

SOUTH AFRICAN ROAD FEDERATION
SYMPOSIUM ON THE PREPARATION OF CONTRACT DOCUMENTATION
AND ADMINISTRATION OF CIVIL ENGINEERING CONTRACTS
CHAPTER 2: BACKGROUND AND ALTERNATIVE FORMS OF CONTRACT

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1. INTRODUCTION

In looking at contract documentation it is necessary to define a number of basic concepts before going into the details of the documentation. The scope of the seminar only permits a brief introduction to some of the concepts but sufficient detail is given for an understanding of the concepts.

Some of the key issues that arise are:-

- What is a Contract?
- Who are the Parties to a Contract?
- How is a contract reached?
- What is Risk and how does it affect contracting parties?
- How can Risk be managed through alternative Contract arrangement?
- How are Contracts managed?

2. WHAT IS A CONTRACT?

A contract is an agreement between two parties, one of whom, the contractor, agrees to construct the works required, and the other, the employer, agrees to pay for the service. Personal rights and obligations are created by the agreement, and the right of the one party is the obligation of the other. The contractor has the obligation to construct the works in accordance with the design drawings, the specification and within the time allocated and has the right to be paid for doing this. The employer, on the other hand, has the right to have the works constructed as required, within the time allocated and has the obligation to pay the contractor for it.

If one of the parties defaults on his obligation, the other, for whom the performance of this obligation would be a right, may invoke the assistance of the law to enforce his right.

A contract may thus be summarised as an offer to provide a product or service and an acceptance of that offer with all its terms and conditions. It is important to note that both the offer and the acceptance thereof may be verbal or written or even implied without any words being spoken. A contract also implies consent by both parties to enter into a contract. This meeting of the minds, or consensus, is an essential element of a contract.

Let us consider buying a newspaper from the vendor on the street corner or groceries or clothing in the store. The newspaper vendor is offering you a copy of the daily news in print at a set price. If you wish to know the latest news you pay the vendor and take a copy of the newspaper.

You have actually completed a contract of sale and purchase through accepting the vendor's offer, paying the price and obtaining the newspaper. Exactly the same holds true in the supermarket or clothing store. Note also that the law lays down certain conditions and obligations on both the buyer and the seller. These conditions can be varied or modified if the buyer and seller agree.

As far as the civil engineering industry is concerned, the written offer and acceptance is infinitely preferable in the light of the large amounts of money that are normally involved as well as the complexity of the projects.

It is also worth noting that the law requires any offers and acceptances in respect of fixed property to be reduced to writing. The same holds true for hire-purchase contracts.

3. PARTIES TO A CIVIL ENGINEERING CONTRACT

In the conventional straight forward civil engineering project there are usual three organizations involved.

- The Employer (also known as the Client or Owner) who is the party interested in having the project executed.
- The Contractor who is responsible for constructing the project in accordance with the Employer's wishes.
- The Consulting Engineer who has been responsible for preparing all the plans and specifications and schedules in accordance with the Employer's brief and who may subsequently be appointed by the Employer to supervise the construction of the project as the 'Engineer' in terms of the contract..

But what contracts exists in this arrangement?

- 1) The construction contract exists between the Employer and the Contractor.
- 2) The contract for professional services relating to design and supervision of the works exists between the Employer and the Consulting Engineer.

Note that there is no contract between the Contractor and the Consulting Engineer.

In the construction contract above, the Contractor undertakes to perform the work in accordance with the drawings and specifications and under the conditions and provisions accepted by him in submitting his tender. For these services the Employer agrees to pay the Contractor the tendered sum in installments over the duration of the contract period.

In the second contract the Employer agrees to use the services of the Consulting Engineer to plan, investigate, report on, design and ultimately to watch over the construction of the project and to administer the Contract between the Employer and the Contractor. Financial compensation to the Consulting Engineer for the performance of this task is by way of professional fees. In the event of the Employer having sufficient resources and expertise to fulfill the functions of design, construction supervision and contract administration “in-house”, this contract would not exist.

