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5 CONTRACT COMMENCEMENT

At the beginning of a project there are many tasks to be undertaken by the various parties. Failure to do so will invariably lead to problems "down the line". This section deals with those initial tasks.

5.1 DIVISIONAL HAND OVER

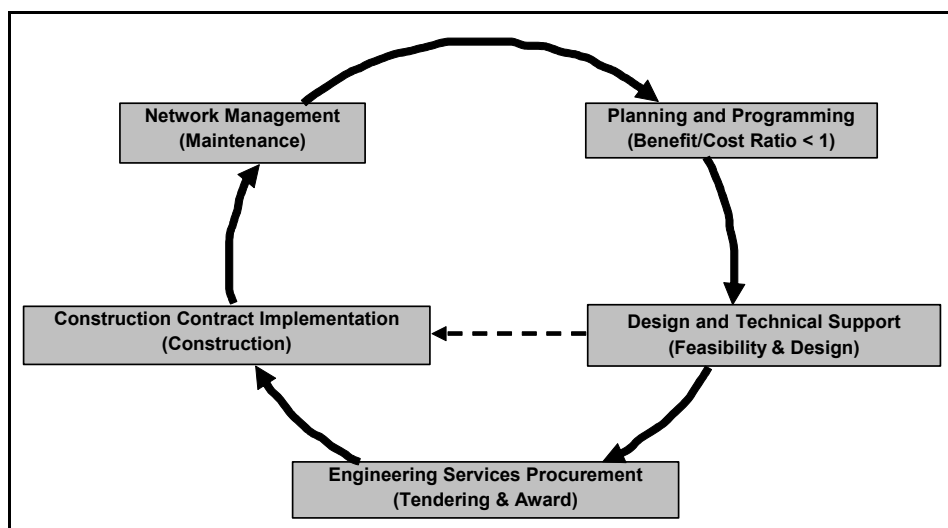
5.1.1 Introduction

The process of identifying, designing, tendering, constructing and finally maintaining a project, in ERA's case a road or bridge, involves many different departments, divisions, branches and districts. Each has its own distinct function in the process but each is also dependent on its preceding function. Within the ERA organisation a Project Engineer is designated to manage each phase of the project. As the PE is assumed, by Management, to be responsible for that phase of the project it is essential that Management officially give the PE the authority necessary to properly manage the project.

The Project Life Cycle provides a logical view of the sequence of stages, which a project must go through to fulfil its objective or objectives. Each stage involves specific activities, all of which must be completed before the project is allowed to move to the next stage. There is, in the excitement to complete a project, a tendency to want to rush the project on to the next stage but this can cause serious problems for the project. Thus, the idea of a "gate" between stages must be introduced and project managers must ensure that all that is needed before progressing through the gate has been done. Some typical problems, which occur as a result of moving on too quickly, are:

- Authorisation for spending may not be approved causing later difficulties with the Client.
- Design may not be sufficiently completed, leading to changes and increased costs later.
- Statutory approval may not be in place, causing delay whilst this is sorted out.
- The site may not be accessible, leading to construction delays and claims

The cyclical nature of projects and the inter-divisional relationships, within the ERA structure are depicted in the diagram below.



5.1.2 Hand Over

To ensure the successful implementation of a project it is essential that, as and when each new function is commenced, the people involved in that function have at their disposal all of the information pertaining to the preceding functions. This will ensure continuity of the project thinking and decision making. In practice, there is little or no communication between the various branches. Notwithstanding this lack of communication it is essential that each "down stream" branch has an intimate knowledge of all of the information, correspondence, thinking, constraints etc. developed and decided upon during the preceding phase and which is required to be continued through to completion of the project.

In order for these Hand-Overs to be complete and effective they should take the form of formal minuted meetings between branches. In addition to the hand over of physical documentation, drawings and computer records, these meetings should include the presentation of an oral and written history of the project up to that point in time.

Although all of the Hand-Overs are addressed below, more emphasis has been placed on items 5.1.2.2, 5.1.2.3 and 5.1.2.4 as these concern the commencement, implementation and completion phases of each construction project.

5.1.2.1 Planning & Programming to Design and Technical Support

The PPD, via the PMS, will identify that maintenance of a road at a certain level is no longer economically viable and that further intervention in the form of a future project is necessary.

Today ERA has its own design manuals and specifications for both roads and bridge works and accordingly this element of the information required for a new project, by DTSB requires no further definition. References to some of the ERA standard design manuals have been included in Chapter 9. In addition and as a complement to these documents there is also the new Project Planning and Procurement Manual produced under the same appointment as this manual.

What is required, however, is the PPD's definition of the project and the classification of the road type i.e. is the project intended to be routine maintenance, periodic maintenance, rehabilitation etc. or what extension of the road's life is expected to result from the intervention etc. In addition they should also provide any strategic considerations which may impact on the design, the source of the project's funding, the programmed implementation programme, dates and details of last interventions, current condition and levels of traffic.

On the basis of the information provided it will be necessary for the DTSB to prepare terms of reference and bid documents for a Consultancy contract and, once appointed, to supervise the project's design. Failure to do so will, in all likelihood, result in an under or over designed project which does not contribute to ERA's strategic development goals.

It must be remembered that although the Environmental Monitoring and Safety Branch and RoW branch fall under the PPD and CCID's respectively they form an integral part of the Design and Technical Support Division during the project's design stage. If the Environmental and RoW branches are not included at this stage delays and difficulties during the construction stage are sure to be experienced.

The Environmental Monitoring and Safety Branch plays a crucial role during the briefing on the new project and handing over of information to DTS and ESP branches. All available details of the scope and scale of the impact of the project and the procedures to be followed for the mitigation of these impacts must be provided at hand over. For further detailed information reference should be made to the Environmental Manual produced under the same appointment as this manual.

5.1.2.2 Design and Technical Support to Engineering Services & Procurement

Prior to the commencement of the actual project's design, the DTSB will have had to procure the services of the design Consultant, in accordance with ToR prepared by the DTS Branch.

The actual design of a project and the preparation of the tender documentation including the Conditions of Particular Application, Special Specifications and Bills of Quantities are prepared under the guidance and supervision of the DTSB.

The ESP branch then implements the procurement process which comprises:

- Publication of General and Special Procurement Notices
- Publication of Invitations to Bid
- Issue of Bidding Documents
- Receipt and Evaluation of Bids
- Contract Negotiations
- Contract Award

In order to implement the procurement process it will be necessary for the DTSB to highlight, for the purpose of checking compliance of the documents with EPA, ERA and Funding Agency requirements, all "out of the ordinary" aspects of the project, its design, conditions of contract, special specifications, bills of quantities and environmental and social impacts.

In addition the ESPB must satisfy themselves that all issues related to; RoW, the environment and project funding will be resolved prior to the award of the contract or, failing resolution, that they will not result in any delays to the project once commenced.

For further detailed information reference should be made to the Project Planning and Procurement Manual produced under the same appointment as this manual.

5.1.2.3 Design and Technical Support + Engineering Services Procurement to Construction Contract Implementation

It is important that pre-construction divisions communicate with CCID during the Pre-Construction Stage. It is essential that CCID have an intimate knowledge of the events which lead to the award of a contract.

The meeting between the CCID and the ESP and TS Branches will entail handing over a complete set of tender documents, copies of all post tender correspondence, copies of minutes of all post tender meetings, details of any important considerations during the tender evaluation period, any other details of post tender decisions, agreements and the Contract Document including the Letter of Acceptance (see 3.2), construction drawings and RoW authorisations¹ etc. The meeting and its agenda are discussed under 5.1.3 below

5.1.2.4 Construction Contract Implementation to Network Management.

When the Works have been completed except for minor deficiencies which do not impair the function of the Works as a whole, they can be considered to be substantially complete, and the TOC issued.

¹ At the time of preparation of this manual the ERA system only commenced the clearing of the ROW after the award of a construction contract. This invariably leads to delays and claims and it is hope that prior to the finalisation of this manual that this system will be revised to ensure that the ROW is cleared prior to award of contract.

One of the most important effects of the issue of a TOC is that the responsibility for the care of Works, including normal maintenance, is no longer carried by the Contractor but is transferred to the Employer who becomes and remains liable for the maintenance of the works from the date of issue of the TOC. It is, therefore, of vital importance that the project is properly handed over to the various ERA organisations associated with maintenance and that they are fully familiar with the details and maintenance requirements of the project.

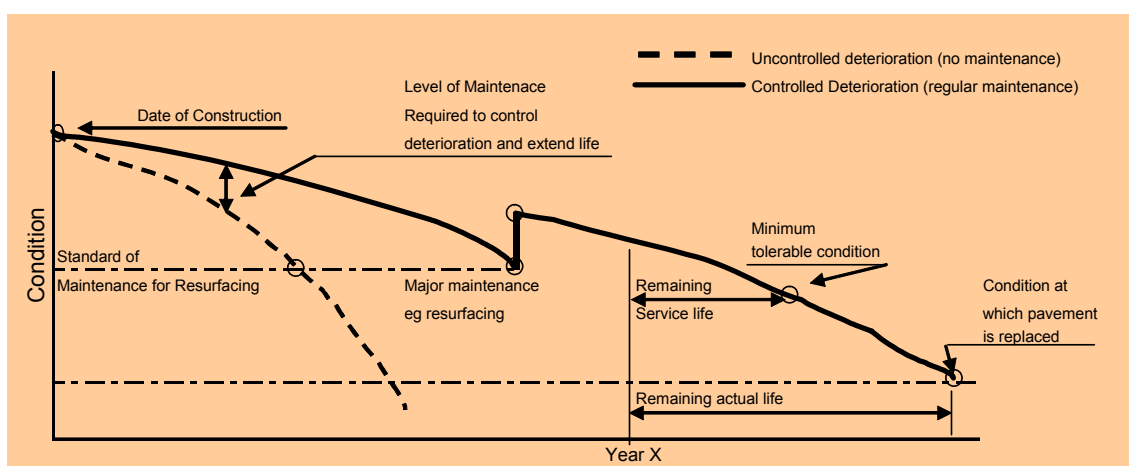
Although the organisations responsible for maintenance of the road should have been following the progress and development of the project this usually does not happen. In order to ensure NM Division and DMO are fully familiar with the details and maintenance requirements of the project it is necessary for ERA to have comprehensive details of the completed works. These details should include, but not necessarily be limited to the following:

- The road foundation structure and materials, including material properties and sources
- The type of surfacing, including material types, grading, application rates, designs etc.
- A road inventory including signs, markings, markers, bridges, culverts etc.
- A road condition survey
- A set of As-Built drawings/details
- Any other details with maintenance requirements, peculiar to the project.

All of the above must be identified, referenced and located on the basis of the national road network and the PMS's definitions of unique sections of the project road. This As-Built information is discussed further under item 8.5 below.

5.1.2.5 Network Management to Planning and Programme.

Even with strict adherence to proper standards of construction, roads deteriorate with the passage of time. The rate of deterioration may vary widely depending on the climate, the strength of the pavement and underlying sub-grade, and the traffic volume and axle weights. The wear and tear on road surfaces by traffic is aggravated by rainwater and by changes in temperature. Cracking occurs in the bituminous surfacing which, together with the ingress of rainwater, results in the deterioration of the layer. The diagram below illustrates this deterioration with time and how road life may be extended by controlled maintenance.



The Network Management division via its various monitoring systems and branches will at some stage reach the point where the cost of maintenance is greater than the benefit resulting from that maintenance and it is at that time that it will be necessary to consider some form of further intervention.

At this stage Planning and Programming would be advised or would via their PMS have identified the need for further intervention in the form of a future project. For further detailed information reference should be made to the Project Planning and Procurement Manual produced under the same appointment as this manual.

5.1.3 Hand Over Meeting

Item 5.1.2.3 above addressed the need to comprehensively hand over the Design and Procurement process to the CCID prior to the commencement of the works. In order to achieve this, a formal meeting should be convened and attended by at least the following members of ERA:

- Head of Engineering Services Procurement Branch
- Head of Design & Technical Support Branch
- ESPB & DTSB Project Engineers
- Head of Construction Contract Implementation Branch
- CCID Project Engineer

The agenda for the meeting should include, but not necessarily be limited to, the following:

- Project History
- Design Philosophy and Criteria
- Project Funding
- Technical and Financial Constraints
- RoW status
- The Tender Process and the Tender Evaluation.
- Handing Over of the following documents:
 - Feasibility Study
 - Final Design Report
 - Tender Document
 - Post Tender Correspondence
 - Post Tender Meeting Minutes
 - Tender Evaluation Report
 - Signed Contract Documents including Drawings
 - Copy of the Letter of Acceptance
 - Consultant Supervision Contract
 - All project correspondence
 - Computer files
 - RoW authorisations
- Supervising Consultant
- Other Departments and Organisations
- Any Other Business

It is important to note that this meeting is not simply a handing over of documents but the transference of the complete history and thinking which has occurred during the Feasibility, Design and Procurement Stages. As this usually covers a period of some years, at least one full day should be allowed for this meeting.

5.2 THE CONTRACT CLOCK

Time and the Contract are inseparable. From the date of the Letter of Acceptance (see 3.2) time begins to run and its passage regulates every phase of the Works. In almost every facet of the day-to-day operations on Site such as, the completion date, the various periods of notice set out in the Conditions of Contract (see 3.4) and the Specification (see 3.5), curing time for concrete, delays, contemporary records, site diaries, outputs and delivery dates, etc., the calendar or the clock plays a major role.

The act of accepting the Contractor's tender (see 2.1) automatically commits and obliges the Employer, the Engineer and the Contractor to undertake a number of actions which are defined in the conditions of contract within similarly defined times. Failure to do so in the specified time, by any of the parties to the contract, is likely to have contractual repercussions which are likely to result in claims or the inability to make them (see separate Claims Manual). It is important to realise, in this regard, that the PEs are acting for the Employer and that the real responsibility for timely action lies with the PEs and not the Head of Branch, Section or Division.

It is therefore fundamental to the contract that the Employer, Engineer and Contractor do what they have to do when it is required to be done by the conditions of the contract. The initial actions have been summarised in both tabular and bar chart format in Appendix 5-1- Actions Required and Times Specified to this section.

5.2.1 The Conditions of Contract

The majority of the ERA contracts are presently based on the FIDIC IV (see 3.4) form of contract and this form has, therefore, been used to illustrate the nature of the actions which are required to be taken. Although the wording of the EU form of contract is very different to the FIDIC form of contract, the principles and nature of actions required to be taken by the parties are the same.

The conditions of contract define a day as a "calendar day". Working in terms of days is preferable to weeks, months or years as definition in terms of these could lead to misunderstandings.

Certain of the clauses of the conditions of contract specify an exact number of days within which actions are required to be taken. There are, however, a number of other clauses which require action but do not specify the number of days within which that action is to be taken.

In these cases one is required to rely on Appendix 3-5 FIDIC IV Clause 1.5 which, in summary states *"Wherever in the Contract provision is made for the giving or issue of any notice, consent, approval, certificate or determination such shall not be unreasonably withheld or delayed"*. In practical terms this means *"as quickly as is reasonable"* or *"as quickly as is necessary to avoid any delays"*. It does **not** mean *"as quickly as is convenient"*.

