



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

SCHOOL OF BUILDING AND ENVIRONMENT

DEPARTMENT OF ARCHITECTURE

SARA 5204 – CONTRACT MANAGEMENT

- I. Unit 1 – Legal Framework and Contracts**
- II. Unit 2 – Contract documents and tenders**
- III. Unit 3 – Labour regulations, Insurances and Contract Administration**
- IV. Unit 4 – Disputes and Arbitrations**

UNIT – I – LEGAL FRAMEWORK AND CONTRACTS

I. Purchase of Property In India

a. Introduction

Real Estate is one of the growing sectors in India as it offers tremendous investment opportunities and ensures good returns on your investment. Immovable property includes land, buildings, houses, bungalows, apartments, farm-houses, agricultural land, shops etc.

It is essential to purchase as well as register these immovable properties in accordance with governing state and central laws of India. The buyer must take critical care in purchasing immovable property and should be aware of the legal proceedings involved in registering the same.

b. Title search before purchasing a property in India

Title search is an important exercise that should be undertaken by the buyer before acquiring a property in India as it will ensure the buyer that title is clear, marketable and free from encumbrances and liabilities. This will safeguard the interest of the buyer and mitigate the risks involved in property transactions.

c. Title search process:-

Trace the title of the property to buy from the title deeds and revenue records. In order to ascertain the origin of the property, one must scrutinize the title documents for last 40-60 years. In order to ascertain any adverse possessions or conflicting claims against the buyer, documents for last 12 years should be thoroughly examined. If the property is illegally acquired and its illegal title is against the government, then documents for last 30 years are to be searched and examined. After scrutinizing the origin of title, there is a need to find out how the property has been transferred from previous owners to the current one i.e. by way of inheritance, gift, sale, mortgaged etc. It also includes checking of all the necessary documents to ensure that they have paid the applicable statutory clearances and possess latest receipts of tax payments and encumbrance certificate. There is a need to check the identity and physical measurements of the property as per the title deed.

Trace the title of the property to buy from the title deeds and revenue records. In order to ascertain the origin of the property, one must scrutinize the title documents for last 40-60 years. In order to ascertain any adverse possessions or conflicting claims against the buyer, documents for last 12 years should be thoroughly examined. If the property is illegally acquired and its illegal title is against the government, then documents for last 30 years are to be searched and examined.

After scrutinizing the origin of title, there is a need to find out how the property has been transferred from previous owners to the current one i.e. by way of inheritance, gift, sale, mortgaged etc. It also includes checking of all the necessary documents to ensure that they have paid the applicable statutory clearances and possess latest receipts of tax payments and encumbrance

certificate. There is a need to check the identity and physical measurements of the property as per the title deed.

d. Process and Procedure for Purchasing Property in India – Plot of Land

Make all the requisite legal checks about the history of land with regard to its third party rights/interests, ownership papers/title deeds, Government approved/freehold, approved building plan, tax payment receipts etc. before giving consent to purchase.

Draft a purchase agreement between the land owner and the buyer on apt stamp paper. The agreement must contain valid points including agreed cost of the land, any advances, if given, duration of time for full and final sale execution, land particulars, method of dispute resolution and procedure of clearing losses or defaults made by any of the parties. Payment of advance and signing of agreement by both the parties as well as witnesses.

Preparing an appropriate title deed through a document writer/ lawyer. Registration of land along with the registration of original title deeds, previous deeds, property/house tax receipts, Torrance plan (plan prepared by the licensed surveyor with meticulous details with regard to land measurements) in the sub-registrar office. It also includes payment of requisite stamp duty. After verifying all the submitted documents by the Sub-Registrar and paying the registration fees and stamp duty, the land will be registered in the name of buyer.

e. Process and Procedure for Purchasing Property in India- Agriculture

The purchase of agricultural land is governed by respective state laws and the provisions with regard to lease, sale and purchase by a non- agriculturalist differs from state to state. Most of the Indian states permit only famers to buy farm land, hence, one has to either provide a proof that exhibits that he/she previously own any agricultural land or a proof that shows that his/her grandfather or father was a farmer or in the business of farming. If you are not a farmer, then it is possible only via conversion of land for non-agricultural purposes and see whether that state has a provision for conversion of land in their drafted regulations.

NRI (non-resident of India), PIO (person of Indian origin) and OCI (overseas citizenship of India) cannot buy agricultural land, plantation property and farm-houses in India. There are restrictions applicable by the state government on purchases made by resident Indians on agricultural land in order to protect the cultivable land. The District collector has the authority for reclassification or conversion of dry agricultural land, but the rules vary from state to state.

One thing is important to check before purchasing any agricultural land i.e. to ensure whether seller holds the right to transfer/sell his/her property and sharing arrangements for water allocation, power-lines or sewer lines etc.

f. Process and Procedure for Purchasing Property in India - Commercial building, shops, offices in commercial areas

The buyer must be clear about the purpose, location and requirements before making the purchase of any commercial property especially in commercial areas. The property you chose must fit with your criterion with respect to price, location, uses and kind of business.

Check all the documents pertaining to ownership i.e. land allotment letter from the authorities, construction approvals i.e. building plans, floor plans, NOCs, environment clearances, water authority etc. Once you are ready to make investment in the construction project of the developer, get a written agreement which must include all the requisite terms and conditions, payment plan, time of delivery, procedure to adopt in case of defaults etc. After making the complete payment of the property, the developer will give you possession letter, allotment letter and other necessary document that will help you claim ownership.

g. Process and Procedure for Purchasing Property in India - Apartments, Residential homes

The residential homes/apartments can be purchased either from the developers/builders when they launch their projects or on resale basis from the owners. Check all the documents pertaining to ownership i.e. land allotment letter from the authorities, construction approvals i.e. building plans, floor plans, NOCs, environment clearances, water authority etc.

Once you are ready to make investment in the construction project of the developer, get a written agreement which must include all the requisite terms and conditions, payment plan, time of delivery, procedure to adopt in case of defaults etc. If it is a purchase of constructed apartment/flat, then ensure to get all the other important documents including occupancy/ownership deed, property tax receipts, connections/fittings etc.

The agreement has to be registered by the concerned authority. After making the full and final payment of the property, the developer will give you possession letter, allotment letter and other necessary document that will help you in claiming ownership.

h. Process and Procedure for Purchasing Property in India

In general, one must follow the basic procedure for buying a property in India, which includes the following:-

First, check the property details before making any purchase deal which includes ensuring the area of the property, whether it is freehold/leasehold, owner details etc. It should actually match with the details mentioned in the title deed. If the construction is yet to take place whether commercial or residential, then ensure that the provided layouts, designs and builder/floor plans are approved by the concerned authorities.

Make a Title search and obtain the Title Search certificate. Acquire the encumbrance certificate from the owner which will legally clarify that the property is free from any kind of loans/encumbrances. Ensure that the property taxes and bills have been paid for that property for last 5 years so owner must provide all the receipts or get it from the respective offices. It will confirm that it doesn't carry any such liabilities.

