4 DELAYS (CLAUSE 30)

The Contract Manager may instruct the Contractor to delay the start or progress of any activity within the Works. Such an Instruction shall be treated as a Compensation Event under Clause 44.1 item c.

5.2.5 MANAGEMENT MEETINGS (CLAUSE 31)

Either the Contractor or the Contract Manager may request the other to attend a Management Meeting (Clause 31.1) in which the progress of the Works and the plans for remaining work shall be reviewed. The Contract Manager will prepare minutes of such meeting and distribute these to the attendants of the meeting and to the Employer (Clause 31.2). A sample agenda and minutes of such meetings is attached as Standard Form F8.
5.2.6 EARLY WARNING (CLAUSE 32)

In accordance with Clause 32.1 it is the obligation of the Contractor to warn the Contract Manager at the earliest opportunity of any likely event, which will adversely affect time, quality or cost of the Works. If the Contractor does submit such an early warning, the Contract Manager shall take this into consideration when assessing the effect on the contract price or time for extension caused by the event.

The Contractor shall not be entitled to additional payment that could have been avoided by giving an early warning (Clause 40.5).

5.3 CONDITIONS OF CONTRACT SECTION C – QUALITY CONTROL

Section C of the conditions of contract deals with Quality Control. This part of the conditions only covers 4 clauses, which are presented in flowchart 9. Quality of the works must be totally specified in the Technical Specifications or Requirements. The specification is best referred to through International or National Standards. Such Standards also specify the testing norms to which materials or works must comply.

The procedures for identification and correction of Defects are presented in flowchart 10 on page 21.
5.3.1 IDENTIFYING DEFECTS (CLAUSE 33)

It is the Contract Manager’s task to check the Contractor’s work and notify him of any Defects that are found. Even though, the Contract Manager may observe the works quality or workmanship while he supervises the works, he will usually hear the Contractor’s reply: “we are not yet finished”. For this reason, it is good practice to request the Contractor to submit a detailed Method-statement of work in which he describes all steps and resources involved in an activity. During execution of the activity the Contract Manager’s staff will check that the activity is carried out
strictly in accordance with the method statement. When he has completed the activity in a certain section, the Contractor will request the Contract Manager to come and inspect this part of the works. He will usually do this by means of a Request for Inspection of RFI.

**Request for Inspection (RFI)**

The Contract Manager, and any person authorized by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.

Essential also during the carrying out of the Works, is that the Contractor shall not continue with a next phase of work until the Contract Manager has been given an opportunity to inspect such part of the Works and has given permission to the Contractor to proceed with the next phase of the Works. Examples are the pouring of concrete. This should only go ahead after the Contract Manager’s Inspectors have inspected the reinforcement. Or for instance the Contractor shall not proceed with placing asphalt bitumen until the Inspectors have inspected the base materials, compaction and lines and levels thereof.

Standard Form no. F.9 provides the format for the Contractor’s request to the Contract Manager to inspect (part of) the Works.

5.3.2 **TESTS (CLAUSE 34)**

As mentioned previously, the Technical Specifications detail the quality of work to be carried out. In the Specifications also the tests to be carried out on works and materials are specified. However, the Contract Manager may order tests additional to those specified in the Technical Specifications. If he does, and the test shows that the work are deficient, then the Contractor has to pay for the tests and any samples. If, on the other hand, the tests show that the works comply with the ordered test, the Test shall be treated as a compensation Event (see chapter …).

5.3.3 **CORRECTION OF DEFECTS (CLAUSE 35)**

A Defect is any part of the Works that does not comply with the Contract. The Defects Liability Period is specified in the Contract Data and starts upon Completion of the Works. The Contract Manager must prepare a list of Defects and give it to the Contractor before the end of the Defects Liability Period. The Defects Liability Period is extended until all Defects have been corrected.

Every time he informs the Contractor of a Defect, the Contract Manager must specify the time allowed for correction of the Defect.

**Defects Liability Period**

The Defects Liability Period is period named in the Contract Data. Usually this period is 365 calendar days, calculated from:

a) the date of Completion of the Works certified by the Contract Manager in accordance with Clause 55, or
b) in the event of more than one certificate having been issued by the Contract Manager under Clauses 2.2 and 55, the respective dates so certified.