The order of presentation of the various actions, below, provides a general indication of the order of priority of the actions, in terms of the contract period. A summarised tabulated schedule of the required actions and specified times as well as a bar chart programme of the same, all as detailed below, has been included as Appendix 5-1- Actions Required and Times Specified to this document.

5.2.2 The Letter of Acceptance (D1)

Action: Employer (Procurement)

The conditions of contract define the Letter of Acceptance (see 3.2) as "*the formal acceptance by the Employer of the Tender*" and the date of this letter is the date upon which the "contractual clock starts ticking". All subsequently required and defined actions are related to this date.

It is the Employer who is responsible for the issue of the Letter of Acceptance and therefore has control over the date of its issue. As, has been said above, the issue of this letter will commit the Employer, Engineer and Contractor to taking a number of actions it is essential that the Employer is in a position to comply with its commitments prior to the issue of the Letter of Acceptance. A sample Letter of Acceptance has been included in Appendix 3-2 - Letter of Acceptance to this manual.

5.2.3 Performance Security (D1 +28d)

Action: Contractor

Appendix 3.5 FIDIC IV Clause 10.1 of the conditions of contract requires the Contractor to provide a Performance security (see 6.1.4.2) within 28 days after the receipt of the Letter of Acceptance (see 3.2). The issue of the letter therefore places an obligation on the Contractor to provide this security to the Employer. When supplying such guarantee the Contractor is also required to notify the Engineer that he has done so.

Although there is no specific sanction, in the event of the Contractor not providing the performance security, the Instructions to Tenderers² states that "*the Tender security of the successful Tender will only be returned when the Tenderer has signed the Agreement and furnished the required performance security*". This suggests that failure to provide the Performance security would be viewed as failure to honour the contract. In addition the clause which cover payments i.e. Clause 60, prevents the Engineer from certifying any payments to the Contractor until such time as the performance security has been provided.

Action: Employer (CCIB)

This clause also requires the Employer to approve the institution which provides the security and the terms of the security. Although no time period for this approval is specified Clause 1.5 provides guidance and the Employer is required to approve the institution and terms, in writing, as quickly as possible. It is the responsibility of the PE to facilitate these approvals and generate the letters of approval.

Further discussion on the Performance security is contained under section 6.1.4.2 and standard security formats in Appendix 6-1 - Standard Forms of Security.

5.2.4 Programme of Work to be submitted

Action: Contractor

FIDIC IV and WB require that a programme for the execution of the works be submitted within 28 days of the date of the Letter of Acceptance (see 3.2). The standard ERA contract forms have, however, modified this in the conditions of particular application as follows:

² For further information refer to the Project Planning and Procurement Manual

- A mobilisation programme to be submitted D1 + 28 days
- A detailed work programme to be submitted D1 + 84 days
- Any required programme updates to be provided with 14 days of request.

As this modification delays the provision of and agreement to a works programme it is suggested that this modification should be reconsidered and the standard FIDIC IV wording retained.

Action: Engineer

This clause also requires the Engineer to give his "consent" to the Contractor's programme. Although no time period for this approval is specified Clause 1.5 provides guidance and the Engineer is required to give his consent, in writing, as quickly as possible.

Further discussion on Works programmes is contained under section 7.11 as well as in the Claims Manual.

5.2.5 Settlement of Disputes (D1 + 28d)

The standard form of this contract, in both the WB and ERA formats, requires ERA to use either a Dispute Review Board (DRB) of three persons or a Dispute Review Expert (DRE). In the case of a DRB, ERA's nominee is to be specified in the Tender documents and the Contractor's nominee in their tender. In the case of a DRE he is nominated after the award of the contract. The DRB/E appointment procedure, as included in the Standard ICB Works Contract Format has been included in Appendix 5-2 - Dispute Settlement Procedure.

Action: Employer (CCIB) & Contractor

In the case of a DRB the Employer and Contractor are required to approve their respective nominees to the board, within 28 days of the Letter of Acceptance (see 3.2). Failing this the nominees will be appointed by the appointing authority. The nominees will in turn appoint the chairman within 14 days of their appointment, failing which the Appointing Authority shall appoint the chairman. It is the responsibility of the Project Engineer to generate this letter.

The ToR and Terms of Appointment of the DRB and or DRE are included as Appendix 5-2 - Dispute Settlement Procedure. For further comprehensive discussion on DRB and DRE reference should be made to the Claims Manual produced under the same assignment as this manual.

5.2.6 Cash Flow to be submitted (D1 + 28/84d)

Action: Contractor

The standard ERA contract forms requires that a cash flow estimate of all payments to which the Contractor will be entitled for the works be submitted within 84 days of the date of the Letter of Acceptance (see 3.2) and any cash flow updates to be provided with 14 days of request.

As this modification delays the provision of and agreement to a works programme it is suggested that this modification should be reconsidered and the standard FIDIC IV wording retained.

For further discussion on Cash Flow see 8.12 and the Claims Manual.

5.2.7 Commencement of the Works ($D1 \leq D2 \leq D1+56d$)

Action: Engineer

The "Commencement Date" is defined as *"the date upon which the Contractor receives the notice to commence issued by the Engineer pursuant to Clause 41"*.

Appendix 3.5 FIDIC IV Clause 41 as amended in the ERA standard bidding documents states the following:

"The Contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within 56 days of the date of the Letter of Acceptance. Thereafter the Contractor shall proceed with the Works with due expedition and without delay.

The requirements to commence the works at site' shall be fulfilled if:-

- a) Program has been submitted in accordance with Clause 14.1*
- b) The Contractor's Technical Staff such as Site Manager(s), Site Engineer(s), with other supporting staff are in position at site;*
- c) Equipment, materials and labour for the work programmed for execution in the first 2 months, have been mobilized at site".*

Although not specifically stated in the conditions of contract implicit in the instruction to commence is the requirement that the Engineer provide the Contractor with all of the information (*drawings, specifications, survey control etc.*) and site necessary for him to proceed with the works. The importance of this and the need for the Engineer to ensure that information is provided as required by the Contractor's programme for the Works, can not be over stressed.

Action: Contractor

Having received the Notice to Commence the Contractor is required to

- Proceed with the Works with due expedition and without delay
- Ensure that the requirements of Clause 14 have been met
- Ensure that the requirements of Clauses 15.1 and 16.1 have been met
- Provide equipment, materials and labour for undertaking the first two months work

5.2.8 Possession of Site (D2)

Action: Employer (CCIB)

The conditions of contract (see 3.4) require that *"... the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of the ... site and accesses ..."*. It is the responsibility of the PE to generate this letter, in coordination with RoW. It should be noted that the clause makes provision for the granting of possession of only that portion of the site as is necessary for the Contractor to proceed in accordance with its programme.

It is obvious that the Contractor cannot begin the Works if he has not been given access to or possession of the site. Under Clause 20 the Contractor becomes responsible for the care of the Works with effect from the commencement date. The Contractor is therefore unlikely to want to take possession of the site before the commencement date and for this reason the Clause 42.1 states that "possession will be given **with**, the notice to commence".

It is important to note that any delays or costs incurred by the Contractor as a result of the Employer's failure to give possession will entitle the Contractor to an extension of the time for completion as well as financial compensation for any costs incurred.

5.2.9 Time for Completion (D2 + Time for Completion)

The "Works" are defined as the permanent works to be executed (including plant) in accordance with the contract and the temporary works of every kind required in or about the execution and completion of the Works and the remedying of any defects therein.

The "Time for Completion" is defined as "*the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 44) calculated from the Commencement Date*".

5.2.10 Engineer's Representative

Action: Engineer

The Employer appoints the Engineer and designates him as such in the Tender documents. The Engineer under this clause is permitted to appoint a Representative and delegate certain of his duties and responsibilities to this Representative. This appointment and delegation must be in writing and must be copied to both the Employer and the Contractor.

Although no time period is specified for this appointment and delegation it should occur on or before D2 as described in item 5.2.8 above in order to permit the proper management of the project from "day one".

Action: Employer (CCIB)

The PE must ensure that this happens.

5.2.11 Advance Payment (D2 + 84d)

The ERA standard contract forms make provision for the payment of interest free advance payments, following the request for such by the Contractor and certification of the amount by the Engineer after (a) execution of the Form of Agreement by both parties, (b) Provision of the Performance security and (c) provision of an unconditional bank guarantee in an amount equal to the Advance payment (see 6.1.4.3 and 6.3.12)

Clause 60.8 of the ERA standard document commits ERA to make the Advance Payment within 56 days of satisfactory (*sic*) application for the same. The standard FIDIC IV document does not specify any time for the payment of the Advance Payment.

Action: Contractor

Following the signing of the Form of Agreement (see 3.1), provision of the Performance Security (see 6.1.4.2) and provision of an Advance Payment Guarantee (see 6.1.4.3) the Contractor should request the payment of the Advance Payment. A sample format for the Advance payment Guarantee has been included in Appendix 6-1 - Standard Forms of Security. This request will be addressed to the Employer but directed to the Engineer.

The timing of this request is not specified, but as it is in the best interest of the Contractor it can be assumed that the request will be made as soon as the guarantee is available.

Action: Engineer

Upon receipt of the Contractor's request for the payment of the Advance Payment and the requisite supporting documentation, the Engineer is required to certify that payment is due. The time within which payment of the Advance payment is to be made is confused by the wording of Clause 60.8 "*satisfactory application*". It is suggested that Clause 60.8 should be interpreted as follows:

The Advance Payment will be made to the Contractor within 56 days of receipt of the last of the following (a) a request from the Contractor for payment, (b) the execution of the Form of Agreement by both parties, (c) the provision of the Performance Security and (d) the provision of an unconditional bank guarantee in an amount equal to the Advance payment.

Although this interpretation serves to define when the Contractor will receive payment it does not provide any direction as to the time within which the Engineer is required to certify the payment. One must therefore be directed by Clause 1.5 and assume that the Engineer is required to certify the payment, in writing, as quickly as possible and in sufficient time to permit the Employer to process the payment within the 56 day period.

Action: Employer (CCIB & Receipts & Disbursements Branch)

In addition to ensuring that payment of the Advance Payment is made within 56 days of the "satisfactory application" the Employer is also required to approve the Bank and the form of the Advance Payment guarantee.

Although the time period for the approval of the Bank and form of guarantee is not specified the requirement that payment be made within 56 days defines the limit of time available to the Employer.

5.2.12 Evidence and Terms of Insurance

Action: Contractor

Appendix 3-5 FIDIC IV Clause 25.1 states with regard to insurance (see 6.2) that:

"The Contractor shall provide evidence to the Employer prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing".

The ERA standard forms of contract for both National and International competitive bidding have modified this wording. Unfortunately the wording leads to a degree of uncertainty. Nevertheless the requirement to provide evidence remains. The modified wording is as follows:

*"The Contractor shall provide evidence to the Employer **as soon as practicable after the insurance has been taken out but in any case** prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing".*

Action: Employer

This clause also requires the Employer to approve the insurers and terms of the insurances. Although no time period for this approval is specified Clause 1.5 provides guidance and the Employer is required to give his approval, in writing, as quickly as possible. It is the Project Engineer's responsibility to verify acceptability and generate the letter of acceptance.

5.2.13 Instructions in Writing

Action: Engineer

All instructions given by the Engineer are required to be in writing. However, in exceptional circumstances the Engineer is permitted to issue verbal instructions. The clause further provides for the written confirmation of the instruction by the Contractor within 7 days, which if not

contradicted in writing by the Engineer within 7 days, shall be deemed to be an instruction of the Engineer.

As the implication of not responding to a Contractor's confirmation is acceptance of the confirmation it is essential that the Engineer carefully consider all such confirmations within the prescribed period.

5.2.14 Extensions of Time for Completion

Clause 44.1 provides for the extension of the period for completion in the event of a number of defined events.

Action: Contractor

The clause does, however, require the Contractor to give notice of his intention to request an extension of the time for completion within 28 days after the event leading to the delay. In addition it also requires the Contractor, within 28 days of the notification, to provide detailed particulars of any extension of time to which he considers himself entitled in order that such submission may be investigated at the time.

Action: Engineer

Although no time period for the Engineer's response to the Contractor's submission is specified Clause 1.5 provides guidance and the Engineer is required to give his approval, in writing, as quickly as possible.

However, the ERA standard bidding documents, under Clause 2.1, require the Engineer to obtain the Employer's specific approval of any extensions of the time for completion.

Action: Employer (CCIB)

Although no time period for this approval is specified Clause 1.5 provides guidance and the Employer is required to give his approval, in writing, as quickly as possible. The facilitation of this process and the basic analysis of such claims is the responsibility of the Project Engineer.

5.2.15 Procedure for Claims

The whole subject of claims is addressed more fully in the Claims Manual.

Action: Contractor

Clause 53.1 requires the Contractor, if he intends to claim any additional payment, to give notice of his intention to the Engineer, with a copy to the Employer, within 28 days after the event giving rise to the claim has first arisen.

Clause 53.3 further requires the Contractor, within 28 days of the above notification, to send to the Engineer an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based.

Action: Engineer

Although no time period for the Engineer's response to the Contractor's submission is specified, Clause 1.5 provides guidance and the Engineer is required to give his approval, in writing, as quickly as possible.

However, the ERA standard bidding documents, under Clause 2.1, require the Engineer to obtain the Employer's specific approval of any additional payments if the Contract Price will be exceeded.

Action: Employer

Although no time period for this approval is specified Clause 1.5 provides guidance and the Employer is required to give his approval, in writing, as quickly as possible. The facilitation of this process and the basic analysis of such claims is the responsibility of the Project Engineer.

5.2.16 Certificates and Payment

Action: Contractor

Clause 60 makes provision for the monthly submission, by the Contractor, to the Engineer of a statement of the work undertaken during the preceding month and for which the Contractor considers himself to be entitled

Action: Engineer

Within 28 days of receipt of this statement the Engineer is required to determine the amounts due to the Contractor and deliver to the Employer and the Contractor an Interim Payment Certificate, certifying the amounts due. It is important to note, with regard to certificate errors and the correction thereof, that only the Engineer has the authority to make corrections and that these are effected in following certificates.

Action: Employer (CCIB & Receipts & Disbursements Branch)

Within 56 days of receipt of the statement by the Engineer, the Employer is required to make payment to the Contractor. Failure to do so will result in the application of interest on the outstanding amount for the period of delay.

For further information on Contractor's IPCs see 6.3.

5.2.17 Taking-Over Certificate

Action: Contractor

When the whole of the Works have been substantially completed, the Contractor may give notice to that effect to the Engineer, with a copy to the Employer. Such notice shall be deemed to be a request by the Contractor for the Engineer to issue a TOC in respect of the Works.

Action: Engineer

The Engineer shall within 21 days either issue to the Contractor, with a copy to the Employer, a TOC or give instructions to the Contractor of all work which is required to be done.

However, the ERA standard bidding documents, under Clause 2.1, require the Engineer to obtain the Employer's specific approval before issuing the TOC.