Draft a sale agreement and conveyance deed on the stamp paper of prescribed value. The agreement will contain all the relevant terms and conditions, agreed price, procedure to adopt in case of any defaults, dispute resolution procedure etc.

- Signing of agreement by both the parties and at-least two-three witnesses.

- The buyer will get the property registered in his own name with the help of real estate lawyer or agent.

II. Documentation required for the purchase of immovable property

a. Plot of land

1. Sale Deed/ Title Deed/Conveyance Deed
2. T.C. (transfer certificate) Extracts if property is a converted land i.e. land converted from agricultural to Non-Agricultural
3. Khatha Certificate and Extracts which records the name of the land holder in the records of local municipality committee & it is constructed as per sanctioned plan.
4. Mutation Registration Extracts confirms the details of previous owner, the mode of acquisition etc.
5. Joint Development Agreement
6. General Power of Attorney
7. Sanctioned Building plan by the concerned authority
8. NOCs from respective government departments such as Electricity board, Water Board, etc. in order to ensure all pertinent government approvals.
9. Supplementary Agreement, if any modifications are made in the main agreement.
10. Encumbrance Certificate
11. Final Sale Agreement

b. Urban Property

1. Public Notice in the newspaper to check if there are any third party objections on the sale/purchase transaction for 15 days from the date of publication.
2. Sale Agreement between Seller and Purchaser or Conveyance deed to transfer property in favor of his/her heir, nominee etc.
3. Property Register Card issued by City Survey Officer of respective Zone
4. City Survey Plan shows the boundary of the property land and existing structures
5. Title Search and Title Clearance certificate
6. Affidavit and Declaration Letter by the owner/co-owners declaring their rights and interests in the property and they are legally allowed to execute the transactions.
7. Indemnity Bond

8. Letter of Approval from competent authority under Urban Land(Ceiling & Regulation) Act,1976 (The properties owned by Co-opt Housing societies, State & Central Government and statutory bodies do not fall under the purview of this Act)
9. NOC from Electricity department/water department etc.
10. Encumbrance certificate
11. Tax receipts of previous years

c. Rural Property

1. Sale Agreement/Conveyance Deed
2. Revenue document of ownership especially agricultural land or rural land is issued by Talathi of respective village which contain the ownership details, property details, encumbrances, leases, Mutation entry No. etc. It is issued in the local language of the state.
3. Power of Attorney
4. No Due Certificate with regard to any encumbrances
5. Paid Tax receipts of previous years

d. Agricultural Land

1. Sale Deed/Title Deed/Conveyance Deed/Mother Deed
2. RTC Extracts
3. Revenue document of ownership especially agricultural land or rural land is issued by Talathi of respective village which contain the ownership details, property details, encumbrances, leases, Mutation entry No.etc. It is issued in the local language of the state.
4. Tax receipt and Bills
5. Encumbrance Certificate
6. Power of Attorney
7. No Due Certificate from bank
8. Final Sale Agreement

e. Flat/Apartment/Residential Houses & Commercial Property

1. Sale Deed/Conveyance Deed/Title Deed
2. Power of Attorney
3. Encumbrance Certificate

4. NOC from respective Government Departments
5. Previous tax receipts
6. Requisite government approvals from society/MC/ competent authorities etc.

If purchase is made from the builder before project construction, then following additional documents are required:-

1. Sanctioned building/floor plans
2. Layout Approval Plan
3. Completion certificate
4. Release deed, if any
5. Sale & Construction agreement between developer and 1st Owner
6. Deed of Declaration
7. Demand letters from seller
8. Copy of possession letter from builder

III. Registration Procedure

a. What is the Registration Procedure for immovable properties?

A buyer can obtain the legal ownership of the property he/she purchased only after he/she registers it in his/her own name as per Indian Registration Act,1908 otherwise the previous owner will be considered as legal owner in the records of Sub-Registrar. Hence, the sale deed is required to be duly stamped and registered which requires payment of stamp duty and registration fee to the concerned authority. Property documents should be registered within 4 months from the date of execution.

b. Registration process of immovable property Documents

- Ownership documents i.e. power of attorney, land purchase deed, conveyance deed, sale agreement, title deed in original along with its 2 photocopies
- Identity proof of both buyer as well as seller and 2 witnesses
- Payment proof and details
- Khata Certificate and tax paid receipts.
- Encumbrance certificate
- Payment receipt of stamp duty and registration fees

c. Process

Submit the complete set of documents required to be registered with the Registration clerk at Sub-Registrar Office of the District. Registration office will verify the authenticity of the documents and provide a token no. to the party. Registration office will hand over the document to computer operator, which will enter all the requisite information in the registration software.

Computer Operator will capture the photo and thumb impression of both the parties with witnesses. He/she will take out the print and give it back to Registration office.

Parties will sign the computer generated print in front of the Registrar and submit it back to registration office. Payment of registration fees and the final document will be signed by the Sub-Registrar or SDM.

3 copies of registry will be generated, where one will be received by the buyer on the same day, 2nd goes in the records of the office and 3rd will go to Patwari.

d. Stamp Duty and Registration Fees

Stamp Duty is paid before or at the time of execution of documents. The stamp duty can be paid in 3 ways i.e. purchase of physical stamp paper, e-stamping or via Franking. It varies as per the respective State Government laws. Registration fee is more than the stamp duty and differs from state to state. It is around 1% of the market value or agreement value, whichever is higher, subject to the maximum of Rs.30, 000.

e. E-Registration procedure in Urban and Rural areas

The registration of immovable properties in both urban and rural areas comes under the territories of respective State governments and is managed by Tehsil/Taluka/Mandal. The land registration and application form can be downloaded online or can be acquired from the concerned authority in the respective state. The documents to be registered and the application form will be verified by the registration office.

The valuation and stamp duty may vary depending on the locality and vacancy. If land is vacant, it is valued at current market price whereas if it is occupied, then it will take into consideration both the market price as well the rate of gross investment utilized by a building.

Stamp duty differs from state to state but in general, in urban areas it is around 6% whereas in rural areas it is around 5%. Currently, E-Registration facility is available in Tamil-Nadu, Rajasthan, West Bengal, Karnataka, Kerala, Odisha, Madhya Pradesh, Punjab, New Delhi, Maharashtra, Chhattisgarh, Sikkim and Jharkhand.

f. What all property can an NRI or PIO or foreign nationals buy in India?

In India, a person resident outside India/NRI/OCI can purchase and acquire any immovable property in India except:-

- Agricultural Land
- Plantation Property/Estates
- Farm House

In order to purchase the above 3 properties, they will require special permission from RBI which is given only after consultation with the Government of India. He/she can transfer any of the above mentioned properties if acquired via inheritance to only Indian Citizens permanently staying in India.

g. Purchase and Registration of Immovable Property by NRI or Foreign or PIO card holders

NRI also are given legitimate right to purchase immovable properties in India except the properties mentioned above. The purchase process is similar to those of Resident Indians and thus, do not need any special permission.