In accordance with Clause 35 and the definition of a “Defect”, the Contract shall not be considered completed until a Defects Liability Certificate shall have been signed by the Contract Manager and delivered to the Employer, with a copy to the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Contract Manager’s satisfaction. Furthermore, Clause 35.4 of the Contract Data explicitly confirms this fact. The Contract Manager must issue the Defect Liability Certificate within 28 days after expiration of the Defects Liability Period of the expiration of the latest date under (b) above.

The Conditions of Contract also mention a Defects Correction Certificate (Clause 11). Therefore, the Defects Liability Certificate should clearly mention that it serves as the “Defects Correction Certificate” as well.

Standard Form no.F.10 gives the format for the Defects Liability Certificate to be followed.

5.3.4 UNCORRECTED DEFECTS (CLAUSE 36)

If the Contractor does not correct the Defect within the period given to him, the Contract Manager will determine how much the correction will cost and the Contractor shall pay this amount.

5.4 CONDITIONS OF CONTRACT SECTION D - COST CONTROL

Small works usually concern re-measurement contracts in which a Bill of Quantities is given and the contractor quotes a unit rate for each Bill item. At the tendering stage the Quantities in the Bill of Quantities are indicative. The final quantity and thus the final Contract Price can only be determined after exact measurement of the contract items.

5.4.1 CHANGES IN QUANTITIES (CLAUSE 38)

See flowchart 10, on page 24, for a step-by-step illustration of the procedure for changes in quantities.

The Contract Manager may change the quantities stated in the Bill of Quantities in accordance with Clause 38 of the Conditions of Contract and subject to the limitations of his authority.

If the quantities of one item vary by more than 25% AND the change exceeds more than 1% of the Initial Contract Price, the Contract Manager shall adjust the unit rate to allow for the change. (Clause 38.1)

However, if the change of the unit rate because of variation in quantities causes the Initial Contract Price to be exceeded by more than 15%, the Contract Manager requires the Employers specific written approval (clause 38.2). For this case, Standard Form no. F.4 has been annexed as a sample.

When adjusting unit rates, the Contract Manager must always bear in mind the considerations and conditions that prevailed when the Contractor prepared the
Bid and determined his unit rates. The Contract Manager may request the Contractor to submit detailed breakdowns of the unit rates (clause 38.3)

5.4.2 VARIATIONS (CLAUSE 39)

See flowchart 12 on page 28, for a step-by-step illustration of Variations and payment for Variations. The definition of a Variation is given in Clause 1 of the Conditions of Contract. The Contract Manager may give an instruction that varies the form, quality or quantity of the Works or any part thereof and the Contractor shall do any of the following:

- increase or decrease the quantity of any work included in the Contract,
- omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor),
- change the character or quality or kind of any such work,
- change the levels, lines, position and dimensions of any part of the Works,
- execute additional work of any kind necessary for the completion of the Works,
- change specified sequence or timing of construction of any part of Works.

Flowchart 9: Procedure for variation of quantities

Usually, the tender documents are accompanied by a Design Document, which includes the criteria used in the design phase. If the Contract Manager intends to
make modifications to the designs, he should always do this taking into consideration the original design criteria.

Such variation shall not invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 40. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.

All variations and any additions to the Contract Price which are required to be determined in accordance with Clause 40, shall be valued at the rates and prices set out in the Contract if, in the opinion of the Contract Manager, the same shall be applicable. However, if the final quantity of varied work differs from the quantity for that particular item in the Bill of Quantities by more than 25% and the change exceeds 1% of the Initial Contract Price, the Contract Manager is obliged to obtain the prior approval of the Employer.

If the Contract does not contain any rates or prices applicable to the varied work, the Contract Manager may request the Contractor to submit a quotation, within 7 days, in the form of new rates for the relevant items of work, for carrying out the Variation.

Should the Contract Manager consider that the Contractor’s quotation for the Variation is not reasonable, he may order the Variation and change the Contract Price based on his own forecast of the effects of the Variation on the Contractor’s costs.

If the above-described process, in the opinion of the Contract Manager, may cause delays to the work, no quotation shall be given and the Variation shall be treated as a Compensation event.

Standard Form no.F.11 applies to Variations and should indicate whether the Variation has any effect on the time allowed for the performance of the Contract.