Action: Employer (CCIB)

Although no time period for this approval is specified Clause 1.5 provides guidance and the Employer is required to give his approval, in writing, as quickly as possible. It is the responsibility of the Project Engineer to arrange for ERA's attendance at the taking over inspection and to generate the letter confirming that the Taking Over certificate may be issued.

The Taking over Certificate and Procedures are further discussed under item 8.2 below.

5.3 PROJECT MANAGEMENT MEETING

At the commencement of the project it is necessary to convene a meeting with the Supervising Engineer to discuss the management of the project and ERA's requirements in this regard.

The agenda for the meeting should include, but not necessarily be limited to, the following:

- ERA Project Engineer
- Reporting requirements
- Standard Contractor's Interim Payment Certificate Format
- Standard Consultant's Invoice Format
- Financial Projection requirements
- Record Keeping Requirements
- Lines and Methods of Communication
- Letters of Introduction.
- Counterpart Staff.
- Site Hand Over
- Notice to Commence
- Drawings and Contract Documentation
- Claims
- Tender Bid Securities
- Mobilisation of Supervisory Staff.
- Any Other Business

Each of the items above is discussed below to clarify the nature of the discussions to be held.

5.3.1 ERA Project Engineer

ERA assigns one of its engineers to act as ERA's representative for the management of the project and to act as a liaison between the parties involved in the project and ERA itself. This person is known as the Project Engineer and is responsible for every aspect of the management of the project. (See 7.6)

An important point to note in this regard is that all communication with the project must be via the PE if the line of responsibility required by ERA is to be maintained (see 2.2). This communication does, however, follow the normal ERA mailing system and lines of communication. (Refer Start Up Procedure Schedule Appendix 5-1- Actions Required and Times Specified).

5.3.2 Reporting Requirements

ERA has developed a reporting system, for construction contracts, for the use of Supervising Consultants on works contracts. In summary the system comprises a comprehensive full project report which is required to be submitted monthly. Full details of this reporting system with guidelines for the monitoring thereof are included in Appendix 7-15 Guideline on Monthly Progress Reports. In addition to this report particular projects might have additional reporting requirements e.g. Inception Reports, Quarterly Reports etc. These requirements will be defined in the Supervising Engineers contract document.

Reporting is further discussed under section 7.8 and 7.9 below.

5.3.3 Contractor's IPC

ERA has a standard format for the presentation of IPC's and it is important that this be adhered to in order not to cause any undue delays in the processing of certificates. In this regard it is important, at a very early stage of the project, to determine, from the conditions of contract; the period within which ERA is required to effect payment to the Contractor. Remember that any delays in this payment period will attract interest at commercial rates which can be substantial on large contracts

Full details of this IPC format are included in section 6.3 to this Manual

It is essential that all IPC's be presented on a cumulative basis rather than simply reflecting the work done in a particular month. The reasons for this are twofold. The first is that any errors made in the preparation of a particular IPC are automatically corrected in subsequent IPC's and the second is that it provides a quick check on the running totals of each element of the IPCs and how much of the original contract amount has been utilised.

The concept of Cumulative Invoices is further discussed in detail in to this manual and Contractor's IPC in section 6.3.

5.3.4 Consultant's Invoice

ERA has a standard format for the presentation of Consultant's Invoices and it is important that this be adhered to in order not to cause any undue delays in the processing of certificates. In this regard it is important, at a very early stage of the project, to determine, from the conditions of contract; the period within which ERA is required to effect payment to the Contractor. Remember that any delays in this payment period will attract interest at commercial rates which can be substantial on large contracts.

Full details of and further discussion on this Invoice format are included in Appendix 6-7 Consultant's Invoice Format and section 6-4 respectively.

It is essential that all Invoices be presented on a cumulative basis rather than simply reflecting the work done in a particular month. The reasons for this are twofold. The first is that any errors made in the preparation of a particular Invoice are automatically corrected in subsequent Invoices and the second is that it provides a quick check on how much of the original contract amount has been utilised.

The concept of Cumulative Invoices as discussed in Appendix 6-4 - Monthly vs. Cumulative IPC is equally applicable to Consultant's Invoices.

5.3.5 Financial Projections

In order to guarantee effective financial management of the project it is essential that everyone be aware of the estimated final contract value on a very regular basis and that the financial implications of every decision are evaluated before issuing any instructions or approving any changes.

To achieve this it is necessary for both the Supervising Engineer and the ERA Project Engineer to maintain up to date and accurate financial records of the project and an estimate of the final contract price. In the case of the Supervising Engineer these records should cover:

- Requests for payment from the Contractor (IPC's)
- IPC's approved for payment by the Supervising Engineer
- Due dates for payment by the Employer
- Dates on which payments are received by the Contractor
- The value of payments received by the Contractor
- The exchange rates applicable to the various contract currencies

It will be necessary for these records to reflect the various currencies utilised on the contract. In addition to these payment and receipt records it will also be necessary for the Supervising Engineer to maintain an accurate projection of the final project cost. The best way of doing this would be to have a spreadsheet covering all of the items in the bill of quantities and containing columns for the following:

- Original billed quantities and amounts
- Estimated final quantities and amounts
- Actual quantities and amounts to date

As not all final cost items appear in the bill of quantities it will also be necessary to include the following information on the spreadsheet:

- Claims approved
- Claims received but not approved (including an estimate of the amount)
- Variations
- Contract Price Adjustment

With this information it will be possible to extrapolate the financial effect of any decision on the project and make the necessary adjustments to remain within the contract budget.

A Financial Monitoring system has been prepared for the use of the Project Engineers to facilitate the monitoring of total contract amounts against contract amounts and funding allocations in their various currencies. Full details of this system are included in Appendix 6-3 - Financial Monitoring to this manual.

Further discussion on this subject is included in sections 6.3.1 and 6.6.

5.3.6 Record Keeping

ERA requires the Consultant to act as their "eyes and ears" on site with regard to the recording of the progress of the works, the resources employed by the Contractor, constraints on the progress of the works, quality control and safety.

This record keeping is required for two main purposes. The first is to provide information to facilitate the evaluation of claims and the second to provide information to facilitate decision making at some time in the future regarding action which may be required. For these reasons it is important that the format of the records be such as to permit an understanding of the project by persons not previously involved in the project.

These records should include but not necessarily be limited to the following:

- Measurement sheets to verify and agree quantities claimed by the Contractor
- Weather conditions
- Rainfall (on a long site one recording station may not be representative of the whole site)
- Contractor's Personnel, Plant, Equipment and Materials on Site
- Contractor's Personnel, Plant, Equipment and Materials utilised on Site
- Approved Construction Programme
- Contractor's Cash Flow Projection

- Copies of Advance Payment, Performance and Retention Securities
- Contractor's Insurance policies
- Daily Activities
- Actual Progress against Planned Progress
- Constraints on the Progress of the Works
- Materials Test Results (including failures with their subsequent passes)
- Accidents on Site
- Correspondence Sent and Received
- Minutes of all meetings
- File notes of any important telephone calls or incidents
- Deliveries and Usages of materials subject to Contract Price Adjustment.

Record Keeping is further discussed under sections 7.4.3, 7.5.3 and 7.6.3

5.3.7 Lines of Communications

It is important that everyone involved in a project fully understands the roles and responsibilities of every other person involved in the project and that everyone understand the defined lines and methods of communication. Failure by anyone to follow defined lines of communications is likely to result in confusion and delays to the project.

In general each contract involves three separate parties viz. The Employer, Contractor and Supervising Engineer. The most important thing to note in these relationships is that, although the Employer signs a contract with the Contractor to undertake the works there is no direct, administrative, line of communication between the Employer and the Contractor. It is necessary, within the conditions of these contracts for all communication to be sent via the Supervising Engineer who is responsible for the management of the project.

These contractual interrelationships are discussed in more detail in section 2.2 above.

Because of the remote location of a number of the projects and because of the numerous forms of communications available today it is important that the methods to be used be defined. It is presently possible to communicate by any one of the following methods:

- Telephone
- Facsimile
- Telex
- Post
- Courier
- E-Mail

Some of these options provide a "hard copy" record and some do not. What is clear is that all parties to the contract must have written records of every agreement, meeting, communication etc.

In order to avoid any delays in communicating each party should define their preferred method of communication, to whom and where all correspondence should be addressed and who should receive copies of what correspondence. Some contracts actually go so far as to define the periods within which communications are deemed to have been received for each particular means of communication. This should be checked at this initial stage of the contract and adhered to.

Appendix 7-2 - Correspondence and Copies provides a schedule which details, in terms of the FIDIC IV Conditions of Contract, who is required to communicate with whom and who should receive copies of such correspondence for every clause.

5.3.8 Letters of Introduction

The Supervising Engineer will be required to deal with a number of Government and parastatal organisations in the management of the project. In order to assist the Supervising Engineer ERA should prepare Letters of Introduction to these organisations explaining who the Supervising Engineer is and what they will be doing and requesting that authority to assist the Supervising Engineer where possible. A sample letter is contained in Appendix 5-3 - Letters of Introduction to this manual.

These letters of introduction should be sent to, but not necessarily limited to the following:

- Telecoms
- EEPKO
- DMO
- Municipal/Local/District and Regional Authorities
- Police
- Customs
- Immigration

5.3.9 Counterpart Staff

During the implementation of the RSDP project the ERA organisation should be taking advantage of the training opportunity afforded by the various projects which are being undertaken. In general this can be done by seconding one or more of their engineers to the Supervising Engineers supervision team.

In order for ERA and the seconded engineer to obtain the greatest benefit from this secondment it is necessary for ERA to define exactly what they expect of the Supervising Engineer with regard to training of the seconded engineer. It is also important that provision be made in the contract for any costs associated with such a secondment.

This definition must be in writing and should preferably be addressed at this (See 5.3) management meeting under the following headings:

- Counterparts name
- Counterparts qualification and experience
- ERA's training requirements for the Counterpart
- Counterparts responsibility
- Requirements for Supervisor's reports on the counterpart
- Arrangements for Housing, Feeding and Transporting the Counterpart

An example of these requirements is included in Appendix 5-4 - ERA Counterpart to this manual

5.3.10 Site Possession

The conditions of most of the contracts require that the Employer formally gives possession of the site of the works to the Contractor to enable the Contractor to undertake the works (see 5.2.8). If this is not done the Contractor could quite easily claim that they were unable to do any work because the Employer would not allow them onto the site.

This requirement provides a very convenient opportunity for introducing the Supervising Engineer and Contractor to the local DMO representatives.

Other than having to make the site available to the Contractor it will also be necessary to identify all bench marks and survey reference beacons.

Finally this handing over of the site must be done in writing quoting the particular clause of the conditions of contract. Sample letters from ERA to the Engineer and the Engineer to the Contractor are included in Appendix 5-5 - Site Possession Letters

Further reference to the granting of possession of the site and or RoW is contained in section 7.6.

5.3.11 Notice to Commence

Most ERA contracts require ERA to issue a Letter of Acceptance to the chosen Tenderer (see section 5.2.2. Within the ERA structure this letter is issued by the ESPD and has been dealt with in previous sections.

Within a time specified in the conditions of the contract the Supervising Engineer is required to instruct the Contractor to commence the works (see 5.2.7). As with the handing over of the site it is necessary that this simple task be done, as failure to do so would provide the Contractor with the grounds for a claim on the basis of not being able to work although a contract had been signed (see Appendix 5-5 - Site Possession Letters)

5.3.12 Drawings and Documents

In many contracts the Supervising Engineer is not the same organisation as the Design Engineer. In these cases it is necessary to ensure that the responsibility for the provision of drawings and contract documents is clearly defined in the contract documents.

The PE is responsible for determining who is to issue the drawings and contract documents to the Supervising Engineer and the Contractor and for ensuring that the original either plastic, sepia or diskette drawings are available for reproduction by the person or organisation responsible for issuing them (see section 5.2.7 and 5.2.8).

In this regard it is important to note that the Tender Drawings **are not** the Construction drawings and ideally, if one wishes to avoid any confusion the drawings issued for construction should be boldly marked as such.

It is essential that the Contractor be issued with all necessary drawings and documents necessary for the work to be undertaken in the sections for which possession is given. Failure to give possession will result in the inability of the Contractor to commence work and consequently in claims for extensions of the contract period.

The more information and site which is provided at the beginning of the contract the less the likelihood that claims will be submitted.

5.3.13 Claims

The most complicated task on any construction project is the evaluation of claims for either additional time or money. This task is often further complicated by a lack of appropriate records (see section 5.3.6 Record Keeping above). It is also often complicated because it is not clear to the Supervising Engineer that particular correspondence from the Contractor actually represents a claim. One of the principal reasons for this is that Contractors do not like to use the word Claim because they feel that it suggests that they are trying to get something to which they are not really entitled. This is not true. A Claim is a request for either Time or Money to which the Contractor considers themselves entitled as a result of some particular occurrence.

In order to avoid any confusion with regard to the evaluation of claims the following should be made clear to the Contractor:

- All correspondence regarding possible future claims or requests for compensation of either Time or Money must commence as follows:

“In accordance with Clause of the conditions of contract, we hereby give notice of our intention to submit our claim N° x for in terms of Clause of the conditions of contract” or

“In accordance with Clause of the conditions of contract we hereby submit our claim N° x for”

- On receipt of such a letter the Supervising Engineer and Contractor are to maintain and agree on a common set of records which will form the basis of that claim.
- The Engineer will open a separate file for that particular claim and its records and correspondence
- Once resolved, the resolution of the claim must be put in writing and confirmed in writing by the Contractor.

Following the resolution of the claim the file may be closed

The subjects of Claims, Claims Avoidance and Dispute Handling are all discussed in detail in the Claims Manual prepared under the same assignment as this manual.

5.3.14 Tender Bid Securities

Most contracts require the tenderers to submit Tender Securities (see section 6.1.1 and 6.1.4.1 below) with their Bids to guarantee that they honour their Bids in the event that their tender is accepted. Only once the Letter of Acceptance has been issued and acknowledged by the successful tender (see section 3.2) should the Bid securities of all the tenderers except that of the successful Tenderer be released. The Bid securities will be held by the ESPD, ?? which also issues the Letter of Acceptance. There should, therefore, be no miscommunication with regard to the release of the securities. However, the successful tender's Bid security should only be released once the successful tender has provided a Performance Guarantee (see section 6.1.4.1 and 6.1.4.2), which will be issued to the CCID.

The CCID therefore has the responsibility, once they have received the Performance Guarantee, to advise ESPD that the Performance Guarantee has been received and that they, ESPD, may release the Bid Security. For further discussion on this reference should be made to the Project Planning and Procurement Manual.

5.3.15 Environment

The EPA via legislation and the contract conditions and specifications will all impose certain environmental considerations on the Contractor in the implementation of the project. It is essential at the initial management meeting that ERA makes it clear to both the Engineer and the Contractor that they are committed to the protection of the environment and that they expect them both to be similarly committed.

The Engineer and Contractor will, accordingly, be required to prepare EMP to guarantee adherence to the specification and the various other guidelines and requirements.

The need for and proposed contents of an EMP is further discussed under section 7.3.3 below. In addition reference should be made to the Environmental Manual, including all Social aspects, which was prepared under the same assignment as this manual.