The payment has to be made in Indian Currency only via the funds received through the usual banking route or funds maintained in NRI account under FEMA/RBI. There is no limit set for the number of immovable properties they wish to purchase.

Form IPI 7 has to be submitted in by Non Resident Indian or Persons of Indian origin in the Central Office of RBI, Mumbai within ninety (90) days from the purchase date of immovable property or latest payment in addition to a certified copy of the document to show that transaction has been made and a bank certificate to show the payment .

h. Registration

The procedure is same as that of Resident Indians. The documents are to be registered within 4 days from the date of execution. If it is executed in foreign country by some of the parties in purchase, then, it can be registered within 4 months after its arrival in India.

The documents are to be registered by Sub-Registrar or SDM of the district, where the property is situated. All the parties executing the document, their representatives/assigns/relatives holding the power of attorney must be present before the Registering officer for registration.

The documents of registration are to be signed before the Registering officer. Once the Officer is satisfied with regard to the identity of persons, authenticity of documents produced and the receipt of payment of registration fees has been produced, he will register the document and make requisite entries in his records.

Lastly, he will register the document, sign it and return it back to the presenter.

i. Documents required for purchasing a property in India

- Permanent Account Number
- OCI/PIO Card(in case of OCI/PIO)
- Passport (if buyer is NRI)
- Passport Size Photos
- Proof of residence
- Power of Attorney to their friends or relatives to execute the property purchase procedure in India. It can be either general or specific explaining the rights and authorities the legal representative can exercise.

j. Documents required for registration

Documents pertaining to immovable property i.e. original sale deed/conveyance deed/title deed/sale agreement.

k. Property disputes- who to approach for resolution of dispute?

There are different kinds of property disputes that may arise from any property transactions, for instance, with respect to validity of seller's ownership title, delays in payment or non-payment of sale consideration, handing over possession of property by builder, non-compliance of terms and conditions of the agreement by buyer or seller etc.

l. Documents required for purchasing a property in India

In such cases, following are the authorities which are to be approached for resolving following kinds of disputes:-

Mutual settlement: Seller and Buyer can try to amicably resolve the disputes to reach a mutual settlement of the problem.

Courts:

The other course of resolving the disputes is to take the assistance of Courts of competent authority and jurisdiction. There are different kinds of suits that are approached before the court for redressal/relief:-

- a. Declaratory suits (when title of the property is challenged)- District Court/Court of law
- b. Injunction(restraining the illegal occupant to trespass): Court of law
- c. Partition Suit(co-owner desiring to get his share in the property): Court of law
- d. Money Suit(realization of mortgage money from property kept as security) : Court of law
- e. Litigations relating to land revenue/acquisitions, title documents: Quasi Judicial authorities i.e. Tahsildars, Deputy/Asstt. Commissioners, Survey Settlement Commissioners.

- Conflicts relating to stamp-duty or valuation of property: District Registrars of Registration or Inspector General of Registration
- Landlord/Tenant Disputes: Rent Controller
- Forgery/Fraud in property transactions: Filing a police complaint or Magistrate as it will come under the purview of Criminal law and courts
- Writ petitions against the decisions of Government that has an impact over your property rights: Concerned High Court/Supreme Court

IV. Tax Law

a. Introduction

Taxes in India can broadly be classified into direct and indirect.

Direct Taxes

These include Income tax, Wealth tax and Interest Tax. The most significant of direct taxes is income tax.

Income Tax

The levy of income tax is governed by the Income-Tax Act, 1961. This is an enormously complex legislation running into over 300 Sections with several subsections. The Act undergoes changes every year with additions and deletions brought out through a Finance Act passed by the Parliament¹.

Broadly, income has been divided into five categories:

- I. Income from salary
- II. Income from house property
- III. Profits and gains of business or profession
- IV. Capital gains

Income from other sources (including dividends, interest from securities, interest income and income from winning of lotteries). The tax incidence on the income of assesses is determined by their residential status.

Different rates of taxes are applicable to the income of individual and nonindividuals.

The general rules of taxation on income are:

- Resident taxpayers are taxed on their worldwide income.
- Nonresident taxpayers are taxed only on income received in India or on income arising (or deemed to arise) in India.

- Corporate income is taxed both at corporate level and to shareholders upon distribution as dividends.
- The accounting year for tax purposes is April 1 to March 31.
- Double taxation relief is offered to residents through credits under the Income Tax Act and under the tax treaties.

b. Rate of Taxation

The rates of taxes given below apply to all types of income except long term capital gains. The income of non-individual resident assesses such as companies, partnerships etc. is taxable at 35 percent (plus a surcharge of 10 percent on tax) whilst the income of non-individual non-resident assessee is taxable at the rate of 48 percent.

Tax rates for individuals range between 10 percent and 30 percent depending on the tax slab in which the total income of the assessee falls.

c. Tax Benefits for Promoting Growth

The provisions of the Income Tax Act are also oriented to promoting the public purpose of economic development.

Accordingly, the Act allows a ten year tax holiday for Infrastructure Projects such as development and/or operation & maintenance of roads, highways, ports, airports, rail systems, etc.; power generation; development and/or operation & maintenance of Industrial parks including Special Economic Zones (SEZs).

Further there is concessional rate of taxation for income from exports and tax incentives for the establishment of industries in areas notified as backward or underdeveloped.

d. Double taxation avoidance agreements

India has executed double taxation avoidance agreements with many countries, including the UK, the USA, Cyprus, Mauritius Islands, etc. Favorable tax treatment is available under these treaties. It is quite common for foreign companies to route investments through the Mauritius Islands in order to avail of reduced withholding taxes on payments of royalty, technical service fees, interest on loans, capital gains, etc.

e. Indirect Taxes

A. Central Excise

Excise duty is an indirect tax levied on a 'manufacturer' on the manufacture of dutiable goods. The liability arises upon 'manufacture' which may well include intermediary stages of production of final product. However, for ease of collection, duty is payable at the time of removal of goods from the factory.

The budget for the financial year 2000 streamlined the provisions relating to rates of excise duty. As a result, the then existing three rates of excise duty, namely 8 percent, 16 percent and

24 percent were converged into a uniform rate of 16 percent. This rate is called Central Value Added Tax (CENVAT). On a few items however, special excise duty is levied.

Although India does not have a typical value-added tax system, under the MODVAT (modified value added tax), a manufacturer can obtain credit for excise duty paid on capital goods and on inputs used in the manufacture of final products. The scheme is applicable to notified inputs and final products and covers most taxable commodities. Credit is also available for Additional Customs Duty (Countervailing Duty) paid on imported capital goods and inputs.

B. Customs Duty

The Customs Act, 1962 provides for duties to be levied on goods imported into or exported from India. Duties of customs are levied at the rate specified under the Customs Tariff Act, 1975. The said Act inter alia specifies the various categories of import items in accordance with the international scheme of classification of goods - 'Harmonised System of Commodity Classification'.