Even though the Contract Manager is not required to obtain explicit approval for Variations, except in case of variation of unit rates under Clause 38.1, he is expected and obliged to inform the Employer continuously of any intended Variation and its process.

When an updated programme is submitted in accordance with Clause 27.2, it shall include an updated cash-flow forecast (Clause 41.1).
Flowchart 10: Variations and Payment for Variations

5.4.3 PAYMENT CERTIFICATES (CLAUSE 42)

Flowchart 13 on page 29, presents the step-by-step procedure for payments to the Contractor.

Payment Certificates

In accordance with Sub-Clause 42.1 (Payment Certificates) the Contractor shall submit to the Contract Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously. The Contractor’s statement shall include the complete set of bill of quantities with the quantities that the Contractor considers he has completed. Attached to the bill of quantities the Contractor will present a measurement sheet to justify each quantity inserted in the Bill of Quantities.
The Contract Manager shall check the Contractor’s monthly statement and deliver to the Employer a Payment Certificate stating the amount of payment to the Contractor, in accordance with Sub-Clause 42.2.

The Contract Manager determines the value of work executed (Clause 42.3). He may do this based on his own estimate of completed works, or based on measurement sheets.

The value of the work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed (Clause 42.4) as well as the valuation of Variations and Compensation Events (Clause 42.5).

Standard Form no.F.12.(a) provides the prescribed format for setting up of the Summary Sheet(s) for the Payment Certificates (PC’s). To obtain a structured overview the IPC Summary Sheet is grouped into the following sections.

- **Key Data**
  
  Under this section general data provides all key-dates of interest to the state of the Contract, such as the Start Date, the Intended Completion Date or any revision thereof.

- **Contract Sum**
  
  Providing key financial data concerning the Contract Sum.

- **Calculation of Payment**
  
  Starting with the normal B/Q Bills, Daywork, Variations, Compensation Events and Specified Provincial Sums, which all lead up to the total Value of the Measured Permanent Work. Further additions may comprise: Materials on site, Plant on site insofar intended for incorporation in the Works Interest on Late Payments (if any) and possible Adjustment of Prices (as per Sub-Clause 47.1 of the Conditions). Deductions may include the Repayment of the Advance, withholding of Retention money, and Liquidated Damages (if any).

- **Payment of IPC in various currencies**
  
  Contracts conducted under foreign Donor assistance usually permit the Contractor to request part payment in one or more foreign currencies. Payment of these foreign currencies will be mostly against a foreign exchange rate fixed as being the currency rate prevailing at a given date (usually 30 days) prior to the date of submitting Tenders. Therefore in the IPC there will be a calculation dividing payment amongst the various currencies.

  The fixed percentages used for normal measured work cannot be used for the Variation of Prices. This as the percentage applied to consumables and materials depends on the source of procurement. As is further dealt with in Sub-Chapter 5.2.6.

- **Key Percentages**
  
  Percentages provide an executive overview showing the state of progress. Two percentage figures are applied being: the increase or decrease of the Contract Sum and the accumulated value to date versus the revised Contract Sum.

  Following the Summary Sheets the Payment Certificate will contain many pages detailing the values of measured work, additions/deductions. The
relevant calculations should be presented in tables presenting the calculations per subject, starting with the Bill of Quantities, the Daywork Schedules (if there is any Daywork) and so on, all as further set out in the next Sub-Chapters.

**Measurement Sheets (Clause 42.1)**

Measurement Sheets are kept as a record of the measurement and calculations of the quantities or the amounts of Work Items performed during the relevant period covered by the IPC.

Standard Form no.F.12.(b) provides a Sample.

**Dayworks (Clause 53)**

A Daywork Summary Sheet is kept to keep an overview of all Daywork Orders issued. Indicating dates of issue, start and finish of Daywork. Total Cost and labour, plant and equipment, materials.

Underlying this Summary Sheet are Daywork Cost Summary Sheets detailing the records of numbers and quantities of inputs for each Daywork job. Like labour, equipment and materials.

Reference should be made to Standard Forms nos. F.12.(c) and (d).

**Variations (Clause 40)**

Apart from Standard Form no.F.8 there are special Measurement Sheets detailing the calculation of quantities and amounts of all Variation Orders. The result of these calculations is applied in the Payment Certificates.

Standard Form no. F.12.(e) provides a Sample format.