5.3.16 Social

Although the Social considerations of ERA's projects fall under the general umbrella of the Environment they are separately addressed here to emphasise ERA's commitment to the implementation of "socially aware" projects. In this regard the contract conditions and specifications will all impose certain social considerations on the Contractor in the implementation of the project. It is essential at the initial management meeting that ERA makes it clear to both the Engineer and the Contractor that they are committed to the "social" environment and that they expect them both to be similarly committed, and follow the requirements of the contract and Ethiopian legislation.

The Engineer and Contractor will, accordingly, be required to prepare SMP, which will form part of the EMP to guarantee adherence to the specification and various other guidelines and requirements.

The need for and proposed contents of an EMP is further discussed under section 7.3.3 below. In addition reference should be made to the Social Manual, which is included in the Environmental Manual, and which was prepared under the same assignment as this manual.

5.3.17 HIV/AIDS

Although the HIV/AIDS considerations of ERA's projects fall under the general umbrella of the Environment they are separately addressed here to emphasise ERA's commitment to the implementation of HIV/AIDS awareness and prevention campaigns as a compliment to each of their projects. In this regard the contract conditions and specifications will all impose certain requirements on the Contractor in the implementation of the project. It is essential at the initial management meeting that ERA makes it clear to both the Engineer and the Contractor that they are committed to the implementation of these campaigns and that they expect them both to be similarly committed.

To this end the Contractor will be required to present details of its HIV/AIDS awareness and prevention campaign.

The HIV/AIDS awareness and prevention campaigns are discussed further under section 7.3.5 below. In addition reference should be made to the Environmental Manual, including all Social aspects, which was prepared under the same assignment as this manual.

5.3.18 Safety, Security and Traffic Accommodation

The contract and local legislation will impose certain requirements and obligations on the Contractor with regard to safe working practices and environment. It is important at the meeting that ERA make it clear that they are committed to the maintenance of a safe working environment and that they expect the Contractor and Engineer to be similarly committed.

In this regard the following should be discussed at the meeting:

- First Aid Facilities
- Emergency procedures in the event of death or injury
- Local facilities
- Evacuation plan
- Site, Camp and Accommodation Security
- Traffic Management Plan

5.3.19 Supervisory Staff

Although insufficient information from the Contractor is likely to be available at this stage for the Engineer to accurately determine the mobilisation dates of their supervisory staff this should be discussed to ensure that everything is in place for the arrival of the Engineer's staff.

Care should be taken that the Engineer does not delay the mobilisation of his staff because of a lack of facilities. When the Contractor is on site and working, the Engineer, and sufficient of his staff, must also be there to supervise.

It is important for ERA to realise that, in general terms, the Contractor has the right to determine when, where and how they intend undertaking the works and that having done so, ERA is then required to select its supervisory team to suit the Contractor's programme. ERA should not attempt to "massage" the Contractor's programme to suit its preconceived idea of how the works should have been implemented (see 5.5 below).

If ERA has any constraints on the level of supervision, which will be provided and if this is likely to effect the manner or order in which the Contractor may undertake the works, then the Contractor should be advised of this in the tender documentation.

Finally, it is essential that the PE ensure, by instruction if necessary, that the Engineer and Contractor's offices are within walking distance of each other and further that the Engineer's living accommodation is close enough to their offices to avoid long travel times to and from work.

In this regard it is important to note that because the Engineer's staff will be here for an extended period they will be required to obtain work and residence permits. These applications will normally require confirmation by ERA that a contract exists and that the persons named form part of the agreement. The facilitation of these confirmations will be the responsibility of the ERA PE.

The Supervision Contract is further discussed in section 5.5 below

5.3.20 Any Other Business

Finally, anything peculiar to this project or required by the Supervising Engineer may be discussed under this section.

5.4 INTERNAL ERA TASKS

At this commencement stage of the works contract it is necessary for the PE to undertake a number of administrative tasks and to ensure that everything is in place to permit the commencement of the Works and Supervision contracts. Failure to ensure that everything is in place will in all likelihood lead to payment and commencement delays

The following items detail those actions required of the PE at this commencement stage.

5.4.1 Disbursements Division

All Works contracts and some Supervision contracts make provision for Advance Payments and in general terms these advance payments become due on presentation of an advance payment guarantee and invoice. As these advance payments are fundamental to the commencement of the works and provision of supervision services the contractors and engineers are likely to present their guarantees and invoices very soon after having been awarded their contracts. If the RDPB is not ready to disburse these first payments the project is likely to be affected.

It is therefore essential that the PE ensure that they are ready and that the advance payments can be made without delay. In this regard the PE should formally advise the RDPB of the value of the advance payment and the approximate timing of when the payment will be required.

The RDPB will require a copy of the signed contract prior to making any disbursements. The signature of the contract is coordinated by ESPD (see 5.4.2 below). The PE must ensure that the issue of a copy of the document to RDPB occurs in time to permit payment of the advance.

The PE must also ensure that a copy of the Contractor's Cash Flow projection (see 5.2.6 above and 7.12 below) is forwarded to RDPB in order to facilitate the inclusion of the project's financial requirements in their disbursement planning.

5.4.2 Contract Signature

In purely contractual terms, the issue, by ERA, of a Letter of Acceptance is sufficient to establish a contract between ERA and the Contractor. The GoE Procurement Proclamation 430/2005, however, requires that, in addition to the Letter of Acceptance a Form of Agreement and Contract Document be signed. The English wording of the Proclamation could be interpreted as the signature of the Agreement and Contract are only required to confirm the existence of a contract. It is, however, expected that the intention is that no monies should be disbursed until such time as the contract has been signed. As this is actually in conflict with the conditions of contract, it is essential that the Project Engineer see to it that the Letter of Acceptance, Signing of the Contract and Notice to Commence are all properly coordinated so as to avoid any possibility of conflicts, delays and inability to make payments.

In order to ensure that this occurs, the Contract must be signed within the period specified in the contract for the issue of the Notice to Commence. This is normally 28 days from the issue of the Letter of Acceptance.

5.4.3 DMO

Advise the District Maintenance Organisation (DMO) of the commencement of the project and inform them that they are no longer required to maintain the road. (They may, however, be required to continue some routine maintenance e.g. grass cutting and this should be considered at this stage.)

Advising the DMO of the commencement of the project should include but not necessarily be limited to the following:

- The Road number and the extent of the project
- That they are no longer required to maintain the road
- The names and addresses of the Contractor and the Consultant
- That they are required to participate in the project by attending meetings and visiting the site.
- That they have no executive authority with regard to the management of the project
- That any requests for additional work must be presented to ERA (and not the Consultant or Contractor) in a fully motivated form. Suggestions in this regard are included as Appendix 5-6 - External Request for Additional or Revised Work to this manual)
- Forward a copy of the contract document and drawings to them

5.4.4 Filing System

The Project Engineer must set up a project filing system, including the creation of necessary computer directories and files. Appendix 5-7 - to this manual contains a basic set of guidelines for a project filing system. The issue of filing is further addressed in sections 7.4.3, 7.5.3 and 7.6.3 below.

5.5 SUPERVISION CONTRACT

Unlike the Works contract a notice to commence will have been issued by the ESPD prior to the commencement of the Works contract. Although a staff mobilisation schedule will exist in the Supervising Engineer's contract this will have been prepared on a number of assumptions related to the Contractor's programme for the works. Unfortunately, more often than not, these assumptions are not correct and it is necessary to review the Supervising Engineer's staff mobilisation schedule to better suit the Contractor's work programme. This then is one of the first tasks which the PE is required to carry out and agree with the Supervising Engineer.

Although this contract is independent of the Works contract it is linked to that contract by the fact that the object of this contract is to supervise the Works contract. For this reason the initial tasks required of the Supervising Engineer with regard to the supervision of the works contract have already been covered in the preceding section 5.2. These tasks will not be repeated here. Similarly the internal task of ESPB and DTSB handing over the Supervision contract to CCID, as discussed in sections 5.1.2.3 is required, but will not be repeated here.

The explanations on Lines of Communications under section 5.3.7 above between ERA and the Contractor must be through the Supervising Engineer and therefore all of ERA's management of the project must be effected by the PE through the Supervising Engineer.

In addition to the tasks already indicated under the Works Contract section 2.4, the Supervising Engineer will also have the following roles and responsibilities which the ERA PE will need to ensure are undertaken by the Supervising Engineer:

- Place on site those personnel identified in their supervision contract
- Supervise, Control and transfer know how to counterpart personnel
- Prepare (sometimes) and issue construction drawings
- Act as an impartial arbiter in all matters between the Contractor and ERA
- Advise ERA in all matters requiring decisions by ERA
- Review Design and alternative proposals (sometimes)

It is very important to understand that generally, conditions of contract e.g. FIDIC give the Supervising Engineer the authority to take decisions with regard to the extension of the contract period and payment of moneys following consultations with the Contractor and the Employer. The Engineer, in general, does not require the approval of the Employer to make any awards to the Contractor. If ERA requires any other arrangements it will be necessary for them to amend the conditions of contract accordingly. This is not, however, recommended because it undermines the basis of the contract.

There is a common misconception that once a Supervising Engineer has been appointed no further involvement is required by the ERA PE. This is not correct, it is essential that the PE supervise the Supervising Engineer at all stages of the project. This has been demonstrated in a number of ERA projects where the Supervising Engineers have performed badly resulting in delays and additional costs. These could have been avoided by proper supervision of the Supervising Engineers. In this regard the PE must visit the site regularly and take an active interest in the project. It must be remembered that the Supervising Engineer is not above questioning.

The roles and responsibilities of each of the parties to the contract during the implementation phase are further discussed under the general Chapter of Project Management in Chapter 7 and those of the Supervising Engineer in particular in section 7.4.

5.6 APPENDICES

See the following pages for Chapter 5 Contract Commencement Appendices.

Appendix 5-1- Actions Required and Times Specified

The actions required and their specified time periods as contained in the FIDIC IV Conditions of Contract and as expanded upon under Section 5.2 of this document are summarised in the schedule below.

Conditions of Contract		Action by	Time for Action (days)
Clause No	Description		
10.1	Performance Security		
	Provision of Security Approval of Security	Contractor Employer	D1 + 28 asap
14.1	Programme to be Submitted		
	Mobilisation Programme	Contractor	D1 + 28
	Detailed Programme Programme Updates	Contractor Employer	D1 + 84 + 14
67.1	Dispute Resolution Procedure		
	Nominate Procedure	Employer	Pre Tender
	Nominate Member	Employer	Pre Tender
	Nominate Member	Contractor	Tender
	Approve Members Approve Chairman	E+C E+C	D1 + 28 D1+ 28 +14
14.3	Cash Flow to be Submitted		
	Cash Flow	Contractor	D1 + 84
41.1	Commencement of the Works		
	Notice to Commence Commence	Engineer Contractor	D1 ≤ D5 ≤ D1 + 56 asap
42.1	Possession of Site		
	Grant Possession	Employer	D2
2.2	Engineer's Representative		
	Appoint and Delegate	Engineer	asap ≤ D5
60.7	Advance Payment		
	Form of Agreement	Contractor	asap
	Performance Security	Contractor	asap
	Advance Guarantee	Contractor	asap
	Certify Payment Make Payment	Engineer Employer	asap ≤ 56 asap ≤ 56
25.1	Evidence and Terms of Insurance		
	Provide Insurance Approve Insurer and Terms	Contractor Employer	D5 + 84 asap
2.5	Instructions in Writing		
	Confirm Verbal Instructions Confirm Verbal Instructions	Engineer Contractor	+ 7 + 7
44	Extension of Time for Completion		
	Request EoT	Contractor	+ 28
	Provide Particulars	Contractor	+ 28 + 28
	Evaluate Request Approve EoT	Engineer Employer	asap asap
60	Certificates and Payment		
	Submit Statement	Contractor	asap
	Certify IPC Make Payment	Engineer Employer	+ 28 + 56
48	Taking-Over Certificate		
	Notify that Works are complete	Contractor	asap
	Issue Taking-Over Certificate Approve Taking-Over Certificate	Engineer Employer	+ 21 asap ≤ 21
Notes			
D1 =		Date of Letter of Acceptance	
D5 =		Date of Notice to Commence	
asap =		as soon as possible	

COMMENCEMENT OF THE CONTRACT

Start-Up Procedures

During the first few days and weeks of a contract, there are a number of important actions which must be undertaken by the Employer, by the Contractor and by the Engineer (and, where appropriate, the Engineer's Representative, acting on behalf of the Engineer).

	Action	Responsibility		
		Employer	Engineer	Contractor
(a)	If the Engineer is not named in the Contract, the Employer must promptly notify the Contractor of his identity.	✓		
(b)	The Engineer's Representative's appointment must be confirmed, in writing, by the Engineer, to the Employer and to the Contractor.		✓	
(c)	A letter, delegating, to the Engineer's Representative, the required selection of the Engineer's powers and responsibilities under the Contract must be issued to the Engineer's Representative, and copied to the Employer and to the Contractor.		✓	
(d)	The Contractor must be given possession of such portions of the site as are necessary to proceed with the Works programmed in accordance with the Clause 14 Programme, (including, in those cases when it is the Employer's responsibility under the Contract, any areas of land required for temporary works.) Further possessions of Site, in accordance with the Contractor's programme of works must not be delayed.	✓		
(e)	The Engineer must issue to the Contractor, within the stipulated period, the notice to commence the works.		✓	
(f)	Ensure clear understanding of, and/or agreement between the parties on, the latest date for completion of the Contract.		✓	
(g)	The Engineer must ascertain any early requirements of the Employer and, in particular, his requirements for liaison, and formats for certification and reporting.		✓	
(h)	The Contractor must supply evidence of having arranged all the required insurance covers.			✓
(i)	The Contractor must supply, to the Employer, any performance securities required. The formats and acceptability of these securities must be checked (the Employer may wish to get the national bank of the country to advise on this). When a satisfactory performance security has been submitted, the Employer should be advised to return the Tender Bond.	✓	✓	✓
(j)	The Contractor must supply any advance payment guarantee required. The format and acceptability of the guarantee must be checked (the Employer may wish to get the national bank of the country to advise on this).			✓
(k)	Once the Contractor has submitted the advance payment guarantee (and the performance guarantee, when it is a specific precondition of the Contract, for payment of the advance payment, that the performance guarantee has also been submitted) and, once the Contractor has submitted an appropriate invoice (if required), then the Engineer should certify payment of the corresponding amount of the advance payment.		✓	
(l)	The Contractor must, within the stipulated period, submit a Clause 14 programme, (together with his forecast cash flow). These must be promptly analysed, by the Engineer's Representative, and consented to or otherwise commented upon.		✓	✓
(m)	The Employer must issue to the Engineer copies of all relevant documentation, including all contract documentation, drawings and other design information. The Engineer (and the Engineer's Representative) must keep secure any confidential	✓	✓	