Customs duty is leviable on imports into India and is payable when the goods are cleared. There are four slabs of basic customs duty ranging from 5 percent to 35 percent. In addition to the basic customs duty; countervailing duty and special additional customs duty are also payable on imported goods.

For the protection of domestic industries, the authorities are empowered to levy protective and anti-dumping duties. Export duties are practically non-existent at present. They are levied occasionally to mop up excess profitability in international price of goods in respect of which domestic prices may be low at given time.

C. Sales Tax

The Central Government levies a sales tax on the inter-state sale of goods (i.e. which results in a movement of goods from one State to another). A sales tax of 4 percent is charged when the transaction is between two registered dealers whilst sales tax of 10 percent is charged in all other cases. Besides the Central Government, various State Governments also impose a tax on sales within their respective States.

D. Services Tax

Service Tax was introduced in 1994. Significant services covered by the legislation include services rendered by General Insurance Companies and telephone connection providers. *E.*

E. GST in India

GST is known as the Goods and Services Tax. It is an indirect tax which has replaced many indirect taxes in India such as the excise duty, VAT, services tax, etc. The Goods and Service Tax Act was passed in the Parliament on 29th March 2017 and came into effect on 1st July 2017. In other words Goods and Service Tax (GST) is levied on the supply of goods and services.

Goods and Services Tax Law in India is a comprehensive, multi-stage, destination-based tax that is levied on every value addition. GST is a single domestic indirect tax law for the entire country. Before the Goods and Services Tax could be introduced, the structure of indirect tax levy in India was as follows:

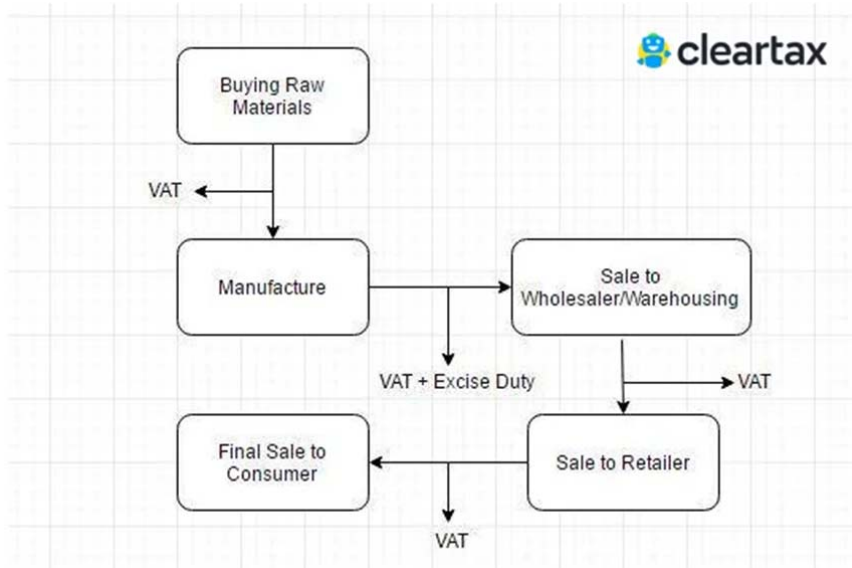


Figure 1. VAT details

Under the GST regime, the tax is levied at every point of sale. In the case of intra-state sales, Central GST and State GST are charged. All the inter-state sales are chargeable to the Integrated GST.

F. Advantages Of GST

GST has mainly removed the cascading effect on the sale of goods and services.

Removal of the cascading effect has impacted the cost of goods. Since the GST regime eliminates the tax on tax, the cost of goods decreases.

Also, GST is mainly technologically driven. All the activities like registration, return filing, application for refund and response to notice needs to be done online on the GST portal, which accelerates the processes.

G. What are the components of GST?

Here are three taxes applicable under this system: CGST, SGST & IGST.

CGST: It is the tax collected by the Central Government on an intra-state sale (e.g., a transaction happening within Maharashtra)

SGST: It is the tax collected by the state government on an intra-state sale (e.g., a transaction happening within Maharashtra)

IGST: It is a tax collected by the Central Government for an inter-state sale (e.g., Maharashtra to Tamil Nadu)

In most cases, the tax structure under the new regime will be as follows:

Transaction	New Regime	Old Regime	Revenue Distribution
Sale within the State	CGST + SGST	VAT + Central Excise/Service tax	Revenue will be shared equally between the Centre and the State
Sale to another State	IGST	Central Sales Tax + Excise/Service Tax	There will only be one type of tax (central) in case of inter-state sales. The Centre will then share the IGST revenue based on the destination of goods.

Table 1. GST details

UNIT – II – CONTRACT DOCUMENTS AND TENDERS

I. Construction Contracts

a. Introduction

Contract management or Contract administration is the management of contracts made with customers, vendors, partners, or employees.

Contract management includes negotiating the terms and conditions in contracts and ensuring compliance with the terms and conditions, as well as documenting and agreeing on any changes or amendments that may arise during its implementation or execution.

It can be summarized as the process of systematically and efficiently managing contract creation, execution, and analysis for the purpose of maximizing financial and operational performance and minimizing risk.

A contract is a written or oral legally-binding agreement between the parties identified in the agreement to fulfil the terms and conditions outlined in the agreement. A prerequisite requirement for the enforcement of a contract, is the condition that the parties to the contract accept the terms of the claimed contract.

Historically, this was most commonly achieved through signature or electronic signature.

Common commercial contracts include employment letters, sales invoices, purchase orders, and utility contracts. Complex contracts are often necessary for construction projects, goods or services that are highly regulated, goods or services with detailed technical specifications, intellectual property (IP) agreements, and international trade.

b. Types of contract

- Lump sum Contract or Stipulated sum Contract
- Unit Price / Item rate Contract
- Incentive Contract
- Guaranteed Maximum Price
- Design Build contract
- Integrated Project delivery contract
- BOT – Build Operate and transfer

- BOOT-Build own operate and transfer
- Others

i. Lump sum Contract

Contractor is asked for specified service for fixed sum. Owner is assigning all the risk to the contractor. Contractor will keep higher markup for the unforeseen contingencies

Contractor is responsible for proper job execution, would provide his own means and methods to complete the work. The contract is sum is calculated based on labour cost + material cost + contractor profit and overheads.

If actual cost of labour & material increases – profit will reduce. If actual cost of labour & material reduces – profit will increase. Lump sum contract is suitable if the scope and schedule of the project is sufficiently defined to allow the contractor to estimate the project cost.

ii. Unit Price / Item rate Contract

Work to be performed is broken into various parts by construction trade. Contract type is based on the anticipated quantities of item which are counted in addition to the unit prices.

Final price of the project depends upon the quantities required to carry out the work. Eg. Painting is done is square foot basis. Unit price contracts are used for an entire major construction projects.

iii. Cost Plus Contract

An agreement which involves the buyer's consent to pay the complete cost for material and labor in addition to the amount for contractor overhead and profit. Contract type is favored where the scope of work is highly uncertain or indeterminate in addition to the types of labor, material and equipment being similarly uncertain in nature.