**Materials and Plant on Site**

The Contractor already incurs costs when supplying to site the necessary construction materials, goods or parts. The Conditions of Contract do not specifically mention part payment for such materials, but the Contract Manager may consider that such materials constitute part of the value of work executed. Usually payment amounts to 70% of the value of these materials on submission of satisfactory documentary evidence (invoices, bill of lading, etc). With payment to the Contractor through the Payment Certificates the relevant materials become the property of the Employer.

Similarly when the Contractor procures plant or equipment, for incorporation in the permanent works, he is permitted to claim part payment thereof through the Payment Certificates. An example of such plant is: pumping equipment to be incorporated in a pumping station.

Standard Forms nos. F.12.(f) and F.12.(g) provide Samples for the calculation of the value of materials on site or plant on site.

**Repayment of Advance (Clause 51)**

Standard Form no.F.12.(h) provides a Sample for calculating the repayment of the Advance. Usually the percentage for the Advance Payment is 10%, but there are instances where up to 30% Advance Payment is being applied.
In accordance with Clause 51 of the Conditions of Contract it is stipulated that the advance payment will be repaid in amounts proportional to the payments made to the Contractor. The Contractor is required to demonstrate with evidence that he has spent the advance payment only for payment of Equipment, Plant, Materials and mobilization expenses, specifically for the Contract.

More specific details may be given in the Contract Data.

Compensation Events (Clause 44)

Similarly Standard Form no. F.12.(j) provides a Sample format for the measurement of Compensation Events.

Price Adjustment (Clause 47)

Another issue to be taken into account is the Variation of Prices (Escalation). Under the relevant Clause certain consumables or materials prone to price escalations, such as diesel or cement, will be re-imbursed to the Contractor on the basis of escalated prices as may be published by the National Statistical Department. Payment of the Price Adjustment though doesn’t follow the fixed percentage division between local and foreign currencies, but depend on whether the subject consumable or material is bought locally (payment 100% local currency) or imported from abroad (payment 100% FC).

Therefore separate calculation sheets are maintained to calculate the relevant Price Adjustments. Standard Forms nos. F.12.(k) and (l) provide a Sample of these calculations.
Flowchart 11: Procedure for Payments to the Contractor

5.4.4 PAYMENTS (CLAUSE 43)

After the Contract Manager has certified the payment, the Employer shall pay the certified amount to the Contractor within 28 days. If the payment is later than 28 days, the Contractor shall be entitled to payment of interest in the next payment.

Retention (Clause 48)

The Employer shall retain the amount specified in the Contract Data from each payment. (Clause 48.1). Upon completion of the whole works, the Employer shall
repay 50% of the total retained amount. The balance 50% shall be repaid to the Contractor after the Defects Liability Period has passed. (Clause 48.2).

On completion of the whole works, the Contractor may substitute retention money with an “on demand” bank guarantee.

**Liquidated Damages (Clause 49)**

The Contractor is contractually held to complete the Works by the Intended Completion Date of the Works. Failing to complete the Works in time the Contractor will have to accept the deduction from payments due to him, of liquidated damages. In accordance with Clause 49 the amount of liquidated damages per calendar day and the limit of the total liquidated damages deductible will be defined in the Contract Data.

Standard Form no.F.12.(i) provides a Sample calculation sheet for Liquidated Damages.

5.4.5 **COMPENSATION EVENTS.**

A step by step procedure of Compensation Events is given in Flowchart 14 on page 35.

The following are considered Compensation Events (Clause 44):

- The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data (Sub-Clause 21.1).
- The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- The Contract Manager orders a delay (Sub-Clause 30.1) or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- The Contract Manager instructs the Contractor to uncover or carry out additional tests upon work, which is then found to have no Defects. (Sub-Clause 34.1)
- The Contract Manager unreasonably does not approve a subcontract to be let.
- Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site investigation reports), from information available publicly and from a visual inspection of the Site. Again, the Contract Manager is advised to refer to the design document and criteria before making a decision on this matter.
- The Contract Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety of other reasons.
- Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- The advance payment is delayed
- The effects on the Contractor of any of the Employer’s Risks.
- The Contract Manager unreasonably delays issuing a Certificate of Completion.
- Other Compensation Events described in the Contract or determined by the Contract Manager shall apply (Sub-Clause 40.4).