	Action	Responsibility		
		Employer	Engineer	Contractor
	documentation (particularly including the Contractor's Bills of Quantities) and must decide which documents are appropriate to issue to his site staff.			
(n)	If there is any delay in finalising the Contract Agreement, copies of the tender documentation, tender notices, the completed tender, the Letter of Acceptance and other relevant correspondence must be supplied to the Engineer's Representative, as a basis for administering the contract.	✓		
(o)	All Contract Documentation, drawings and other design information, necessary for the Contractor to commence the works, must be formally issued to him.	✓	✓	
(p)	Details of all survey control stations for use by the Contractor in setting out the Works must be promptly supplied, and must be supplied in writing.		✓	
(q)	Submissions, by the Contractor, for consent to Subcontractors under Sub-Clause 4.1 should be initiated.			✓
(r)	Contact should have previously been made with any utility authorities whose installations may be affected by the Works. The Engineer's Representative should familiarise himself with the current situation in this respect and should ensure that any requirements of the Contract are followed.	✓	✓	
(s)	The Contractor should provide a time-table for provision of the Engineer's facilities, and temporary facilities required in the interim should be agreed by the Engineer and the Contractor.		✓	✓
(t)	The appointment of all the Engineer's Representative's assistants must be notified to the Contractor together with a statement of their authority.		✓	
(u)	Copies of relevant reports and data, including design site investigation, materials and site survey must be supplied by the Employer, to the Engineer.	✓		
(v)	The Engineer's Representative's staff must familiarise themselves with the contract documents, noting any apparent errors, and bringing these to the attention of the Engineer. The Engineer will take the appropriate action, which may include informing the Employer and/or rectifying the error, and/or requiring the Engineer's Representative to rectify the error.		✓	
(w)	Correspondence management, filing and record systems must be established.		✓	

Item	Description	Action By	Duration (days)	Contract Period				EoT	Defects Liability Period (365)
				1	28	56	84		
	Contract Period		(05-D1) + 1TC + EoT + 365						
1	Expiry of Tender Validity	ERA	D1						
2	Issue Letter of Acceptance	ERA	D1						
3	Provide Performance Security	Contr.	D2 ≤ D1 + 28						
4	Provide CI 14 Programme	Contr.	D3 ≤ D1 + 28						
5	Provide CI 14.3 Cash Flow	Contr.	D4 ≤ D1 + 28						
6	Approve DRBE Members	ERA	D1 + 28						
7	Approve DRB Chairman	ERA	D1 + 28 + 14						
8	Issue Notice to Commence	Eng	D1 ≤ D5 ≤ D1 + 56						
9	Give Possession of Site	ERA	D6 ≤ D5						
10	Provide Evidence of Insurance	Contr.	D7 ≤ Start Work						
11	Provide Insurance Policy	Contr.	D8 ≤ D5+84						
12	Start Work	Contr.	D9 = D5 + asap						
13	Submit Adv Payment Guarantee	Contr.							
14	Request Advance Payment	Contr.	D10						
15	Certify Advance Payment	Eng	D10 + asap						
16	Pay Advance Payment	ERA	D11 ≤ D10 + 56						
17	Submit Monthly Statements	Contr.	D						
18	Certify Payments	Eng	D + asap						
19	Make Payments	ERA	D + 56						
20	Claim Event	N/A	D						
21	Notify Intention to Claim	Contr.	D + 28						
22	Submit Claim Details	Contr.	D + (2 x 28)						
23	Evaluate Claim	Eng	D + (2 x 28) + asap						
24	Approve Claim	ERA	D + (2 x 28) + (2 x asap)						
25	Award Claim	Eng	D + (2 x 28) + (3 x asap)						
26	Request Taking Over Certificate	Contr.	D12						
27	Approve ToC	ERA							
28	Issue ToC	Eng	D13 = D12 + 28						
29	Certify Release of Retention	Eng	D						
30	Release Retention	ERA	D + asap						
31	Issue Statement at Completion	Contr.	D + 56						
32	Release Performance Guarantee	ERA	D14 = D13 + 28						
33	Defects Liability Period								
34	Issue Defects Liability Certif	Eng	D15 = D12 + 365						
35	Issue Final Statement	Contr.	D16 = D15 + 28						
36	Certify Final Payment	Eng	D17 = D16 + 28						
37	Make Final Payment	ERA	D18 = D16 + 56						

Contract Closure

Appendix 5-2 - Dispute Settlement Procedure

The following is extracted from Section 12 of the ERA standard contract document format for ICB Works Contracts. It is very similar in format to the ERA format for NCB Works Contracts as well as to the IDA FIDIC IV based contracts.

SECTION 12

DISPUTE RESOLUTION PROCEDURES

I. VERSION 1 - DISPUTE REVIEW BOARD

- **Annex A to Conditions of Particular application For Dispute Review Board (DRB)**

II. VERSION 2 - DISPUTE REVIEW EXPERT

- **Annex A to Conditions of Particular application For Dispute Review Expert (DRE)**

VERSION 1 - DISPUTE REVIEW EXPERT

SECTION 12 - DISPUTE RESOLUTION PROCEDURE

CLAUSE 67: SETTLEMENT OF DISPUTES (VERSION 1)

SUB-CLAUSE 67.1(A)
DISPUTES REVIEW BOARD (DRB)
APPOINTMENT PROCEDURE

1. "The Dispute Review Board (DRB) shall comprise three Members experienced with the type of construction involved in the Works and with the interpretation of contractual documents. One Member shall be selected by each of the Employer and the Contractor and approved by the other. If either of these members is not so selected and approved within 28 days of the date of the Letter of Acceptance, then upon the request of either or both parties such member shall be selected as soon as practicable by the Appointing Authority specified in the Appendix to Bid.

2. The third Member shall be selected by the other two and approved by the parties. If the two Members selected by or on behalf of the parties fail to select the third Member within 14 days after the later of their selections, or if within 14 days after the selection of the third Member, the parties fail to approve that Member, then upon the request of either or both parties such third Member shall be selected promptly by the same Appointing Authority specified in the Appendix to Bid who shall seek the approval of the proposed third Member by the parties before selection but, failing such approval, nevertheless shall select the third Member. The third Member shall serve as Chairman of the Board.

3. The DRB shall be established by the signing of a Board Member's Declaration of Acceptance (as required by paragraph 12 of Annex A to these Conditions of Particular Application) by all three Board Members.

4. In the event of death, disability, or resignation of any Member, such Member shall be replaced in the same manner as the Member being replaced was selected. If for whatever other reason a Member shall fail or be unable to serve, the Chairman (or failing the action of the Chairman then either of the other Members) shall inform the parties and such non-serving Member shall be replaced in the same manner as the Member being replaced was selected. Any replacement made by the parties shall be completed within 28 days after the event giving rise to the vacancy on the Board. In case of disagreement between the Employer and the Contractor, the replacement shall be designated, by the Appointing Authority specified in the Appendix to Bid. Replacement shall be considered completed when the new member signs the Board Member's Declaration of Acceptance."

SUB-CLAUSE 67.1(B)
DISPUTES REVIEW BOARD
DISPUTES RESOLUTION PROCEDURE:

1. "If any dispute arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after the repudiation or other termination of the Contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred to the DRB.
2. The DRB shall give a Recommendation in writing within 56 days of receipt of a notification of a dispute.
3. If the DRB has issued a Recommendation to the Employer and the Contractor within the said 56 days and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor within 14 days after the parties received such Recommendation from the DRB, the Recommendation shall become final and binding upon the Employer and the Contractor.
4. All Recommendations which have become final and binding shall be implemented by the parties forthwith, such implementation to include any relevant action of the Engineer.
5. Whether or not a Recommendation by DRB has become final and binding upon the Employer and the Contractor, a Recommendation shall be admissible as evidence in any subsequent dispute resolution procedure, including any arbitration or litigation having any relation to the dispute to which the Recommendation relates.
6. If the DRB fails to issue his Recommendation within 56 days after it has received the written Request for Recommendation, then either the Employer or the Contractor may, within 14 days after the expiry of the said 56-day period, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 67.4; no arbitration in respect thereof may be commenced unless such notice is given.
7. The arbitration shall be conducted in accordance with the arbitration procedure published by the Appointing Authority specified in the Appendix to Bid.
8. Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every decision of the Engineer unless and until the same shall be revised as a result of the operation of this Sub-Clause 67.1 or, as hereinafter provided, in an arbitral award.

9. The Disputes Review Board Members shall be paid by the hour at the rate specified in the Tendering Data and Contract Data, together with reimbursable expenses of the types specified in the Contract Data, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the DRB.

SUB-CLAUSE 67.2
AMICABLE SETTLEMENT

Sub-Clause 67.2 is deleted without a change in the numbering of the other Sub-Clauses of this Clause 67.

SUB-CLAUSE 67.3
ARBITRATION

Sub-Clause 67.3 is modified to read as follows:

“Any dispute in respect of which the Recommendation, if any, of the DRB has not become final and binding shall be finally settled by arbitration in accordance with the arbitration procedure published by the Appointing Authority specified in the Appendix to Bid.”

“Neither party shall be limited in the proceedings before such tribunal to the evidence or arguments put before the DRB for the purpose of obtaining its Recommendation(s) pursuant to Sub-clause 67.1. No Recommendation shall disqualify any Board Member from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.

“Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer, the Contractor and the DRB shall not be altered by reason of the arbitration being conducted during the progress of the Works.”

SUB-CLAUSE 67.4
FAILURE TO
COMPLY WITH
RECOMMENDATION

Sub-Clause 67.4 is amended to read as follows:

“Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 67.1 and the related Recommendation has become final and binding, either party may, if the other party fails to comply with such Recommendation and without prejudice to any other right it may have, refer the failure to arbitration in accordance with Sub-Clause 67.3. The provisions of Sub-Clause 67.1 shall not apply to any such reference.”

Annex "A"

Version 1 Dispute Review Board (DRB)

Annex A to Conditions of Particular Application

Rules and Procedures for the Functions of the Disputes Review Board (DRB)

(see Clause 67 of the Conditions of Particular Application)

1. Except for providing the services required hereunder, the Board Members should not give any advice to either party or to the Engineer concerning conduct of the Works. The Board Members:
 - (a) shall have no financial interest in any party to the Contract, or the Engineer, or a financial interest in the Contract, except for payment for services on the Board;
 - (b) shall have had no previous employment by, or financial ties to, any party to the Contract, or the Engineer, except for fee-based consulting services on other projects, all of which must be disclosed in writing to both parties prior to appointment to the Board;
 - (c) shall have disclosed in writing to both parties prior to appointment to the Board any and all recent or close professional or personal relationships with any director, officer, or employee of any party to the Contract, or the Engineer, and any and all prior involvement in the project to which the Contract relates;
 - (d) shall not, while a Board Member, be employed whether as a consultant or otherwise by either party to the Contract, or the Engineer, except as a Board Member, without the prior consent of the parties and the other Board Members;
 - (e) shall not, while a Board Member, engage in discussion or make any agreement with any party to the Contract, or with the Engineer, regarding employment whether as a consultant or otherwise either after the Contract is completed or after service as a Board Member is completed;
 - (f) shall be and remain impartial and independent of the parties and shall disclose in writing to the Employer, the Contractor and the Engineer, any fact or circumstance which might be such as to cause either the Employer or the Contractor to question the continued existence of the impartiality and independence required of Board Members ;and
 - (g) shall be fluent in the language of the Contract.

2. Except for its participation in the Board's activities as provided in the Contract and in this Agreement, none of the Employer, the Contractor and or the Engineer shall solicit advice or consultation from the Board or the Board Members on matters dealing with the conduct of the Works.

3. The Contractor shall:
 - (a) Furnish to each Board Member one copy of all documents which the Board may request including Contract Documents, progress reports, variation orders, and other documents pertinent to the performance of the Contract.
 - (b) In cooperation with the Employer, coordinate the Site visits of the Board, including conference facilities, and secretarial and copying services.
4. The Board shall begin its activities following the signing of a Board Member's Declaration of Acceptance, and it shall terminate these activities as set forth below:
 - (a) The Board shall terminate its regular activities when either (i) the Defects Liability Period referred to in Sub-Clause 49.1 (or, if there are more than one, the Defects Liability Period expiring last) has expired, or (ii) the Employer has expelled the Contractor from the Site pursuant to Sub-Clause 63.1, and when, in either case, the Board has communicated to the parties and the Engineer its Recommendations on all disputes previously referred to it.
 - (b) Once the Board has terminated its regular activities as provided by the previous paragraph, the Board shall remain available to process any dispute referred to it by either party. In case of such a referral, the Board Members shall receive payments as provided in paragraphs 7(a) (ii), (iii) and (iv).
5. The Board Members shall not assign or subcontract any of their work under these Rules and Procedures.
6. The Board Members are independent contractors and not employees or agents of either the Employer or the Contractor.
7. Payments to the Board Members for their services shall be governed by the following provisions:
 - (a) Each Board Member will receive payments as follows:
 - (i) A retainer fee per calendar month equivalent to three times the daily fee established from time to time for arbitrators under the Administrative and Financial Regulations of the International Centre for Settlement of Investment Disputes (the ICSID Arbitrator's Daily Fee) or such other retainer as the Employer and Contractor may agree in writing. This retainer shall be considered as payment in full for:
 - (A) Being available, on 7 days' notice, for all hearings, Site Visits requested by either party and other meetings of the Board.
 - (B) Being conversant with all project developments and maintaining relevant files.
 - (C) All office and overhead expenses such as secretarial services, photocopying and office supplies (but not including telephone calls, faxes and telexes) incurred in connection with the duties as a Board Member.
 - (D) All services performed hereunder except those performed during the days referred to in paragraph (ii) below.
 - (ii) A daily fee equivalent to the ICSID Arbitrator's Daily Fee, or such other retainer as the Employer and Contractor may agree in writing. This daily fee shall only be payable in respect of the following days, and shall be considered as payment in full for:

- (A) Each day up to a maximum of two days of travel time in each direction for the journey between the Board Member's home and the Site or other location of a Board Meeting.
- (B) Each day on Site or other location of a Board Meeting.
- (iii) Expenses. In addition to the above, all reasonable and necessary travel expenses (including less than first class air fare, subsistence, and other direct travel expenses) as well as the cost of telephone calls, faxes and telexes incurred in connection with the duties as Board Member shall be reimbursed against invoices. Receipts for all expenses in excess of US\$ 25.00 (U.S. Dollars Twenty Five) shall be provided.
- (iv) Reimbursement of any taxes that may be levied in the country of the Site on payments made to the Board Member (other than a national or permanent resident of the country of the Site) pursuant to this paragraph 8.
- (b) Escalation. The retainer and fees shall remain fixed for the period of the Board Member's term.
- (c) Phasing out of monthly retainer fee. Beginning with the next month after the Taking over Certificate referred to in Clause 48 (or, if there are more than one, the one issued last) has been issued, the Board Members shall receive only one-third of the monthly retainer fee. Beginning with the next month after the Board has terminated its regular activities pursuant to paragraph 4(a) above, the Board Members shall no longer receive any monthly retainer fee.
- (d) Payments to the Board Members shall be shared equally by the Employer and the Contractor. The Contractor shall pay the Board Members invoices within 30 calendar days after receipt of such invoices and shall invoice the Employer (through the monthly statements to be submitted in accordance with Sub-Clause 60.1 of the General Conditions) for one-half of the amounts of such invoices. The Employer shall pay such Contractor's invoices within the time period specified in the Construction Contract for other payments to the Contractor by the Employer.
- (e) Failure of either the Employer or the Contractor to make payment in accordance with this Agreement shall constitute an event of default under the Contract, entitling the non-defaulting party to take the measures set forth, respectively, in Clause 63 or Clause 69.
- (f) Notwithstanding such event of default, and without waiver of rights there from, in the event that either the Employer or the Contractor fails to make payment in accordance with these Rules and Procedures, the other party may pay whatever amount may be required to finance the activities of the Board. The party making such payments, in addition to all other rights arising from such default, shall be entitled to reimbursement of all sums paid in excess of one-half of the amount required to finance the activities of the Board, plus all costs of obtaining such sums.