Here the contractors profit is set at a fixed amount. If the actual cost is less, owner keeps the savings. If the actual cost is more, owner must pay the additional amount.

Advantage of cost plus contract is project will result in building that was envisioned even if the costs run high. Builder/Contractor has no risk in this model of contract.

Three key types of cost plus contracts

1. Cost + Fixed percentage contract – Compensation is based on a percentage of the cost
2. Cost + Fixed fee contract – compensation is based on fixed sum independent of final cost. Customer agrees to reimburse the contractor's actual costs, regardless of the amount and in addition pay a negotiated fee
3. Cost + Fixed fee with Guaranteed Maximum Price Contract – Compensation is based on the fixed sum of money. The total project cost will not exceed an agreed upper limit.

iv. Incentive Contracts

Compensation is based on the contracting performance according to agreed target – budget, schedule and quality

- Fixed Price Incentive Contracts
- Cost Reimbursement Incentive Contracts

Fixed Price Incentive contracts are preferred when contract costs and performance requirements are reasonably certain. Cost Reimbursement contract provides the initially negotiated fee to be adjusted later by a formula based on the relationship of total allowable costs to total costs.

This type of contract specifies target cost, a target fee, minimum and maximum fees, and a fee adjustment formula. Payment would be done based on the formula.

v. Guaranteed Maximum Price

Also known as GMP, Not to Exceed Price (NTE). Contractor is compensated for actual cost incurred plus a fixed fee subject to a ceiling price.

Contractor is responsible for cost overruns, unless GMP has been increased via formal change order (as additional scope not as price overruns errors or omissions). This is different form of lump-sum contract where cost savings are typically retained by the contractor and becomes additional profits. Sometimes savings are shared by owner and the contractor as an incentive to keep the cost down.

vi. Design build Contract

Appropriate when the project delivery method is design build. Traditional contracts were awarded as design-bid-build system. Owner awards the entire project to a single company

After contract is signed, the contractor is responsible for design and construction work required for the project. Owner shall co-ordinate with one party rather than coordinating with different parties

In this option still owner has a right to approve or reject design options but is no longer responsible for coordinating and managing the design team. Most of these contracts are awarded through negotiations rather than bid process.

Appropriate when the project delivery method is design build. Traditional contracts were awarded as design-bid-build system. Owner awards the entire project to a single company

After contract is signed, the contractor is responsible for design and construction work required for the project. Owner shall co-ordinate with one party rather than coordinating with different parties. In this option still owner has a right to approve or reject design options but is no longer responsible for coordinating and managing the design team. Most of these contracts are awarded through negotiations rather than bid process.

vii. Integrated Project Delivery

Represent the latest trend towards more collaborative approach to delivering construction projects. IPD contracts are unique in that require involvement of owners, designers, contractors and key stakeholders on project as early as possible. (from conceptual stage)

Contract type results in more transparency among all parties involved. Additionally both risk and reward are shared by the parties. Resulting in greater integration of resources, processes and expertise. Maximizing the efficiency through all phases of design, fabrication and construction.

II. Contracting Procedures

a. Formation of Contracts

A well drafted contract is a key for any construction contracts. Contract will enforce commercial and legal obligations between two parties and set out procedure for resolving any disputes.

Contracts are not only the offer, acceptance and intentions to create legal relations. But also tender, pre-contract negotiations, LOI are capable of being enforced as contract. Currently many standard contracts are used in the industry without seeking legal advice. While these forms adequately cover the relationship of contractor and employer, there may be specifics which are not included. Therefore advice from construction lawyer is essential.

b. Elements of Contracts

What is the biggest cause of disputes between owner and contractor?

Following are the basic elements of any contract :-

- Name and Address of both parties and signature
- Location of work
- Detailed scope of works
- Total cost of the project and terms of payment
- Guarantee for contractor's performance
- Guarantee for workmanship
- Special consideration or waiver of liability
- Penalty clause or liquidated damages

c. Potential Contractual Problems

- Insurances (CAR, WCP, Storage & Erection, Transit, third party Insurances)
- Provisional sums and Quantities
- Preferred sub-contractors / suppliers
- Inspections and Site meetings
- Payments (contracts sum / progress payments / variations)

- Work programs
- EOT (extension of time)
- Practical completion
- Liquidated damages
- Prolongation cost
- Security and Retention Money

d. Content of Contract documents

- a. Cover page
- b. Contract agreement
- c. Tender document (including addendums and minutes of negotiation meetings)
- d. Cover page
- e. NIT (Notice Inviting Tender)
- f. Instruction to tenderers (with vendor checklist)
- g. GCC (General conditions of contract)
- h. Schedule of Fiscal aspects (payment terms)
- i. Contract agreement format
- j. Bank Guarantee format
- k. EHS guidelines
- l. Contractor declaration
- m. Special conditions of contract
- n. Technical specifications
- o. BOQ / BOM (Bill of quantities or Bill of materials)
- p. Drawings and details
- q. List of approved makes
- r. Schedule of rates (basic material price, labor, overhead and profit etc)

III. Tendering

Tendering is the process by which bids are invited from interested contractors to carry out specific packages of construction work. It should adopt and observe the key values of

fairness, clarity, simplicity and accountability, as well as reinforce the idea that the apportionment of risk to the party best placed to assess and manage it is fundamental to the success of a project.

a. Types of tender

i. Open Tendering

Open tender is an arrangement where an advertisement in local newspaper or TRADE journals invites contractors to apply for tender documents. A deposit is usually required to ensure only serious offers are made

It is needed to cover the cost of copying the documents. Authorities would be advised against open tendering because it often leads to excessive tender lists where the cost of abortive tendering is considerable. In some instances selection criteria being applied after the tender been submitted, so a bid could be rejected if the contractor does not belong to an approved trade association

Advantages

- Give high level of competition and contractors tend to give best prices as compare to other tendering method.
- There is no list of restrictive tenderer, which does not allow favoritism
- It is very transparent process which ensures that only the contractor with the price and meeting all the technical requirements will win the tender
- This process is usually managed by procurement board where its staff are trained for such exercises and board ensure that all the procedures involved in tender are followed.

Dis-Advantages

- Low price usually detriment of quality and often result in client obtaining poor quality job and late completion of work
- Given that its open tender and thus there are no restrictions on the number of contractor who can bid and become bulky and lengthy job for tender analysis which often result in delays and high cost.

ii. Selective Tendering

Selective tendering consists of drawing up a list of chosen firms and asking them to tender. It is by far the most common arrangement because it allows price to be the deciding criterion. All other selection factors will have been dealt with at the pre-qualification stage.

There are three ways in which selective tendering lists are drawn up:-

An advertisement may produce several interested contractors and suitable firms are selected to tender. Consultants may contact those they would wish to put on an adhoc list.

