# **B.** Architecture

# **Professional Practice and Ethics (AR6703)**

# Introduction about Contract and its Procedures

# Lecture - 6

## **Contract and its Classification:**

A written or spoken agreement, especially one concerning employment, sales or tenacy, that is intended to be enforced by law. So what is this is actually a written or spoken agreement contract is this when a sign a thing on a certain basis or rule this will be considered as a contract as a deal may be for example. A promise or set of promise the law will enforce, so you are already signing a contract saying that you will be obeyed you will be responsible for that above contract then that is called the contract, so the right and obligations are created by the acts of agreements between the parties. There will be rules for every human and if you are signing parties requires or parties projects than you are saying that you are okay for the every season of procedure and rules his coating on you from the whole tender attendant period, so this is what the contract basically is

How is the Contract made

According to the Indian Contract act 1972

- A promise (owner or employer) to whom the act of promise is made, so this is a promise as we said already everybody will be having there one set of rules and if you are signing the contract then you are promisable to that person and that person can be a owner or employer contract is a contract
- 2. Promiser is the contractor, the one who promises to take the contract

So these are the simple term to define who is the promise and what is the promisors opinion in this, so this is the difference between the promise in the promise. So mode of acceptance of contract is through the form of

tender by filling an agreement form. So this way of mode of agreementing the contract will be executed as per is the agreement being sign or filling an agreement. So once the accepted the contract is executed with the due procedures as per agreement. The contract become void when there is any misrepresentations, fraud or any mistakes. The contracts will become wide when the misrepresentations or misleading the promise then it will be consider as a frauds or mistakes. So this is what the acceptance procedure will be leading to mode of acceptance of contract is through the form of tender filling a agreement form, so this is how you are telling that line like you are going to be the contractor or tender by filling that form of tender as an agreement base once accepted the contract is executed with this procedure as per agreement and on the specification and drawings provided by the architect and duly signed with reasonable satisfaction of the architect

A contract becomes wide when there is misrepresentations, fraud or any mistakes again this will become wide when you just mislead your sign and this are all the classification of building contracts. So there are the four types of contracts

## **Classification of Building Contract**

- Lumpsum Contracts
- Item Rate Contracts
- Labour Contracts
- Demolition Contracts

So these are the four types of building contracts we are going to classify upon, so these are the four here we go look into the lumpsum contract

## **Lumpsum Contract**

Traditional means of procuring construction. This is the most aged contract method were are old senior Citizens were following these type of contracts means which is called as a traditional means which is the most common from form of construction contract. Under this lumpsum contract, a single lumpsum prize for all the works agreed before the works begin like if you are appointing amazing he will be equating daily needs like he will be needing a bray or he will be needing leave on Saturday and he will be needing his wages daily so these are the contracts you will say okay and you can start your work mazine and that is there goes there lumpsum contract. Everything

is priory fixed or talked and then the work will start this is called lumpsum contract

#### **Item Rate Contract**

Item rate contract is also known as unit price contract or schedule contract, this is where every single works will be having a unit prize and scheduled that will be paying according to the schedules at every stage. A contractor undertakes the execution of work on an item rate basis. So whichever consider as a item rate basis then it will be straighter way going to this item rate contract.

#### **Labour Contract**

In a labour contract, the contractor undertakes contract for the labour portion only excluding other materials and stuffs arranged by the other. He is only paying the labour portion but not to the materials at the stuffs arranged by the others, so this is very clearly mention that only person called labour. So the contractor engages the requisite labour and it gets the work alone as per the drawings and specifications like he will be like working only for the drawings and specifications on the side and nothing more than that that will be called as a labour contract. Convenient for the private building constructions because on a day basis labours will be coming and working and winding off and that is the progress no need to payoff them anymore or anything then that so this is very convenient for the private building contract.