8. Board Site Visits:

- (a) The Board shall visit the Site and meet with representatives of the Employer and the Contractor and the Engineer at regular intervals, at times of critical construction events, at the written request of either party, and in any case not less than 3 times in any period of 12 months. The timing of Site visits shall be as agreed among the Employer, the Contractor and the Board, but failing agreement shall be fixed by the Board.

- (b) Site visits shall include an informal discussion of the status of the construction of the Works, an inspection of the Works, and the review of any Requests for Recommendation made in accordance with paragraph 10 below. Site visits shall be attended by personnel from the Employer, the Contractor and the Engineer.
- (c) At the conclusion of each Site visit, the Board shall prepare a report covering its activities during the visit and shall send copies to the parties and to the Engineer.

9. Procedure for Dispute Referral to the Board:

- (a) If either party objects to any action or inaction of the other party or the Engineer, the objecting party may file a written Notice of Dispute to the other party with a copy to the Engineer stating that it is given pursuant to Clause 67 and stating clearly and in detail the basis of the dispute.
- (b) The party receiving the Notice of Dispute will consider it and respond in writing within 14 days after receipt.
- (c) This response shall be final and conclusive on the subject, unless a written appeal to the response is filed with the responding party within 7 days after receiving the response. Both parties are encouraged to pursue the matter further to attempt to settle the dispute. When it appears that the dispute cannot be resolved without the assistance of the Board, or if the party receiving the Notice of Dispute fails to provide a written response within 14 days after receipt of such Notice, either party may refer the dispute to the Board by written Request for Recommendation to the Board. The Request shall be addressed to the Chairman of the Board, with copies to the other party and the Engineer, and it shall state that it is made pursuant to Clause 67.
- (d) The Request for Recommendation shall state clearly and in full detail the specific issues of the dispute to be considered by the Board.
- (e) When a dispute is referred to the Board, and the Board is satisfied that the dispute requires his assistance, the Board shall decide when to conduct a hearing on the dispute. The Board may request that written documentation and arguments from both parties be submitted to him before the hearing begins. The parties shall submit insofar as possible agreed statements of the relevant facts.
- (f) During the hearing, the Contractor, the Employer and the Engineer shall each have ample opportunity to be heard and to offer evidence. The Board's Recommendations for resolution of the dispute will be given in writing to the Employer, the Contractor and the Engineer as soon as possible, and in any event not less than 28 days after receipt by the Board of the written Request for Recommendation.

10. Conduct of Hearings:

- (a) Normally hearings will be conducted at the Site, but any location that would be more convenient and still provide all required facilities and access to necessary documentation may be utilized by the Board.
- (b) The Employer, the Engineer and the Contractor shall be given the opportunity to have representatives at all hearings.
- (c) During the hearings, no Board Member shall express any opinion concerning the merit of the respective arguments of the parties.

- (d) After the hearings are concluded, the Board shall meet privately to formulate its Recommendations and shall submit them in writing, together with an explanation of its reasoning, to both parties and to the Engineer. The Recommendations shall be based on the pertinent Contract provisions, applicable laws and regulations, and the facts and circumstances involved in the dispute.
 - (e) The Board shall make every effort to reach a unanimous Recommendation. If this proves impossible, the majority shall decide, and the dissenting Member may prepare a written minority report for submission to both parties and to the Engineer.
11. In all procedural matters, including the furnishing of written documents and arguments relating to disputes, Site visits, and conduct of hearings, the Board shall have full and final authority.
 12. After having been selected, each Board Member shall sign two copies of the following declaration and make one copy available each to the Employer and to the Contractor:

"BOARD MEMBER'S DECLARATION OF ACCEPTANCE

WHEREAS

(a) a Construction Contract (the Contract) for the _____ PROJECT(fill in name of project) has been signed on _____ (fill in date)between-----

----- (fill in the name of Employer) and -----
----- (fill in name of Contractor).

(b) Clause 67 of the Conditions of Particular Application of the Construction Contract and Annex A to said Conditions provide for the selection of a Disputes Review Board (the Board);

(c) the undersigned has been selected to serve as a Board Member on said Board;

NOW THEREFORE, the undersigned Board Member hereby declares as follows:

1. I accept the selection as a Board Member and agree to serve on the Board and to be bound by the provisions of Clause 67 of the Conditions of Particular Application of the Contract and Annex A to said Conditions.

2. With respect to paragraph 1 of said Annex A, I declare

(a) that I have no financial interest of the kind referred to in subparagraph (a);

(b) that I have had no previous employment nor financial ties of the kind referred to in subparagraph (b); and

(c) that I have made to both parties any disclosures that may be required by sub-paragraphs (b) and (c).

BOARD MEMBER

_____ [print name of Board Member]

Date: _____

VERSION 2 - DISPUTE REVIEW EXPERT

SECTION 12 - DISPUTE RESOLUTION PROCEDURE

Clause 67: Settlement of Disputes (version 2)

SUB-CLAUSE 67.1 (A) DISPUTES REVIEW EXPERT (DRE) APPOINTMENT PROCEDURE

1. "The Dispute Review Expert (DRE) shall be a person experienced with the type of construction involved in the Works and with the interpretation of contractual documents and shall be selected by agreement between the Employer and the Contractor. If the DRE is not selected within 28 days of the date of the Letter of Acceptance, then upon the request of either or both parties the DRE shall be selected as soon as practicable by the Appointing Authority specified in the Appendix to Bid."

2. The DRE shall take up his functions after having signed a DRE's Declaration of Acceptance (as required by paragraph 12 of Annex A to these Conditions of Particular Application).

3. In the event of death, disability, or resignation of the DRE, the latter shall be replaced by agreement between the Employer and the Contractor. Any replacement made by the parties shall be completed within 28 days after the event giving rise to the need for a replacement. In case of disagreement between the Employer and the Contractor, the DRE shall be designated by the same Appointing Authority specified in the Appendix to Bid."

SUB-CLAUSE 67.1(B) DISPUTES RESOLUTION PROCEDURE BY DRE

1. "If any dispute arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after the repudiation or other termination of the Contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred to the DRE .

2. The DRE shall give a Recommendation in writing within 56 days of receipt of a notification of a dispute.

3. If the DRE has issued a Recommendation to the Employer and the Contractor within the said 56 days and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor within 14 days after the parties received such Recommendation from the DRE, the Recommendation shall become final and binding upon the Employer and the Contractor.

4. All Recommendations which have become final and binding shall be implemented by the parties forthwith, such implementation to include any relevant action of the Engineer.

5. Whether or not the DRE's Recommendation has become final and binding upon the Employer and the Contractor, a Recommendation shall be admissible as evidence in any subsequent dispute resolution procedure, including any arbitration or litigation having any relation to the dispute to which the Recommendation relates.

6. If the DRE fails to issue his Recommendation within 56 days after he has received the written Request for Recommendation, then either the Employer or the Contractor may, within 14 days after the expiry of the said 56-day period, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 67.4; no arbitration in respect thereof may be commenced unless such notice is given.

7. The arbitration shall be conducted in accordance with the arbitration procedure published by the Appointing Authority specified in the Appendix to Bid.

8. Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every decision of the Engineer unless and until shall be revised as a result of the operation of this Sub-Clause 67.1 or, as hereinafter provided, in an arbitral award.

9. The DRE shall be paid by the hour at the rate specified in the Tendering Data and Contract Data, together with reimbursable expenses of the types specified in the Contract Data, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the DRE."

SUB-CLAUSE 67.2
AMICABLE SETTLEMENT

Sub-Clause 67.2 is deleted without a change in the numbering of the other Sub-Clauses of this Clause 67.

Sub-Clause 67.3 is modified to read as follows:

SUB-CLAUSE 67.3
ARBITRATION

“Any dispute in respect of which the Recommendation, if any, of the DRE has not become final and binding shall be finally settled by arbitration in accordance with the arbitration procedure published by the Appointing Authority specified in the Appendix to Bid.”

“Neither party shall be limited in the proceedings before such tribunal, to the evidence or arguments put before the DRE for the purpose of obtaining its Recommendation(s) pursuant to Sub-clause 67.1. No Recommendation shall disqualify any Board Member from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the dispute.”

“Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer, the Contractor and the DRE shall not be altered by reason of the arbitration being conducted during the progress of the Works.”

SUB-CLAUSE 67.4
FAILURE TO
COMPLY WITH
RECOMMENDATION

Sub-Clause 67.4 is amended to read as follows:

“Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 67.1 and the related Recommendation has become final and binding, either party may, if the other party fails to comply with such Recommendation and without prejudice to any other right it may have, refer the failure to arbitration in accordance with Sub-Clause 67.3. The provisions of Sub-Clause 67.1 shall not apply to any such reference.”

Annex "A"

Version 2 Dispute Review Expert (DRE)

Annex A to Conditions of Particular Application

Rules and Procedures for the Functions of the Disputes Review Expert (DRE)

(See Clause 67 of the Conditions of Particular Application)

1. Except for providing the services required hereunder, the DRE should not give any advice to either party or to the Engineer concerning conduct of the Works. The DRE:
 - (a) shall have no financial interest in any party to the Contract, or the Engineer, or a financial interest in the Contract, except for payment for his services;
 - (b) shall have had no previous employment by, or financial ties to, any party to the Contract, or the Engineer, except for fee-based consulting services on other projects, all of which must be disclosed in writing to both parties prior to selection as DRE;
 - (c) shall have disclosed in writing to both parties prior to selection as DRE any and all recent or close professional or personal relationships with any director, officer, or employee of any party to the Contract, or the Engineer, and any and all prior involvement in the project to which the Contract relates;
 - (d) shall not, while serving as DRE, be employed whether as a consultant or otherwise by either party to the Contract, or the Engineer, except as a DRE, without the prior consent of the parties;
 - (e) shall not, while serving as DRE, engage in discussion or make any agreement with any party to the Contract, or with the Engineer, regarding employment whether as a consultant or otherwise either after the Contract is completed or after service as DRE is completed;
 - (f) shall be and remain impartial and independent of the parties and shall disclose in writing to the Employer, the Contractor and the Engineer, any fact or circumstance which might be such as to cause either the Employer or the Contractor to question the continued existence of the impartiality and independence required of a DRE; and
 - (g) shall be fluent in the language of the Contract.
2. Except for its participation in DRE's activities as provided in the Contract and in this Agreement, none of the Employer, the Contractor and or the Engineer shall solicit advice or consultation from the DRE on matters dealing with the conduct of the Works.
3. The Contractor shall:
 - (a) Furnish to the DRE a copy of all documents which he may request including Contract Documents, progress reports, variation orders, and other documents pertinent to the performance of the Contract.
 - (b) In cooperation with the Employer, coordinate the Site visits of the DRE, including conference facilities, and secretarial and copying services.

4. The DRE shall begin his activities following the signing of a DRE's Declaration of Acceptance, and he shall terminate these activities as set forth below:
 - (a) The DRE shall terminate his regular activities when either (i) the Defects Liability Period referred to in Sub-Clause 49.1 (or, if there are more than one, the Defects Liability Period expiring last) has expired, or (ii) the Employer has expelled the Contractor from the Site pursuant to Sub-Clause 63.1, and when, in either case, the DRE has communicated to the parties and the Engineer his Recommendations on all disputes previously referred to him.
 - (b) Once the DRE has terminated his regular activities as provided by the previous paragraph, the DRE shall remain available to process any dispute referred to him by either party. In case of such a referral, the DRE shall receive payments as provided in paragraphs 7(a) (ii), (iii) and (iv).
5. The DRE shall not assign or subcontract any of his work under these Rules and Procedures.
6. The DRE is an independent contractor and not an employee or agent of either the Employer or the Contractor.
7. Payments to the DRE for his services shall be governed by the following provisions:
 - (a) The DRE will receive payments as follows:
 - (i) A retainer fee per calendar month equivalent to three times the daily fee established from time to time for arbitrators under the Administrative and Financial Regulations of the International Centre for Settlement of Investment Disputes (the ICSID Arbitrator's Daily Fee), or such other retainer as the Employer and Contractor may agree in writing. This retainer shall be considered as payment in full for:
 - (A) Being available, on 7 days' notice, for all hearing and Site Visits requested by either party.
 - (B) Being conversant with all project developments and maintaining relevant files.
 - (C) All office and overhead expenses such as secretarial services, photocopying and office supplies (but not including telephone calls, faxes and telexes) incurred in connection with the duties as a DRE.
 - (D) All services performed hereunder except those performed during the days referred to in paragraph (ii) below.
 - (ii) A daily fee equivalent to the ICSID Arbitrator's Daily Fee or such other daily fee as the Employer and Contractor may agree in writing. This daily fee shall only be payable in respect of the following days, and shall be considered as payment in full for:
 - (A) Each day up to a maximum of two days of travel time in each direction for the journey between the DRE's home and the Site.
 - (B) Each day on Site or other location convening the service.
 - (iii) Expenses. In addition to the above, all reasonable and necessary travel expenses (including less than first class air fare, subsistence, and other direct travel expenses) as well as the cost of telephone calls, faxes and telexes incurred in connection with the duties as DRE shall be reimbursed against invoices. Receipts for all expenses in excess of US\$ 25.00 (U.S. Dollars Twenty Five) shall be provided.

- (iv) Reimbursement of any taxes that may be levied in the country of the Site on payments made to the DRE (other than a national or permanent resident of the country of the Site) pursuant to this paragraph 8.
- (b) Escalation. The retainer and fees shall remain fixed for the period of the DRE's term.
- (c) Phasing out of monthly retainer fee. Beginning with the next month after the Taking over Certificate referred to in Clause 48 (or, if there are more than one, the one issued last) has been issued, the DRE shall receive only one-third of the monthly retainer fee. Beginning with the next month after the Board has terminated its regular activities pursuant to paragraph 4(a) above, the DRE shall no longer receive any monthly retainer fee.
- (d) Payments to the DRE shall be shared equally by the Employer and the Contractor. The Contractor shall pay the DRE's invoices within 30 calendar days after receipt of such invoices and shall invoice the Employer (through the monthly statements to be submitted in accordance with Sub-Clause 60.1 of the General Conditions) for one-half of the amounts of such invoices. The Employer shall pay such Contractor's invoices within the time period specified in the Construction Contract for other payments to the Contractor by the Employer.
- (e) Failure of either the Employer or the Contractor to make payment in accordance with this Agreement shall constitute an event of default under the Contract, entitling the non-defaulting party to take the measures set forth, respectively, in Clause 63 or Clause 69.
- (f) Notwithstanding such event of default, and without waiver of rights there from, in the event that either the Employer or the Contractor fails to make payment in accordance with these Rules and Procedures, the other party may pay whatever amount may be required to finance the activities of the DRE. The party making such payments, in addition to all other rights arising from such default, shall be entitled to reimbursement of all sums paid in excess of one-half of the amount required to finance the activities of the DRE, plus all costs of obtaining such sums.