The Employer may have his own resources for the construction phase. [For example the Department of Water Affairs & Forestry (DWAF) is a public agency that has substantial resources to carry out “in-house” construction of significant magnitude]. In such cases the Employer may, at his discretion and depending on his own capacity, still use the services of a Consulting Engineer for certain planning and design functions and for the supervision of the works.

4. HOW IS A CONTRACT REACHED?

Figure 2 illustrates the various steps that would normally be followed in concluding a single contract for a civil engineering project. It must be remembered that a project can involve several contracts. In each case the process would be essentially the same.

In the civil engineering contract the documents prepared by the Owner, termed the Employer in the Contract, (or the Consulting Engineer or behalf of the Employer) describe in greater or lesser detail what the Employer wants. It may, for example, be a road, a small reservoir, a major dam, steel making plant, or any other facility that may be required.

Contracting companies will submit their offers (or tenders) to do the work for the Employer. The tender will contain the prices at which the various items of work will be done or, in some instances, a single price may be quoted (Lump Sum). Once the Employer decides which offer

he wants to accept, he then advises the chosen contractor that his offer has been accepted. At that moment a contract exists between the Employer and the Contractor.

The process thus outlined is very simplified but it describes the essence of how the Contract is reached.

This procurement process is now well regulated in South Africa by the prescripts and procedures by the CIDB, which organs of state are obliged to follow.

It is customary in civil engineering for the tender to be accepted in writing and the “Form of Offer and Acceptance” included in GCC 2010 (and earlier editions) detail the offer and the basis of the acceptance and list all the documents which will together form the basis of the Contract.

5. RISK AND RISK SHARING

5.1. General

In any civil engineering contract there are certain elements of risk associated with the design and the construction. Some of the risks can be defined quite accurately while others are so extreme that they are totally uninsurable. Set out below are some of the risks that are generally regarded as the responsibility of one or other of the parties to the Contract. The lists are not exhaustive and are not always the responsibility of the particular party.

5.2. Employer's Risk

Some of the risks which the Employer is generally required to carry should they occur are: -

- Lack of Contract Definition.
- Poor Design and Administration by Engineer.
- Uninsurable risks – Special and Excepted.
- Unforeseen conditions with time and cost over-runs.
- Financial strength of the Contractor.
- Non-performance by the Contractor.
- Litigious Contractors.

5.3. Contractor's Risk

The execution of the Works is the sole legal responsibility of the Contractor in accordance with the general terms of the contract with the Employer. Arising from this are several risks which the Contractor must allow for in planning and executing the Contract. The complexity of the work and the time scale all have a bearing on how the risks are managed. Among the issues to be considered are:

- Assessment of what the Contract requires.
- Adequacy of the tender.
- Adequacy of the construction methods.
- Adequacy of the Contractor's contract programme.
- Errors in tendered rates.
- Balancing of the tender.
- Construction equipment breakdowns and material inadequacies.
- Labour relations and suitable labour.
- Material quality and delivery.
- Weather conditions.
- Delayed payment by Employer.

5.4. Methods of Sharing Risk

There are several ways in which risks can be reduced particularly by the Employer. He, together with his Consulting Engineer, will normally have had a much longer involvement with the project than the Contractor. They are thus able to include risk mitigation steps in the contract documentation which will assist the Contractor and probably reduce the price.

Among the methods available for the sharing of risks are the following: -

- Accurate definition of the work required (termed 'the Works' in the Contract).
- Selection of the form of contract conditions appropriate to the definition of the work.
- Warrant basic information provided and avoid disclaimers.
- Specifying the scope of insurable risk.
- Specifying Excepted and Special Risks to be borne by Employer.
- Well drafted contract documents.
- Pre-qualification of Contractors.
- Mobilization (Advance) and progress payments.
- Procedures to cover unforeseen conditions
- Contract Price escalation provisions.

5.5. Risk and Contract Pricing Form

Figure 3 shows the relationship between the form of pricing adopted for the contract, the incentives to the Contractor and the flexibility accorded the Employer.

It will be seen that the method adopted to pay the Contractor for the work he is called upon to do can have a significant effect upon the distribution or sharing of risk.