#### **Demolition Contract**

General description of work is to furnish all equipment, labour; layouts of work features and supervision needed to be accomplish the following like demolitions, debris removal and disposal. So he is required to quote the rate for individual item for work on the basis of BOQ. How much for the demolition and how much will be for collecting of debris removal and disposing to the debris to the side. So this will be happening according to the BOQ since if it is important to collect and check the BOQ before you start the contract. The amount of the contractor is made on the basis of the detailed measurements of different items of work actually executed by him. Ex: government projects, types of contracts mainly done in railways and PWD's. So this is the example for the demolition contract.

## **Contract Execution:**

So this is how every contract executes. The person involves will be the hero and the contractor will be acting upon, side supervisors, suppliers, store of works, clerk of works and the project managers and consultants, engineers, architects and there goes the client or owners

#### Role of an Architect in the Execution

- To act as a agent of the owner. So this will be the main role where architect used to play in the period of execution and there we go he will be acting as a agent of the owner and yes he is responsible for paying answering the owner since he must be very alert and attend to during the time of execution
- 2. To act as a interpreter of the contractor. So he will be interpreting with the contractor and what is happening he will be listening to him and will be updating to the client later. So he is responsible for the interpretation part also
- 3. To act as a quassi-arbitrator like if there is any clash between the contractor and the supplier or the contractor and the client so he will be acting as the mediator or a lawyer or advocate he will be solving out the problem which is happening between the peoples in order to get the product successfully he need to be the mediator and solve the problems
- 4. To supply the working drawing in proper time, so he will be managing and scheming that weather the drawings that go on date or not and he should be having track over every drawings will be moving
- 5. To check the quality and quantity is the main responsible for every architect even after you have a supply or supervisor for your own it's your responsibility to check the quality in order you are the only responsible for to answer the client. So it is your work of course to play the role of an architect in the execution part to check the quality and quantity
- To adhere to the rules and regulations to the contract act or any other act, so these are the rules one architect can mainly play in a execution part
- 7. So to check and correct the bill quantities to understand the inflation of any

- 8. He is the responsible any inflation happening even after the BOQ supply properly
- 9. Too ensure the safety and security of execution as per norms, so he is also responsible for the site, chairs and cows so he should be very careful to ensure the labours or safety and securely executing the works and debris and disposals labour should be wearing helmets and more safety precaution methods
- 10. To appoint clerk of words and site supervisor as per his convenience, so he is the one who appoints and fix the people who is who and where to where, so to appoint consultants with respective of the works specified
- 11. He is also responsible for appointing the consultants, to inspect the building progress periodically yes he needs to visit the site of an and there goes the site visit schedule needs. So he should be visiting the site on the schedule in order to check every projects, progress is going on the time and as per the schedule, so it is important to keep on tracking of this periodically

#### **Contract Document**

Contract Document is about consisting of

- Articles of agreement
- General conditions of contract
- Bill of quantities
- Specifications and drawings
- Work progress report
- M-book
- Auditions and alternations
- PERT/CPM chart etc.

This will be the contract documents consisting articles of agreements as per the contractors agreed as per how the engineers agreed, so this is important to have the contract document in order to escape in the future or have a safety pressures in the future you need to be having this articles of agreement. General conditions of contract is you need to be specified as a disclaimer that we are say and he agreed it before so we are not responsible for anymore like that you need to have a article of agreement at any cost. So General conditions of contract is same thing as the tender process we rewrite early period. The Bill of quantity should be precise in specifier.

Specification and drawing is the main important thing that every file should contain as same as the tender document we have attached, so this M-books and persipiams will be analytically helping you by the way

## **Pre-Requistes**

- Pre-Requistes is the thing the contractor should do before every work starts, so the nature of approach to the site, how the nature of approach to the site and what is the site made of so it is important to know the site conditions in details early,
- The means of communication and to all the site soil the characters and S.B.C so structurally he should be sounding good
- The Nature of the excavation any other matter relevant drinking water facilities for the workers, labour rest room stay facility is everything is comes under the pre requisites. So it is the responsibility of contractors even after he signed after our tender document he is the only person responsible for the site happenings after all we are the architects we should be encountering this contractor like he his being tracking all things regularly we should enquire him at any cost.
- So it is responsible to make everything ready for the workers. Drinking waters and toilet facilities and everything is upon to him but checking is a up to