Many local authorities and national bodies keep approved lists of contractors in certain categories, such as work type and cost range. (contractor who ask to be included on select lists of tenders are usually asked to provide information about their financial and technical performance)

iii. Negotiated Tendering

In this method normally one contractor is approached and such tender mainly used for specialist work such as lift system, port or airport project at big level, in such case there are limited number of contractors who do such work in the market.

It is based on one to one discussion with contractors to negotiate the terms of contract.

b. Tendering Procedures

Submission of list of contractors / vendor for approval by Client. Based on reputation of contractor in region / zone where the work is to be done / based on previous experience working with the contractor.

Issuance of Pre-qualification letter to contractor. Based on the mutually agreed final list of vendors the PQ format would be shared

Pre-qualification document review. PMC shall check the list of documents by contractor for their completeness

Perform vendor jobsite / work visit. To ascertain the quality of work executed by them in the past or ongoing projects

Preparation of Evaluation Matrix. PMC shall prepare evaluation matrix of vendors by assigning appropriate scores and ranking. Ranking shall have an input from Architect / Consultant / Client or Joint evaluation.

Evaluation matrix along with PMC recommendation to client for approval. Based on approval final vendor list finalized to share the bid documents

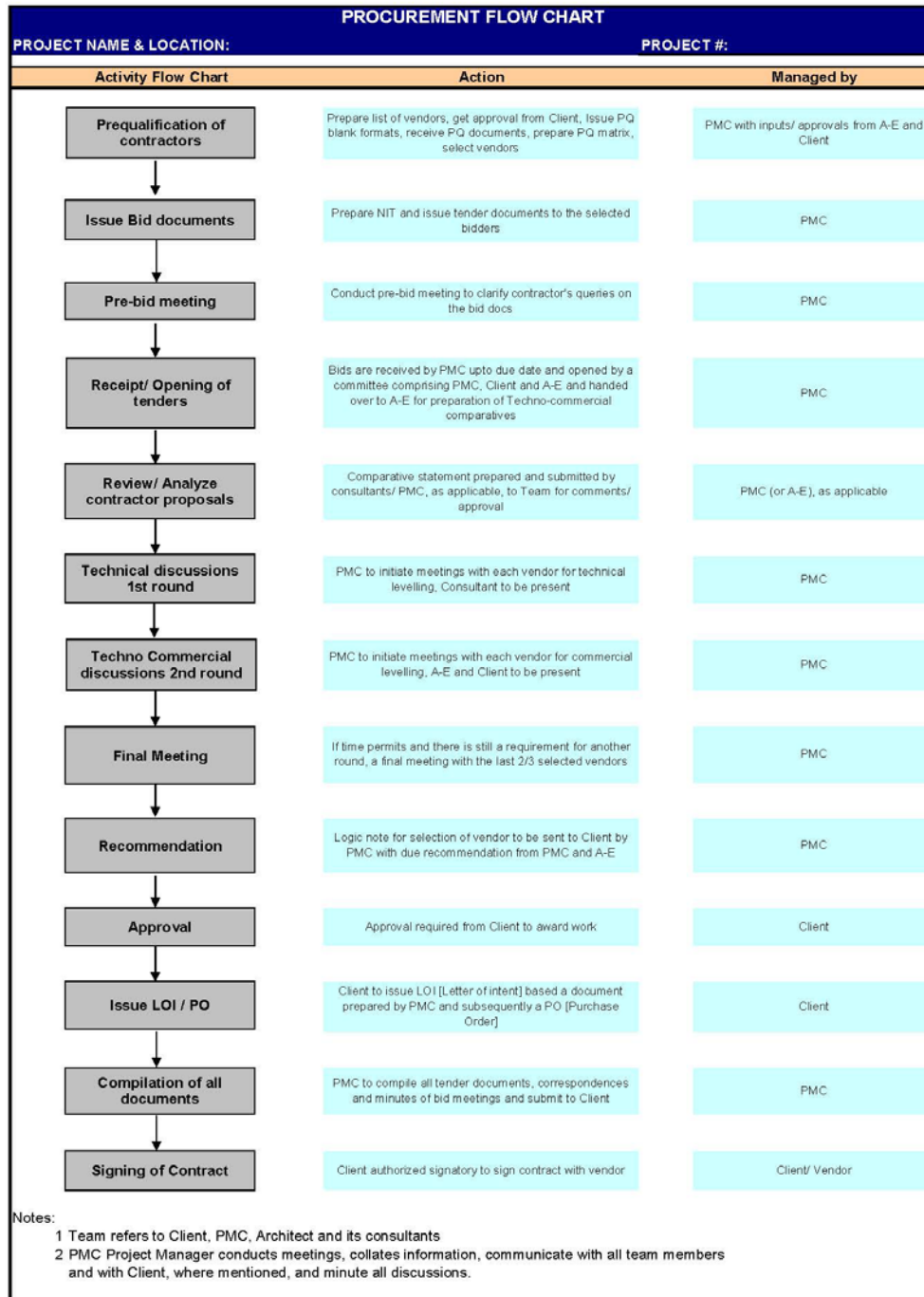


Figure 2. Tendering Flowchart

c. Bidding

i. Issuance of Bid to pre-qualified vendors / contractors

- PMC will issue NIT(Notice inviting Tender) in advance and request all the shortlisted vendors approved by client to personally collect the tender document from specified location.

ii. Clarification to Contractor Queries

- Subsequent to the issuance of tender PMC shall convene a pre-bid Meeting to clarify contractor's doubts related to scope of work, design or contract conditions.
- Pre-bid meeting shall be held in the presence of representatives from all the bidders
- During pre-bid presentation, PMW will go through the project details, scope of work, job specific safety requirements, documentation requirements and other items in tender.
- Key items to be covered in Pre-bid as follows:
 - Safety Protocol
 - Detailed scope of work
 - Addendums & Exclusions
 - Project specific safety requirements
 - Roles and responsibilities of project players
 - Bid documents and Information
 - Insurance requirements
 - Site Map and Staging Plan
 - Project summary schedule / Key milestone
 - Work week / scheduled holidays
 - Permit requirements
 - Terms of Payment
 - Project specific software requirements
 - Evaluation criteria
 - Site Walkthrough
 - Other related matters

PMC representatives and AE shall try to provide response / clarifications to all queries / doubts raised by contractors in the pre-bid meeting itself. Queries which requires review shall be collated and forwarded to AE. AE must make sure to provide clarification within 1-3 days. Post to pre-bid meeting, if any queries are received, PMC will attend to those immediately. The queries responded by AE to be routed through PMC to ensure the completeness of the response. Pre-bid meeting shall be followed by site visit if required.

iii. Issuance of Addendums

Changes in scope of work / addition and deletions to the tender initiated by PMC / client / architect / consultant/contractor during pre-bid subsequent to the issue of tender before or after the receipt of bids, PMC shall prepare and issue an addendum to all the bidders in

writing. Issuance of addendum may or may not result in changing the due date of receipt of bids, if it is not issued prior to the receipt of bids

iv. Receipt and Opening of tender document

Tender doc shall be received up to due date and time. Any tender received beyond the due date and time shall be marked and dealt as per conditions. PMC will inform client and AE in advance on the date of opening of tenders

On due date, tender shall be opened by tender committee (client /AE(optional)/PMC). Bid opening form shall be used to fill in necessary information. Bid must be accompanied with “vendor checklist for submission of bids”. Any contractor opting not to quote on tender must confirm in writing (regret note).

v. Review and Analyze contractor submitted proposal

PMC shall review in detail the proposal received from the contractor for completeness of all the required information. Spl. Attention must be paid to any exclusion in the proposal. Spl. Attention must be paid to “Rate Only” Items. PM to collate and forward all the technical issues pertaining to proposal to architect's / consultant's.