The Contract Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

As soon as such an event occurs, the Contract Manager expects the Contractor to react competently and promptly to it by gathering and submitting information demonstrating the effect of each Compensation Event upon his forecast cost.

The Contract Manager will assess the Contractor’s information and may adjust the Contract Price based on his own forecast, if he considers the Contractor’s forecast unreasonable.

If the Contractor has failed to give early warning in accordance with Clause 32 and the effect has adversely affected the Employer’s interests, or the Contractor has not cooperated with the Contract Manager, he will not be entitled to compensation.

Standard Form no. F.13 provides the format for the documentation of a Compensation Event.
DAYWORK (CLAUSE 53)

The Contract Manager may, if in his opinion it is necessary or desirable, issue a written instruction, under Sub-Clause 53, that any varied work shall be executed on a Daywork basis. Dayworks are small additional amounts of work.

The Contractor records Daywork on forms approved by the Contract Manager. The Contract Manager has to sign the Daywork sheets within two days of the works being carried out.

The Contractor shall then be paid for such varied work under the terms set out in the Daywork schedules included in the Contract and at the rates and prices affixed thereto by him in the Tender.
Standard Form no.F.14 provides texts to make it clear to all parties what the rules governing Daywork are.

5.5 CONDITIONS OF CONTRACT SECTION E – FINISHING THE CONTRACT

When the Works have been Completed, a number of activities need to be undertaken to “wrap-up” the Contract.

5.5.1 COMPLETION (CLAUSE 55)

When the Contractor considers he has completed the Works, he shall request the Contract Manager to issue a certificate of Completion. The Contract Manager will decide whether of not the Works have been completed.

Strictly speaking, two types of completion can be distinguished: (i) Sectional Completion of a section of the Works, (ii) The completion of all contractual obligations at the end of the Defects Liability Period. The Completion of the Defects Liability Period will be addressed later on.

Standard Form no.F.15 gives the format for the Completion Certificate of Sections of the Works. This Form refers in particular to the specification for Completion of a Section or Part of the Works in the Contract Data under Clause 2.2. An integral part of this Certificate is the List of Defects. This list normally is the result of an inspection of the relevant Section of the Works performed jointly by representatives of the Employer, the Contract Manager and the Contractor. The object is to ascertain whether the relevant Works have indeed been completed and if so whether still any Defects need to be corrected by the Contractor during the Defects Liability Period of the Works. In any case the Contractor shall provide an undertaking that he will correct the Defects with due expedition.

The Contract Manager shall not unreasonably withhold the Completion Certificate. If he does, the Contractor is entitled to a Compensation Event under Sub-Clause 44.1.(k).

Standard Form no.F.16 is much similar but concerns the Completion of the whole of the Works.
6 Reports and records

6.1 GENERAL

One of the prime requirements of construction supervision is to be very much aware of the importance of records. Though the attitude of some is that to put everything down on paper and then to keep this in file is all too tedious, then they have simply missed the message.

The Contract Manager should:
  ▪ See to timely preparation of reports
  ▪ See that all parties sign records
  ▪ See to issuing of records

The Project Director should:
  ▪ ensure timely preparation of reports

Records are meant to fix progress of activities, staff availability, circumstances, agreements with the contractor and other parties and so on and are important for communication with the Employer, but also for the Contract Manager, for example when problems occur after some time.

Mere oral communication doesn’t stand up in court. To say: I said this, and he said that at the time is simply not good enough as it can’t be verified whether recalling what one said is really correct. Hence the important thing in contract administering is: records, record and again records!

A record is everything one keeps on paper. So this includes the earlier Contract Administrative Documents dealt with, as well as all kind of Certificates. It is excellent custom to sign and date all records.

This Chapter deals with typical administrative reporting papers, which so far haven’t been dealt with. These include:
  ▪ Minutes of Meetings
  ▪ Daily Log Sheets
  ▪ Progress Reports

6.2 MEETINGS

After Award of Contract, parties hold the First-construction meeting to coordinate and agree procedures during the construction phase.

The First-construction meeting should address issues, which should be known to both parties, and which must be agreed and recorded.
Standard Form no.F.17 provides a standard layout for the First-construction meeting.

Once the Works have started, practice within civil works contracts is that there are two types of meetings, being:

- Works Meetings between the Contract Manager and the Contractor, and possibly attended by the Employer as well, and
- Supervision Meetings between the Employer, the Contract Manager and Sr. Supervisory Staff.