## By Negotiation

Contractors are called in and negotiated with them in person before assigning the work for them. So contractors will be negotiated with them in the person before assigning the work. It is up to the contractor who is always been inside, so he is the well-known person about is worker so who is good at what, so it is good to discuss with him before you appointing a person to certain work, So negotiated tenders occurs when the client approach is the single supplier based on their track record or a previous relationship. So every single supplier based on their track record or previous relationship when the client approaches he should be negotiated upon. So it can give the client the confidence of working with a supplier they already know, can reduce the duration costs of tendering. This is the thing happening when you have everything in the schedule people will go smooth the work will move smooth so this is important to be having everything in ready. It is often seen as anti-competition and exclusive, with the potential for 'cozy relationship', yes if we have everything schedule and we know how

to get works to be done at the site then there goes the peace. So there will be no war between the consultants and the client, there is no war between the consultants and the suppliers, so things will be smooth upon your architect head. So this is what the cozy relationship comes from

## By the Public Notice

Through advertisement in a newspaper it can be done. Public notification is must in order to claim up contractor or genders but also for this anybody with eligibility can could an open tendering has been criticized for being a slow and costly process yes it is most viable way to get the more greatest tenderers or contractors or experience contractors will be knocking at your door only by this public notice as I feel. It may be sometimes unsuitable for the contract as a result of it can work create deal of time for attend money yes it will take time and money but not more than completion of the project think about it. Open tendering offers the greatest competition and has the advantages of allowing new or emerging suppliers.

## **Project Formulation:**

So there we goes about the project formulation is the conscience exact statement of the project to sets the boundaries limits of the works to be performed by the project, so it is the formal document that gives the distinctive identity of the project and precise meaning of project work to prevent work to prevent conflict, confusion or the overlap. So project formulation can be defend as one of the stages in the lifecycle of a project. So this is important to form a letter project until you execute so the formulation stages is also called as the initiation yes there should be a initiative for very project and that is where goals for the formulation

So the conceptualization, definition, pre-project. So this stage aims to carefully identify and weight various components. So analyze project feasibility and cost effectiveness of course. Examine and approve project inputs and outputs, Identify stakeholders and their involvement and contribution. So that you can keep track on them define benefits and expectations. Estimate resources needed Perform a preliminary analysis of risks that you goanna face yes it will say a lot of stress in the future. So make an outline of project schedule. This will lead a peaceful mime then leading a covers between you and the contractor or the suppliers. So there

goes the main elements of the formulation and evaluation. The formulation and evaluation comprises of the seven main elements described below

- Estimate of demand and benefits: This task determines the potential benefits that result from the investment. In projects that generate saleable products, the size and nature of the market depends upon as it is estimated
- Evaluation of the Technology: The proposed technology is reviewed in light of the results of the evaluation of demands and the benefits before you executed
- Sustainability and environmental impact: This is one important factor that everyone is depend upon the sustainability of today so the task considers the sustainability of the project not only from the perspective of the natural resource usage of the environmental impact. It is also critical and those projects not generating substantial income streams, where there is a need for operational support once the investment is completed. So as a school is not sustainable of there is no provision for paying's the teacher's salary so this it guy, this is the precise example for the sustainability, see who needs to work if you don't get pay so just work for it for a investment with light could of negative environmental impact
- Estimation of costs and income: It is important to estimate like what is going to be remaining at your hand at your back. So next step is to define the calculate cost and income associated with the investments and operations of the projects. So although they may be relatively easy step for simple investments, the introduction of variables such as perennial crops, livestock breeding or other complex activities can create significant complications. So we need to be estimative before this is what the remaining's are
- Financing the investment: we need to funds and the financing before we invest, so that can we work on the capital amount we need
- Organization and investment management: The most profitable profit will fail it lacks an adequate structure for directing and managing operations. The identification of this managements needs in an integral element in a formulation of evaluation effort
- Evaluation and preparation of recommendations: With all the individual elements of formulation and evaluation gathered, the full project evaluation can be undertaken, so there we go