Technical comparative will enlist key technical parameters and compare the proposal to ensure the contractor has not taken any exceptions to the technical specifications in tender docs. Commercial comparative shall be prepared based on the rates quoted by contractor for various items of work. Spl. Attention shall be given to taxes, octroi, charges, which must be accounted to bring all the proposals at par with each other for fair and equitable comparison.

If certain components not clear from contractor's proposal, clarifications shall be sought. Immediately after techno-commercial comparative, PM shall also develop capability evaluation matrix that will rank the contractors on CTQ's (critical quality parameters). Depending on the final outcome and ranking from capability evaluation and techno commercial comparison, PMC will make the recommendations for negotiations.

vi. Negotiations

Upon preparation of techno-commercial comparative statement and capability evaluation, PMC would arrange a negotiation with first three or all bidders. Agenda shall be used as a base for discussion along with the proposal. This document must be signed by both contractor and negotiation committee and will form a part of contract agreement.

Upon completion of first round of negotiations, the contractors shall be requested to provide in writing, if any price adjustments they would like to make. (even if contractor is not willing to provide adjustment to be documented). Post to the first round of negotiation PMC shall prepare the comparative statement based on revised quotes submitted by contractors.

The negotiation would continue with second, third up to final negotiation based on the final quote from the contractor. All negotiation minutes to be kept in record. In the event of tender for imported or local supply equipment, PM representatives shall use the relevant checklist to make sure that all the issues have been addressed and agreed to.

In the event of tender for work packages, relevant checklist must be used prior to closing deal.

vii. Recommendation and Award of work

Based on final all-inclusive price indicated by bidders in final round of negotiations, PM will prepare final revised comparative statement. PMC shall prepare a logic note addressed to client, providing recommendation for award of work.

Client shall review the recommendations made by PMC and choose to Issue Letter of Intent (LOI) to the vendor followed by purchase order / work order / contract agreement. Contractor shall sign and return one copy of the purchase order / work order to the client.

Subsequent to the issuance of LOI to successful bidder, PMC shall proceed with issuance of “Letter of Regret” to all unsuccessful bidders. PMC also should use tollgate checklists prior to moving on to the next stage, to make sure that prior to starting next stage, all the steps for the preceding stage have been completed.

UNIT – III – LABOUR REGULATIONS, INSURANCES AND CONTRACT ADMINISTRATIONS

I. INSURANCES AND BONDS

There are many risks in any construction project. The majority of these risks are usually assumed (and priced) by the contractor during the construction phase, who typically covers this exposure by taking out various insurance policies.

i. Types of Insurances

- a. All risk insurances
- b. Professional indemnity Insurances
- c. Public Liability Insurances
- d. Worker's Compensation Insurances
- e. Decennial liability Insurances
- f. Delay in start up Insurances
- g. Storage cum Erection Insurance

a. All risk insurances

This insures against physical damage to the works (and usually materials on site). All risks insurances typically covers the full reinstatement value of the works plus a mark up for any ancillary cost (such as consultancy and professional fees) that are incurred.

Contractors generally have “global” all risks insurance policies that cover all its projects, it is generally more cost effective for contractor's to maintain this insurances. Defects are usually excluded from all risks insurance policies, wording can be purchased that provides cover for damage that a defect causes to other parts of the work. For the meaningful insurance, the different components of the works must be carefully and clearly delineated.

This insurance is only generally available if the works are being undertaken in accordance with well established (rather than evolving) construction techniques. Contractor's all risk policies (CAR) are limited if it is taken for the particular project or scope of works.

b. Professional indemnity Insurances

This insures contractors with design responsibility (i.e. under design and build contract) against liability arising out of professional negligence. Eg. Designs do not comply with the requirements of the underlying construction contract.

Professional indemnity insurance is made on “a claim made basis” (rather than when the breach of professional duty actually occurs). Professional indemnity insurance is generally required to remain in place until any limitation period.

The amount of professional indemnity insurance cover the contractor is determined on a case to case basis, depending on the extent and the complexity of the design work involved. Professional indemnity insurance is also the most important insurance policy that design consultants (such as architects and engineers) are required to have in place.

c. Public Liability Insurance

This provides cover for liability arising out of death or personal injury to third parties (but not the contractor's employees, who should be covered by worker's compensation insurance) or damage to property belonging to third parties (but not the works, which is covered by all risks insurance) prior to the works being taken over.

d. Worker's compensation Insurance

This insures the contractor against liability for the death or personal injury to its employees (usually on site) when performing the works.

e. Decennial liability Insurances

The contractor and supervising architect are jointly liable to the employer for a period of 10 years (from the date the works are taken over) for any defect that threatens the safety and stability of the building or if the building suffers a total or partial collapse. Decennial liability cannot be contractually excluded and contractors often take out insurance against this liability. Most of the international projects would have this clause in the contract. (Middle East, Gulf countries etc.)

f. Decennial liability Insurances

Unless the contractor is entitled to relief under the contract, contractors are customarily required to pay liquidated damages to the employer if the works are not taken over by the date for the completion or depending on the nature of the works, fail to satisfy specified output criteria.

g. Transit, Storage cum Erection Insurance

When the contractors erect the manufacturing unit, need to protect the investment. Even small damage to a component can cause heavy financial loss. The Erection All Risks/Storage-cum-Erection Insurance Policy gives your project a continuous cover, right from the time the consignments leave the warehouse till the product received and erected on the site.

II. POINTS TO BE NOTED ON THE INSURANCE CLAUSES

- a. Joint Names:** certain insurance policies (especially public liability insurance) are generally taken out in the joint names of the employer and the contractor. As a matter of good order, co-insured parties should obtain copies of the policy that they are insured under so they know exactly what they are covered for.
- b. Cross liability:** It is usual for contracts that are in joint names to contain a cross liability clause. A cross liability clause essentially means that each party is insured in his own right as if a separate policy had been issued and, as such, the policy will respond to liability incurred by one co-insured party to another co-insured party.
- c. Per occurrence or in the aggregate:** It is important to check if insurance cover is provided on per occurrence or on an aggregate basis. For employer, cover on a per occurrence basis is

advantageous as, if insurance is provided on an aggregate basis, previous claim could severely impact on (and even completely exhaust) the amount of available insurance.