Standard Form no.F.8 provides a standard layout for providing a record of matters discussed and the action agreed upon in the form of “Minutes of Meeting”. The relevant standard format for the Minutes of Meeting is of course applicable to all types of Meetings.

Prior to a meeting with the Contractor, the Contract Manager will normally have a staff meeting to inform himself of latest occurrences, developments and issues to be discussed in the meeting with the contractor.

**6.3 DAILY LOG SHEETS**

As already stated in Sub-Chapter 6.1 (General) records are important and in particular maintaining a system of Daily Records is of paramount importance because it keeps a chronological track of the day to day progress, work conditions, input of Contractor’s resources, constraints, delays (if any) and so on.

Daily Records represent the only practical means to be able to find out (much) later what happened on any particular day of the execution of the Works.

Standard Form no.F.18 gives the format for such Daily Record Sheets.

Though category’s of Labour and Plant and Equipment are indicated on the Form these are merely intended to provide a sample. The relevant listing of Labour, Plant and Equipment should be corrected to fit the actual categories of Labour, Plant and Equipment on the subject Works.

**6.4 PROGRESS REPORTS**

Progress reporting is a tool, which enables all parties: Contractor, Contract Manager/Employer to obtain an overview of the state of progress and any delays and other difficulties. An essential part of progress reporting is also the Planning of the Works. On the basis of all such information timely action can be undertaken to accelerate the progress if so required. Without progress reporting one simply would have no idea as to where the project is heading.

Usually, the Contract Manager has to submit monthly reports to the Employer. However, the Contract Manager may be requested, or may find it necessary himself, to keep weekly records. An example for such weekly reports is given in Standard Form no. F.19.

Standard Form no.F.20 provides the format and guidelines for setting up Monthly Progress Reports. Sometimes the Terms of Reference will also require the submission of Quarterly Reporting or Annual Reporting. However these reports
should contain very much the same information provided in the Monthly Progress Reports.

Normal practice on site should be that the Contractor submits his Monthly Progress Report to the Contract Manager. In this report the Contractor has the opportunity to highlight any difficulty he incurs in undertaking the works, reasons for delays (if any) and information on possible disputes and claims.

The Contract Manager will then incorporate the Contractor’s information in his own report. Hereby the Contract Manager should not merely copy the Contractor’s report but he should write his own report. In this report he should also report on the Consultant’s own activities during the month.

The Monthly Progress Report should cover the following main chapters:

- General Project Data
- Progress and Planning
- Financial
- Contractor’s Resources
- Constraints and Claims
- Quality Control
- Miscellaneous
- Consultant’s Report

Form F.18 indicates in Italics (and in red) suggestions regarding the issues each chapter should cover.

The Chapter on Progress Indicators should provide percentage indicators and comparative S-curves concerning the physical and financial progress.
Standard Form F.No. 1. Start Date
Standard Form F.No. 2. Appointment of Contract Manager
Standard Form F.No. 3. Sub Contracting
Standard Form F.No. 4. Request for Approval
Standard Form F.No. 5. Possession of Site
Standard Form F.No. 6. Contract Manager’s Instruction
Standard Form F.No. 7. Extension of Intended Completion Date
Standard Form F.No. 8. Minutes of Meeting (Annex 2)
Standard Form F.No. 9. Quality Control (Request for Inspection)
Standard Form F.No. 10. Defects Liability Certificate
Standard Form F.No. 11. Variation
Standard Form F.No. 12. Payment Certificate (a to j)
Standard Form F.No. 13. Compensation Event
Standard Form F.No. 14. Daywork Instruction
Standard Form F.No. 15. Completion Certificate (Section)
Standard Form F.No. 16. Completion Certificate
Republic of Yemen  
Ministry of Agriculture and Irrigation  
Irrigation Improvement Project

<table>
<thead>
<tr>
<th>Contract Manager:</th>
<th>Project Name:</th>
<th>Works Contract No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Contract Manager</td>
<td>Name of Project</td>
<td>Number</td>
</tr>
</tbody>
</table>

| Contractor: | |
|-------------| |
| Name of Contractor | |

### START DATE

To: Name and  
   address of Contractor

Having received the Project Manager’s approval of the insurance policies and certificates, duly submitted vide your letter (insert ref.no.) dated (insert date). You are herewith informed that the Start Date (Clause 1.1, Conditions of Contract and Contract Data) of the Works is:

(date)

You may commence the Works as soon as is reasonably possible with due expedition and without delay.