8. DRE Site Visits:

- (a) The DRE shall visit the Site and meet with representatives of the Employer and the Contractor and the Engineer at regular intervals, at times of critical construction events, at the written request of either party, and in any case not less than 3 times in any period of 12 months. The timing of Site visits shall be as agreed among the Employer, the Contractor and the DRE, but failing agreement shall be fixed by the DRE.
- (b) Site visits shall include an informal discussion of the status of the construction of the Works, an inspection of the Works, and the review of any Requests for Recommendation made in accordance with paragraph 10 below. Site visits shall be attended by personnel from the Employer, the Contractor and the Engineer.
- (c) At the conclusion of each Site visit, the DRE shall prepare a report covering his activities during the visit and shall send copies to the parties and to the Engineer.

9. Procedure for Dispute Referral to the DRE:

- (a) If either party objects to any action or inaction of the other party or the Engineer, the objecting party may file a written Notice of Dispute to the other party with a copy to the Engineer stating that it is given pursuant to Clause 67 and stating clearly and in detail the basis of the dispute.

- (b) The party receiving the Notice of Dispute will consider it and respond in writing within 14 days after receipt.
 - (c) This response shall be final and conclusive on the subject, unless a written appeal to the response is filed with the responding party within 7 days after receiving the response. Both parties are encouraged to pursue the matter further to attempt to settle the dispute. When it appears that the dispute cannot be resolved without the assistance of the DRE, or if the party receiving the Notice of Dispute fails to provide a written response within 14 days after receipt of such Notice, either party may refer the dispute to the DRE by written Request for Recommendation to the DRE. The Request shall be addressed to the DRE, with copies to the other party and the Engineer, and it shall state that it is made pursuant to Clause 67.
 - (d) The Request for Recommendation shall state clearly and in full detail the specific issues of the dispute to be considered by the DRE.
 - (e) When a dispute is referred to the DRE, and the DRE is satisfied that the dispute requires his assistance, the DRE shall decide when to conduct a hearing on the dispute. The DRE may request that written documentation and arguments from both parties be submitted to him before the hearing begins. The parties shall submit insofar as possible agreed statements of the relevant facts.
 - (f) During the hearing, the Contractor, the Employer and the Engineer shall each have ample opportunity to be heard and to offer evidence. The DRE's Recommendations for resolution of the dispute will be given in writing to the Employer, the Contractor and the Engineer as soon as possible, and in any event not less than 56 days after receipt by the DRE of the written Request for Recommendation.
10. Conduct of Hearings:
- (a) Normally hearings will be conducted at the Site, but any location that would be more convenient and still provide all required facilities and access to necessary documentation may be utilized by the DRE.
 - (b) The Employer, the Engineer and the Contractor shall be given the opportunity to have representatives at all hearings.
 - (c) During the hearings, the DRE shall not express any opinion concerning the merit of the respective arguments of the parties.
 - (d) After the hearings are concluded, the DRE shall formulate his Recommendations and shall submit them in writing, together with an explanation of his reasoning, to both parties and to the Engineer. The Recommendations shall be based on the pertinent Contract provisions, applicable laws and regulations, and the facts and circumstances involved in the dispute.
11. In all procedural matters, including the furnishing of written documents and arguments relating to disputes, Site visits, and conduct of hearings, the DRE shall have full and final authority.
12. After having been selected, the DRE shall sign two copies of the following declaration and make one copy available each to the Employer and to the Contractor.

DISPUTES REVIEW EXPERT’S DECLARATION OF ACCEPTANCE

WHEREAS

- a) a Construction Contract (the Contract) for the ----- Project
(fill in name of project) has been signed on _____ *(fill in date)* between-----

-----*(fill in the name of Employer)* and -----

-----*(fill in name of Contractor)*.
- (b) Clause 67 of the Conditions of Particular Application of the Construction Contract and Annex A to said Conditions provide for the selection of a Disputes Review Expert (DRE);
- (c) the undersigned has been selected to serve as the DRE;

Now therefore, the undersigned DRE hereby declares as follows:

- 1. I accept the selection as a DRE and agree to serve in this capacity and to be bound by the provisions of Clause 67 of the Conditions of Particular Application of the Contract and Annex A to said Conditions.
- 2. With respect to paragraph 1 of said Annex A, I declare
 - (a) that I have no financial interest of the kind referred to in subparagraph (a);
 - (b) that I have had no previous employment nor financial ties of the kind referred to in subparagraph (b); and
 - (c) that I have made to both parties any disclosures that may be required by sub-paragraphs (b) and (c).

DISPUTES REVIEW EXPERT

_____ *[Print name of DRE]*

Date: _____

Appendix 5-3 - Letters of Introduction

[Printed of ERA Letter head]

Dear Telecoms/EEPCO/Water/Police/District DMO/ etc

Contract No: ?????? Road A to B

ERA has entered into contracts with *[name of Supervising Engineering Company]* and *[name of Contractor]* who will undertake the supervision and construction of the above mentioned project respectively.

The contract entails *[insert a brief description of the works to be undertaken]*. Work is scheduled to start on or about *[insert the approximate contract commencement date]* and be completed by *[insert the contractual end date plus an allowance for any anticipated extension of the contract period]*

The Contractor intends establishing their camp site at *[insert details of where the contractor's camp will be established]*.

You are requested to provide whatever assistance you may be able to afford to the Contractor and the Supervising Engineer during the course of the contract.

The ERA Project Engineer for this project is *[insert name of the ERA PE]* who may be contacted in the ERA head office on the following:

- *[insert fixed line telephone number and extension]*
- *[insert facsimile number]*
- *[insert mobile phone number]*
- *[insert e-mail address]*

Yours faithfully

?????

Head of Construction Contract Implementation Division

ERA

Appendix 5-4 - ERA Counterpart Secondment

It is essential that ERA, the Counterpart and the RE are all clear as to the conditions under which the counterpart is being seconded to the project as well as what is expected with regard to training and reporting during the period of the secondment.

It is also important that ERA ensure that provision has been made in either the Construction or Supervision contract for any costs associated with such a secondment. If no such provision exists it will be necessary to issue a variation order to accommodate all additional costs.

ERA Counterpart Secondment Schedule			
Name ³ :	<i>Dawit Kebede</i>	Contract No.:	<i>4286</i>
Contact:	<i>+251 9 11 22 33 44</i>	Contract Name:	<i>Addis- Alemgena Rehabilitation</i>
Qualification:	<i>BSc Civil Engineer</i>	Consultant:	<i>ABC Consultants Pty Ltd</i>
Experience ⁴ :	<i>One year in CCID as PE for Addis CMC upgrading project</i>	RE Name:	<i>Peter Cobb</i>
		Contact:	<i>+251 9 11 55 66 77</i>
		Site Office ⁵ :	<i>km 22</i>
Secondment:	<i>1 Nov 2006 - 30 Nov 2008</i>	Start/End:	<i>15 Jun 2006 - 30 Apr 2009</i>
Training Requirements⁶:			
<i>During this period of assignment ERA requires the counterpart to gain particular experience in the functioning and operation of the materials laboratory including hands on experience in the physical testing of materials.</i>			
<i>In addition the counterpart should gain general experience in project supervision from the Consultant's perspective.</i>			
Counterpart's Responsibility⁷:			
<i>The Counterpart shall be responsible to the Resident Engineer and shall be required to act under his instructions and in accordance with the rules and regulations governing the Consultant's supervisory staff.</i>			
Reporting Requirements⁸: (reports to be submitted to the ERA project engineer responsible for the project)			
Counterpart:		Consultant:	
1. Quarterly Training Progress (by 5th day)		1. Counterpart Training Program (by 15/10/06)	
		2. Monthly Training Progress (by 5th day)	
		3. Final Training Report (by 15 Dec 2008)	
Logistics⁹:			
Working Hours: <i>In accordance with Consultant's working hours + 21 days annual leave at the convenience of the Resident Engineer.</i>			
Transport: <i>No personal transport to be provided. Engineer to be transported as necessary by "communal" site transport. Engineer to be transported to Addis and back on pay weekends by the Consultant.</i>			
Board: <i>No board provided but lodging to contain catering facilities.</i>			
Lodging: <i>Engineer to be accommodated in shared accommodation provided under the contract</i>			
Allowance: <i>The counterpart will receive the standard ERA living out allowance.</i>			
Approved by ¹⁰ :		Head CCID:	
Received by ¹¹ :		Counterpart	
Received by ¹² :		RE:	

³ Insert Name of counterpart engineer being seconded for training.

⁴ Insert sufficient detail of the counterpart's previous experience to permit the RE to prepare a suitable training program.

⁵ Insert sufficient details to permit the counterpart to identify where he is going to be working and living.

⁶ ERA must provide exact details of the training which they expect the counterpart to undergo.

⁷ Ideally the counterpart should have no official ERA responsibilities during this assignment. He should be assigned to the Consultant to perform as one of its own staff.

⁸ Insert details of the nature and frequency of reporting required by ERA

⁹ Insert details of all aspects pertaining to the logistics of the counterpart's secondment.

¹⁰ The form will be completed by the Project Engineer but must be approved for issue by the Head CCID

¹¹ The form must be officially transmitted to the Counterpart who must sign it in confirmation of receipt.

¹² The form must be officially transmitted to the RE who must sign it in confirmation of receipt.

Appendix 5-5 - Site Possession Letters

ERA Letterhead.

Addressed to the Engineer

Dear Sir

Contract No: ??? Road A to B

In anticipation of the issue of the Notice to Commence and in terms of Clause 42.1¹³ of the conditions of contract we hereby advise you that possession of the site between *[insert the chainages of the start and end points of the section(s) to which possession is being given]* is hereby given to the Contractor.

You are hereby requested to advise the Contractor of this with your Notice to Commence in terms of Clause 41.1¹⁴.

Yours faithfully

Head, Construction Contract Implementation Division

ERA

The Engineer's Letterhead.

Addressed to the Contractor

Dear Sir

Contract No: ??? Road A to B

In terms of Clause 41.1¹⁵ you are hereby instructed to commence the works.

We attach for your reference a letter received from the Employer giving you possession of the site between *[insert the chainages of the start and end points of the section for which possession is given]*.

Yours faithfully

Engineer's Representative

[Insert Consultants name]

¹³ This is the FIDIC IV Clause reference. The actual clause number for each particular contract should be verified and used.

¹⁴ This is the FIDIC IV Clause reference. The actual clause number for each particular contract should be verified and used.

¹⁵ This is the FIDIC IV Clause reference. The actual clause number for each particular contract should be verified and used

Appendix 5-6 - External Request for Additional or Revised Work

REQUESTS FOR ADDITIONAL AND OR REVISED WORK

The Contractor and or Engineer are often pressurized by officials, local government and other authorities to include additional works or revise designs to "better address local requirements". The conditions of ERA contracts are quite clear that neither the Contractor nor the Engineer have the right to alter the contract without the consent/approval of the Employer.

In order to address the requirements of those not directly involved in the administration of the project, it is therefore necessary to determine a set of procedures to address and, where necessary, to implement their requirements. The following procedure is proposed for addressing all such requests.

- i. The Promoter of the "request" should discuss the technical and financial feasibility of the request with the ERA PE and submit a formal written request.
- ii. The ERA PE will then discuss the request with the Resident Engineer to determine if it is possible to accommodate the request. If it is considered possible, the ERA PE will prepare a submission for ERA's approval in which he will detail the following:
 - The details of the request
 - The motivation for the request
 - The Programme implications
 - The financial implications
 - The contractual requirements for its implementation
- iii. ERA should consider the request in the light of the technical and financial feasibility, the suitability of the work in relation to the objectives of the project, future plans for the project and available funding.
- iv. If ERA considers that the works can be undertaken it will normally be necessary to obtain the approval of the funding agency for the inclusion of such additional works in the contract. Only once such approval has been obtained should the Engineer be instructed, by ERA, to include the work in the contract.
- v. ERA should then advise the Promoter that the works are to be/ not to be included in the contract.

This process of approval and inclusion should not take a lot of time if item (ii) above is sufficiently detailed.

If the additional expenditure increases the ceiling amount of the contract it will be necessary to source the additional funds and include them in the GoE's contract budget prior to issuing any instruction to the Engineer to implement the work.

Appendix 5-7 - Guideline N^o CA1 - ERA PE Filing System

GUIDELINE N° CA1



Ethiopian Roads Authority

Guideline N° CA1 ERA PE Filing System

Contract Administration Manual

Draft November 2006

**FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
ETHIOPIAN ROADS AUTHORITY
CONTRACT ADMINISTRATION DIVISION**

PE Filing System

November 2006

ER PE FILING SYSTEM GUIDELINE

1.0 INTRODUCTION

2.0 HARD COPY FILING SYSTEM

2.1 Pre-Construction Stage - DTSB and ESPD

2.1.1 Pre-Construction

2.2 Construction Stage - CCID

2.2.1 Construction Stage - Non Financial

2.2.2 Construction Stage - Financial

2.3 Drawings

2.3.1 Pre-Construction Stage

2.3.2 Construction Stage - Non Financial

2.3.3 Construction Stage - Financial

3.0 DOCUMENT RETRIEVAL

4.0 COMPUTER FILING SYSTEM

ERA PE FILING SYSTEM GUIDELINE

1.0 INTRODUCTION

The keeping of project records, whilst being very important, is only of use if one is able to easily retrieve the records when required. For this reason it is very important that, at the commencement of a project, the Project Engineer takes the time to consider the project and the type of records which it will generate and, having determined this, decides on an appropriate system for the storage of these records. The guidelines below address the requirements of the Feasibility, Design, Tender, Construction and Defects Liability Stages of a project.

In general these records will be limited to correspondence, reports and financial and technical information and will be in either hard or soft copy form. Any filing system must therefore provide for the storage of both of these forms of records. As every project is unique the information which follows should be viewed as a set of guidelines rather than a set of hard and fast ERA rules.

Although, at the time of preparation of these guidelines (2006), ERA does have a centralised filing system for correspondence, this system does not include the keeping of documents, drawings, reports etc. Until such time as a complete system is developed the individual systems utilised by the PEs will be required to serve this function. The most important consideration in determining a system is that it must permit a person who is not familiar with the system to be able to retrieve information without assistance.

The following guidelines will, firstly, address the requirements of hard copy filing and, secondly, those of computer filing.

2.0 HARD COPY FILING SYSTEM

With reference to Construction contracts, any system will be required to address the following aspects of the contract.