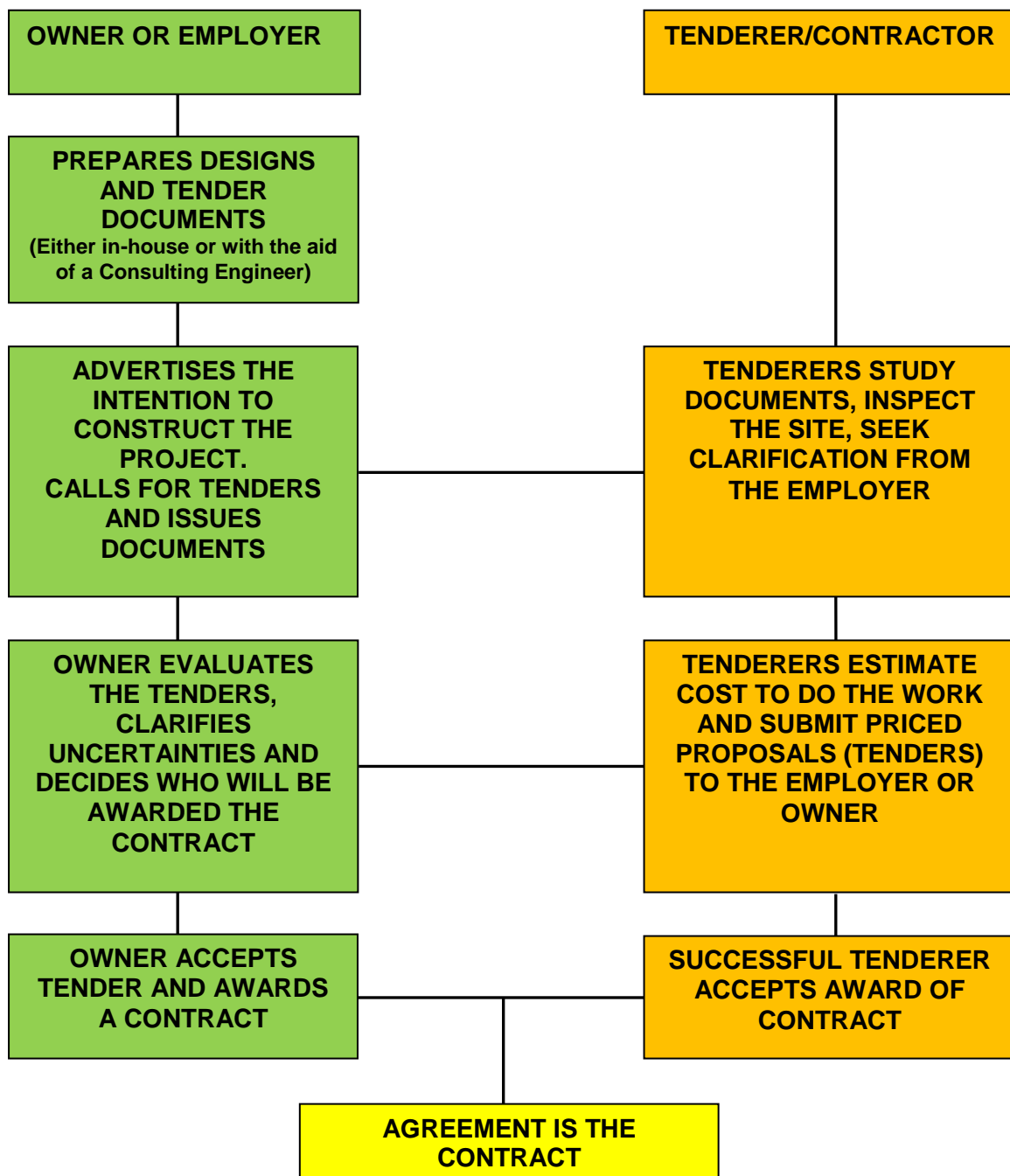
FIG 2: HOW A CONTRACT IS REACHED

FIG 3: FORM OF CONTRACT PRICING AND SHARING OF RISK