It is hereby also confirmed that the Intended Completion Date being (number) Calendar Days from the date of the Letter of Acceptance shall be:

(date)

Signed: ________________  
Ministry of Agriculture and Irrigation  
Project Management Unit  
(Employer)

cc – the Contract Manager (Name of Contract Manager)

(Contract Manager’s Logo)
Republic of Yemen  
Ministry of Agriculture and Irrigation  
Irrigation Improvement Project

| Contract Manager:  
Name of Contract Manager | Contractor:  
Name of Contractor | Project Name:  
Name of Project | Works Contract No. Number |
|-------------------------|------------------|------------------|-------------------------|

**APPOINTMENT OF PROJECT MANAGER**

To: Name and address of Engineer

In accordance with Clauses 1.1. and 4.1. of the Conditions of Contract you are hereby appointed to act as the Contract Manager under the Terms of the Contract.

Name of Works Contract

In accordance with Clause 1.1. you shall carry out the duties as specified in the Contract. Furthermore, in accordance with Clause 4.1. we hereby delegate to you the duties and authority vested in the Project Manager, excepting the following as stated in Part II – Conditions of Particular Application:

- Adjusting unit rates from changes in quantities which cause the Initial Contract Price to exceed 15 percent under Clause 38.2 (Changes in the Quantities);
- Terminating the Contract under Clause 59 (Termination);

Appropriate action on the above named Clauses shall only be executed by you upon due consultation with us, and our subsequent approval to act accordingly.

Signed: ____________________________

Ministry of Agriculture and Irrigation  
Project Implementation Unit  
(Employer)

cc – Contractor (Name of Contractor)
Republic of Yemen  
Ministry of Agriculture and Irrigation  
Irrigation Improvement Project

<table>
<thead>
<tr>
<th>Contract Manager:</th>
<th>Contractor:</th>
<th>Project Name:</th>
<th>Works Contract No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Contract Manager</td>
<td>Name of Contractor</td>
<td>Name of Project</td>
<td></td>
</tr>
</tbody>
</table>

**APPROVAL FOR SUBCONTRACTING**

To: *Name and address of Contractor*

Having received your written application vide your letter ref. ......, dt. ........, for our approval of Subcontracting part of the works, we hereby confirm to have duly considered the details of your submission. The relevant details of the proposed Company have included:

- Its financial status
- Number of personnel employed (by category)
- Experience record
- List of equipment and plant in possession by the Company

As a result and in accordance with Clause 7.1 of the Conditions of Contract, we hereby approve the appointment as your Sub-Contractor named hereinafter:

*(Name of Sub-Contractor)*

to undertake the following part(s) of the Works:

*(Describe the relevant sub-contracted works)*

Please be reminded hereby that this consent does not alter your obligations.

Signed: __________________

Contract Manager

cc – the Employer

*(Contract Manager’s Logo)*
To: Ministry of Agriculture and Irrigation
   Irrigation Improvement Project – Project Management Unit
   …… Road
   P.O.Box …,
   Sana’a

Dear Sir,

In accordance with the Conditions of Contract the Contract Manager shall obtain the specific approval of the Employer before instructing the Contractor to conduct work or carry out instructions all as stipulated in the said Conditions.

In this respect we hereby duly request you, in accordance with the terms of the above Works Contract, to give your approval for us to proceed with the issue to the Contractor of the following document marked hereinafter.

- Adjusting unit rates from changes in quantities which cause the Initial Contract Price to exceed 15 percent under Clause 38.2 (Changes in the Quantities);
- Terminating the Contract under Clause 59 (Termination);

The relevant document requiring your due consideration and approval is attached hereby. Kindly will you, in case of your Approval, sign this Request for Approval, returning one copy to us.

Signed: _____________________
   Contract Manager

Approved: ____________________________
   Ministry of Agriculture and Irrigation
   Project Management Unit (Employer)
2 Reports and Records

Standard Form F.No. 17. Minutes of meetings
  a. Pre construction meeting
  b. Management Meetings

Standard Form F.No. 18. Daily Log Sheets

Standard Form F.No. 19. Progress Reports