2.1 Pre-Construction Stage - DTSB & ESPB

- Correspondence with the Consultant
- Correspondence with Other parties
- Invitation of Bids
- Receipt and Evaluation of Bids
- Award of a Contract

It is important that an exact replica of the Invitation to Bid package, including all drawings, geotechnical information etc. and an exact replica of the successful contractors' bid package, including all attachments be kept for record purposes. In most cases the contractor's bid package will form the basis of the contract document. It will not, however, be exactly the same and copies of both document packages therefore need to be filed for record purposes. As a result of this duplication of documentation the volume of material required to be filed at the Pre-Construction Stage is likely to be great. It is therefore suggested that the pre-construction stage documentation and correspondence be contained in a separate package to that of the construction stage. This package must, however, be available to the CCID PE responsible for the implementation of the project. The following section will therefore consider filing as commencing with the Letter of Invitation to submit Bids. All previous correspondence and documentation will be contained in a separate Consultant's Design and Tender filing package.

2.1.1 *Pre- Construction*

- | | |
|--|--|
| 1. Correspondence with the Consultant. | This correspondence will relate to general correspondence but will exclude correspondence on the invitation package , the evaluation of bids or contract negotiations which should be filed in sections 3, 4 and 5 below. |
| 2. Correspondence with other Parties. | This section will cover correspondence with other GOE departments, land owners, funding agencies etc. Depending on the nature of the correspondence generated by each particular project it may be prudent to create sub-sections within this section. |
| 3. Invitation of Bids. | This section will contain all of the letters of invitation, one complete solicitation package, the minutes of the site inspection and any questions raised and answers given during the tender period. |
| 4. Receipt and Evaluation of Bids. | This section will contain the schedule of bids received and the values thereof, a letter recording the handing over of documents to the consultant for evaluation, the consultants bid evaluation report, any correspondence relating to the evaluation process and a record of any negotiations and or clarifications during the evaluation period. |
| 5. Letter of Acceptance. | This section will only contain the Letter of Acceptance issued by ERA. The Notice to Commence is issued by the Consultant. This section should also contain hand over notes containing all pertinent information to the CCID plus a copy of the signed contract agreement. |
| 6. SPARE | |
| 7. SPARE | |
| 8. SPARE | |
| 9. SPARE | |
| 10. SPARE | |

2.2 **Construction Stage -CCID**

- Correspondence with the Contractor
- Correspondence with the Consultant
- Correspondence with Other parties
- Contract Documents (including. Manuals and Procedures)
- Minutes of Meetings
- Reports
- Contract Data Schedule
- Payment Certificates
- Claims and Disputes
- Final Account
- Drawings

The documentation generated during the construction stage can be conveniently separated into financial and non-financial categories which should be filed in two separate packages. The system, therefore, is conveniently separated into Pre-Construction Stage, Construction Stage Financial and Construction Stage Non-Financial.

2.2.1 *Construction Stage - Non-financial*

- | | |
|---------------------------------------|---|
| 1. Correspondence with the Contractor | In general there should be little or no correspondence between ERA and the Contractor during the construction stage. There may, however, be copies of letters to the contractor sent to ERA by the Consultant. |
| 2. Correspondence with the Consultant | This section will contain all correspondence of a general nature relating to technical issues, new rates, proposed courses of action, queries on progress and actions taken etc. but excluding correspondence on payment certificates, claims, final accounts etc. which are covered in the Financial file below. |
| 3. Correspondence with other Parties | This section will contain correspondence with GOE departments, land owners, funding agencies etc. |
| 4. Minutes of Meetings | In general these will be site meetings but meetings other than site meetings may be called to address specific matters. |
| 5. Reports | This section will contain the ERA contract progress reporting, ERA PE site visit reports, the full progress report, the project completion report and any special reports. |
| 6. Right of Way | Although items on this subject will come in the form of correspondence it may be necessary to allocate separate files depending on the volume of material |
| 7. Programmes | Although items on this subject will come in the form of correspondence it may be necessary to allocate separate files depending on the volume of material |
| 8. Design and Design Changes | Although items on this subject will come in the form of correspondence it may be necessary to allocate separate files depending on the volume of material |
| 9. SPARE | |
| 10. SPARE | |

2.2.2 *Construction Stage - Financial*

- | | |
|----------------------------|--|
| 11. Contract Data Schedule | This is a single page affixed to the inside cover of the file which indicates the most pertinent contract information. |
| 12. Payment Certificates | This section will contain the Consultants letter of authorisation and transmittal, the one page interim payment certificate and all back up documentation for each certificate. In addition any notes, comments, queries etc on payment certificates should also be filed under this section together with the relevant certificate. |
| 13. Claims and Disputes | This section will contain all correspondence related to claims including the Consultants rulings on the claims. It should also contain; notes, comments, queries etc on the claims particularly if ERA disagree with the Consultants ruling. |
| 14. Final Account | This section will contain the complete final account in bill of quantity form with all back up calculations, correspondence etc. |
| 15. SPARE | |
| 16. SPARE | |
| 17. SPARE | |
| 18. SPARE | |
| 19. SPARE | |
| 20. SPARE | |

2.3 Drawings

Drawings will be received by ERA at three distinct stages viz. at the Invitation Stage, during the Construction Stage and at the Final Report Stage. In general the drawings received during the first two stages will be paper copies while those received at the final stage will most likely be sepia copies plus paper and/or computer copies. As the volume of drawings may be great it is proposed that the drawings are filed in box files if they are folded A0 or A1 copies or on bookshelves if they are bound A3 copies. Considering each stage in turn.

2.3.1 *Pre-Construction Stage*

Invitation of Bids

The drawings at this stage will be supplied as part of the Invitation to Bid package and depending on their volume should either be filed in the Pre-Construction file under section 3 or in a box file marked in a similar manner to the lever arch file. If there are any revisions of drawings during the bidding period it is essential that these revised drawings be included with the original drawings.

Receipt and Evaluation

The drawings of the successful Bidder will form part of the contract agreement to be signed by ERA and the Contractor and as the original contract document will be held by others for safe keeping only a working copy of the document will be required and this is filed under section 5. There will accordingly be no requirement for filing another copy of these drawings.

2.3.2 *Construction Stage - Non-financial*

Construction (Section 11 to 14)

The first drawings to be issued at this stage will be the "Drawings Issued for Construction" which will in all likelihood be different to the drawings issued with the invitation to bid. Subsequent issues of drawings will either be drawings which have been revised or drawings which were not previously issued. As the volume of drawings at this stage is likely to be great it is proposed that these drawings be stored in folded form in box files. It should be noted that when drawings are superseded by revision they should NOT be disposed of but should be kept for record purposes in the chronological order in which they were issued.

Report

Following the issue by the Consultant of the Taking over Certificate and before the issue of the final certificate the consultant will provide a set of As-Built Drawings. These will most likely be full size copies and soft copies of the construction drawings. The copies should NOT be folded they will need to be stored either in hanging files or in rolled form. If paper copies are provided these should be filed either with the Final Report under section 15 or in a box file suitably identified.

2.3.3 *Construction Stage - Financial*

In general it should not be necessary to store drawings under this section other than drawings used for checking of measurements.

The table below summarises the contents of these guidelines for a Construction contract filing system.

CONSTRUCTION CONTRACT FILING SYSTEM

NOTE: The system comprises lever arch files which shall be marked as follows respectively.

(1)	(2)	(3)
PROJECT TITLE PROJECT NUMBER PRE-CONSTRUCTION	PROJECT TITLE PROJECT NUMBER NON-FINANCIAL	PROJECT TITLE PROJECT NUMBER FINANCIAL
and the filing divisions contained therein shall be as follows respectively		
1. Correspondence with Consultants 2. Correspondence with Others 3. Invitation of Bids 4. Receipt and Evaluation of Bids 5. Letter of Acceptance 6. 7. 8. 9. 10.	1. Correspondence with Contractor 2. Correspondence with Consultant 3. Correspondence with Others 4. Minutes of Meetings 5. Reports 6. Right of Way 7. Programmes 8. Design and Design Changes 9. 10.	11. Contract Data 12. Payment Certificates 13. Claims and Disputes 14. Final Account 15. 16. 17. 18. 19. 20.

Files (1) will be created by the DTSB & ESPD who will transfer the file(s) to the CCID following the award of the contract.

Files (2) and (3) will be created by the CCID.

All files will be held by the Project Engineer for the duration of the Contract after which time they will be archived.

DRAWINGS shall be kept in box files marked as above for each stage.

CD copies of drawings shall be kept with the hard copy files but in a storage case.

3.0 DOCUMENT RETRIEVAL

In order to be able to ensure efficient retrieval of documents it will be necessary to establish a document register and whilst this should be done on an organisational level as a complete document management system, there is no reason why individual PEs should not create their own simple Excel based document management systems. Excel has the facilities to sort data in any chosen order and to search data for particular reference words.

In order to create such a system it will be necessary to identify every document by assigning it a unique Document Identification Number (DIN) and then entering the information relevant to that document on a spreadsheet. An example of such a document register is given below.

DIN	Date	Reference	From	Subject	DIN & Chronological Order
0001	13-Jan-06	Eng/Contr/0001	Eng	Appointment of engineer's representative	
0002	26-Jan-06	Contr/ERA/0001	Contr	Submission of performance guarantee	
0003	3-Feb-06	ERA/Contr/0001	ERA	Approval of performance guarantee and guarantor	
0004	14-Feb-06	Contr/ERA/0002	Contr	Submission of insurance cover note	
0005	12-Mar-06	Eng/ERA/0006	Eng	Advance payment certificate	
0006	20-Mar-06	Eng/ERA/0008	Eng	Request for confirmation of engineer's housing location	
0007	21-Mar-06	ERA/Eng/0002	ERA	Confirmation of location of Engineer's housing	
0008	4-Apr-06	Eng/Contr/0010	Eng	Issue of notice to commence	
0009	5-Apr-06	ERA/Eng/0003	ERA	Granting of possession of site	
0010	10-Apr-06	Contr/Eng/0007	Contr	Submission of clause 14 programme	
0011	25-Apr-06	Contr/Eng/0011	Contr	Submission of clause 14.3 cash flow	
0012	5-May-06	Contr/ERA/0003	Contr	Submission of insurance policy	
0013	15-May-06	ERA/Contr/0002	ERA	Approval of insurance policy and insurer	

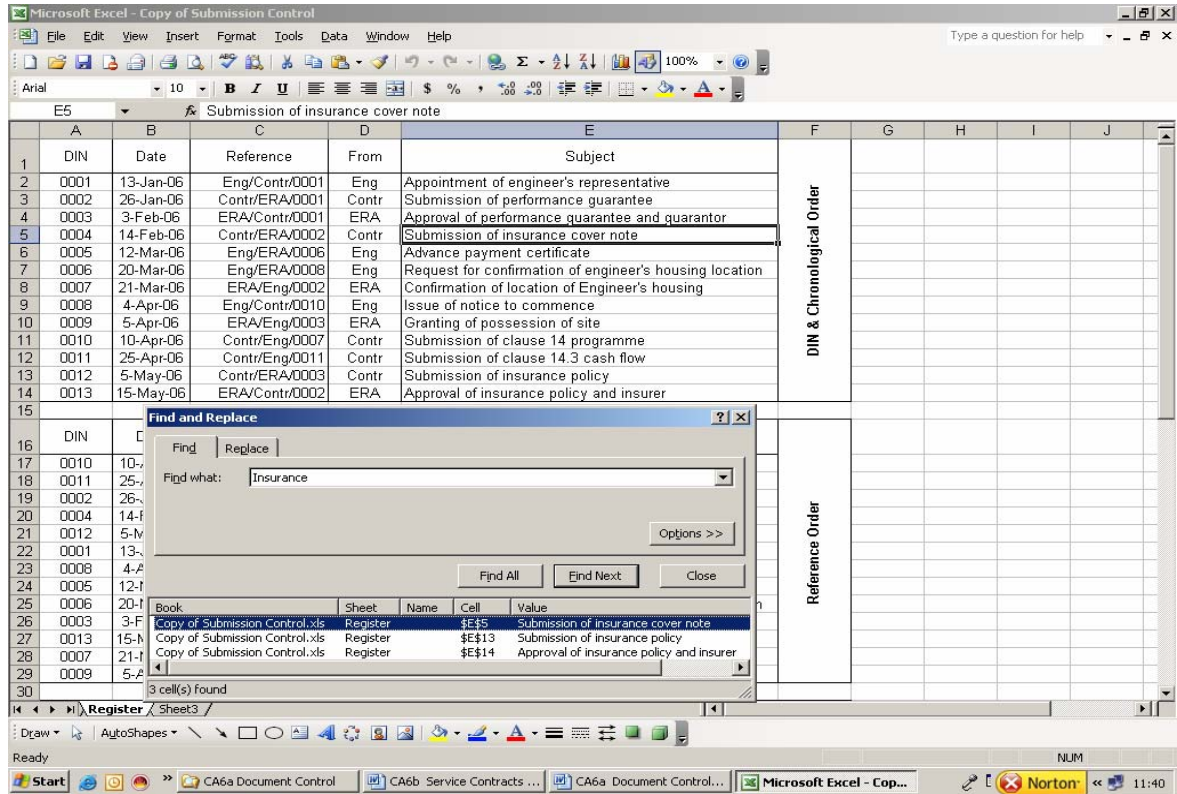
The information in this document register is currently sorted in chronological and DIN order. The information can, however, be easily sorted in either ascending or descending order by column heading or combination of column headings by using the excel function Data/Sort/Sort By/Column Heading. The example below has sorted the information above in ascending order by correspondence originator i.e. Column "From" plus Date and DIN order.

DIN	Date	Reference	From	Subject	Letter Originator Order
0002	26-Jan-06	Contr/ERA/0001	Contr	Submission of performance guarantee	
0004	14-Feb-06	Contr/ERA/0002	Contr	Submission of insurance cover note	
0010	10-Apr-06	Contr/Eng/0007	Contr	Submission of clause 14 programme	
0011	25-Apr-06	Contr/Eng/0011	Contr	Submission of clause 14.3 cash flow	
0012	5-May-06	Contr/ERA/0003	Contr	Submission of insurance policy	
0001	13-Jan-06	Eng/Contr/0001	Eng	Appointment of engineer's representative	
0005	12-Mar-06	Eng/ERA/0006	Eng	Advance payment certificate	
0006	20-Mar-06	Eng/ERA/0008	Eng	Request for confirmation of engineer's housing location	
0008	4-Apr-06	Eng/Contr/0010	Eng	Issue of notice to commence	
0003	3-Feb-06	ERA/Contr/0001	ERA	Approval of performance guarantee and guarantor	
0007	21-Mar-06	ERA/Eng/0002	ERA	Confirmation of location of Engineer's housing	
0009	5-Apr-06	ERA/Eng/0003	ERA	Granting of possession of site	
0013	15-May-06	ERA/Contr/0002	ERA	Approval of insurance policy and insurer	

Excel's search facility can also be used to identify all correspondence with, for example, similar subject matter e.g. Insurance. This is demonstrated in the picture below which resulted from identifying all correspondence related to insurance, via the following key strokes Edit/Find/[type "Insurance"]/Find All, which would yield the result that the word "Insurance" occurred in cells E5, E13 and E14 or letters with DIN references 0004, 0012 and 0014.

4.0 COMPUTER FILING SYSTEM

The need for an easy to use computer filing system is almost more important than it is for hard copies primarily because it is not possible to physically see the contents of computer files without opening them. When computers are shared, it is suggested that each user, set up its own User account. Each project should have its individual folders and sub folders which "mirror" the hard copy filing system.



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