 Preparation of the investment: Aspects to be considered here we are task scheduling, negotiations with the financing resources supervision of the constructions and other activities essential to the execution of the every project

### **BOT**

So there we go few steps of BOT and there we go, what is meant by BOT is a private party concessionaire retains a concession for a fixed period from the public parties is called principal the client, for the development and operation of a public facility. The development consists of the financing, design and construction of the facility. The concessionaire here is the start the secure return of the investment by operating the facility and during the concession period. The BOT projects are very useful in biding situations, by implementing these methodologies the company or the government can share the risk of the project. So what are the process study, selection, implementation and the construction, operation and then the transformation there we go BOT

BPT projects include a wide array of public facilities with the primary function to serve the public need, to provide social services, private economy, activities and the most common examples are roads and bridges.

#### **BOOT**

Definition: It is the expansion of the Build Own Operate Transfer is the founding model and a form of concession in which a public authority makes an agreement with a private company like one and one to design Build, Own and Operate and the specific piece of the infrastructure such as power, transport whatever will be there to achieve the income from the facility under the period of time. So and late a transferring it in the public ownership to a single organization or consult term there we go with the process

- EOI
- RFP
- Evaluation of BIDS
- Award of Works

We heard about this we learnt about these definitions there we goes in shot

#### **EOI**

EOI is an expression of interest is a method of showing your interest in applying for a biding who is who

#### **RFP**

RFP is again the request proposal, if you are interested in proposal then you should be requesting for the proposal as simple as that then in principle of RFP informs suppliers that an organization is looking to procure and encourages them to make their best effort of out of it, it requires the company to specify which is proposed to purchase if the requirement analysis has been prepared already like proper it can be incorporate quite easily into the request document. So it allows for wide distribution and response a lot suppliers that is the selection process is competitive, when an ensures the same suppliers responds the faculty to identify requirements is generally expected to follow a structured evaluation and the procedures at the same time

## **Mode of Evaluation of BIDS**

Although the review offers receive done in the bid opening even there is a preliminary examinations of this offer is done to be beginning of the evaluation process to determine, in the case of salt decision for goods and work procurement, after confirming compliance with the technical requirements, a comparison is will be made between the prize and the offer technically the complaint and with the lowest evaluated bid price is the one that is recommended for contract award. So at this point of time your bid should be lowly evaluated when evaluate consultancy individually and firm the technical qualifications are also initially assets for individual consult selection once the technical qualifications are determined and there we go request to submit the financial offer and negotiate a contract. The result of this bid or proposal evaluation process is depends purely on the procurement methods and the procedures for determining the selected suppliers or contractor or service provider that will be recommended for the negotiation and the contract award and so there will goes after quoting the lowest biding

### **Award of Work**

Contract awarding is the method used during a procurement in order to evaluate the proposals like which is good and which is bad tender offers taking part and award the relevant contract, usually at this stage eligibility of the proposals has been concluded so if its remain and choose the most

preferable among the propose there are several methods for this which are obviously related to the proposal method as by the procurement management.

#### **Methods**

There are several methods for the award of work, quoting the least price will be the first awarding the work. So this method is the simplest and oldest of all we know that quote low when the law. So under this procurement contract is awarded to the best price. So then there we goes the second rule is most economically advantages, this is applicable to the proposal of different quality within the limit set under this proposal and graded according to their price of value and the contractors awarded to one with the best grade, so best is now the second then mean value will be the contract, the contract is awarded bit closer to the mean value of the proposal and yeah he is also awarded with the mean value person will be also awarded this may apply to the procurements where numerous proposals are expected and there is a need for market representing values

## **Exclusion of the extremes**

What this goes under this method the proposals that are deviating from the most of mass of proposals are executed and then the procedures continues with one of the above methods. There are also many variants and a combination of these main methods, but this was called the best part to quote the awards.