- d. Project specific:** The point is made all the more relevant if the insurance is not project specific, as a claim from one project could mean that no cover is available for any other projects.
- e. Deductibles:** Employers should carefully assess the level of the deductible under an insurance policy to ensure that the deductible is reasonable and not prohibitively high. Excessive deductibles could lead to a risk being effectively uninsured.
- f. Identity of Insurers:** Employers usually impose minimum requirements regarding the creditworthiness of insurers to reduce the risk of insurers defaulting on their payment obligations.
- g. Caps on liability:** It is common misconception in the construction industry that contractor's liability for the particular risk is implicitly capped at the amount of insurance that the contractor is required to have for that risk.
- h.** Drafting of insurance clauses usually requires a contractors to "warrant" that it has satisfied all the requirements imposed by the construction contract. As such these requirements cannot be taken lightly and may result in serious breach of contract if they are not adhered to.

Prior to executing contract , each party

- Ensure that it understands the extent of its insurance obligations
- Make sure that insurance requirements are reviewed by its legal advisor
- Ensure the insurance requirements under the contract can be accommodated by the relevant policies.
- Checks that any necessary amendments are made to the relevant insurance policies to ensure that the contractually agreed insurance requirements are adequately reflected.

III. BONDS

What is bond?

A bond is usually contained in a document given by a third party in support of the obligations of another party, containing a promise to pay money immediately or on a future date. It thereby provides an assurance to the beneficiary that the contracting party will perform its obligations, and security if it does not.

Who issues bond?

Bonds are normally issued by banks, insurance companies or specialist surety companies. Collectively these are known as bondsmen. Bondsmen will invariably seek a counter-indemnity from the party requesting the bond (i.e. the contractor). In the case of a bank bond, this would normally be secured against the contractor's over draft facility.

i. Types of Construction Surety Bonds or Bank Guarantees

- Bid bond or Tender Security or Earnest Money deposits
- Advance payment bonds

- Performance bond
 - Retention bond
 - Off-site material bond
 - Adjudication bond
- a. **Bid bond:** Bid bonds are used to compensate an employer if a contract has to be re-awarded because a prospective contractor refuses to enter into the contract after his tender is accepted.
- b. **Performance bonds:** are designed to ensure that the contractor delivers goods or performs services in accordance with the terms of the contract. If the contractor fails to perform the contract, it is likely that the employer will suffer a loss, usually because of delay.
- c. **Advance payment bonds:** manage the risk of the contractor's failure to earn the whole of any advance payment from the employer by failing to provide goods and services to an equivalent value. The failure may result from the contractor's insolvency, fraud or default through using the advance payment for another purpose. Such bonds usually contain a reduction clause, whereby the amount of the bond reduces in accordance with monthly certificates until the certified value of work done exceeds the advance payment.
- d. **Retention bonds:** cover the risk of the contractor's failure to perform the contract. Retention monies are normally viewed as a security for the cost of rectifying defective works. Early release of retention monies (the attraction to the contractor being to obtain early release of retentions to help cash flow), can be secured by a bond providing the employer with added security from the bondsman in the event of the contractor's default in carrying out defective works.
- e. **Off-site material bonds:** cover an employer against the risk of paying the contractor for materials being manufactured off-site. If the contractor or sub-contractor becomes insolvent, the employer can claim on the bond for the amount of the goods it has paid for in the event that the goods it has paid for are not delivered to site.
- f. **Adjudication bonds** are conditional bonds which require the bondsman to pay out on an adjudicator's decision.

What is Guarantee?

A guarantee is given by a third party (a guarantor) to provide an undertaking to a beneficiary that the guarantor will answer for the debt or default of a third person (the principal debtor). The principal debtor remains primarily responsible for payment or performance of the relevant obligation.

Guarantees are often provided by parent companies where a party is contracting with a subsidiary. Guarantees can be either performance guarantees or financial guarantees.

Under a financial guarantee, the guarantor will compensate the beneficiary for the loss it suffers as a result of the principal debtor's default. Guarantees must be in writing and signed by the guarantor. Unless executed as a deed, there must be consideration. The guarantor must have the necessary capacity to give the guarantee; otherwise the guarantee will be void.

UNIT – IV – DISPUTES AND ARBITRATIONS

I. DISPUTE IN CONSTRUCTION

i. Disputes in construction contracts

A combination of environmental and behavioral factors can lead to construction disputes.

Projects are usually long term transactions with high uncertainty and complexity, it is impossible to resolve every detail and foresee every contingency at the outset. As a result, situations often arise that are not clearly addressed by the contract. The basic factors that drive the development of construction disputes are uncertainty, contractual problems and behavior.

ii. Uncertainty

Uncertainty is the difference between the amount of information required to the task and the amount of information is available. Amount of information required depends on the task complexity and the performance requirements, usually measured in time or to a budget

Amount of information available depends on the effectiveness of planning and requires the collection and interpretation of that information for the task. Uncertainty means not every detail of a project can be planned before work begins. When uncertainty is high, initial drawings and specification will almost certainly change and project members will have to work hard to resolve problems as work proceeds if disputes are to be avoided.

iii. Contractual Problems

Standard forms of contract clearly prescribe the risks and obligations each party has agreed to take. Such rigid agreements may not be appropriate for long term transactions carried out under conditions of uncertainty. It is uncommon to find amended terms or bespoke contracts that shift the risk and obligations of parties.

Where amended terms or bespoke contracts are used they may be unclear and ambiguous. As a consequence, differences may arise in the parties perception of the risk allocation under the contract. The amended or bespoke terms of conditions will take effect in addition to the applicable law of contract which is continually evolving and being refined to address new issues.

iv. Behaviour

Since contracts cannot cater for every eventuality, wherever problems arise either party may have an interest in gaining as much as they can from the other. Equally, the parties may have a different perception of the facts. At least one of the parties may have unrealistic expectations, affecting their

ability to reach agreement. Alternatively, one party may simply deny responsibility in an attempt to avoid liability.

II. COMMON CAUSES OF CONSTRUCTION DISPUTES

“CONSTRUCTION IS A UNIQUE PROCESS WHICH CAN GIVE RISE TO SOME UNUSUAL AND UNIQUE DISPUTES”

1. **ACCELERATION**
2. **COORDINATION**
3. **CULTURE**
4. **DIFFERING GOALS**
5. **DELAY**
6. **DESIGN**
7. **ENGINEERING AND EMPLOYER REPRESENTATIVE**
8. **PROJECT COMPLEXITY**
9. **QUALITY AND WORKMANSHIP**
10. **SITE CONDITIONS**
11. **TENDER**
12. **VARIATIONS**
13. **VALUE ENGINEERING**

1. ACCELERATION

It is not uncommon for commercial property owners to insist upon acceleration a construction project. Such examples might include the completion of a major retail scheme, and need to meet key opening dates or tenant occupation in an office development

The construction costs associated with acceleration are likely to be less than the commercial risk the developer may face if key dates are missed. Circumstances surrounding acceleration are often not properly analyzed at the time the decision is made, and that inevitably leads to disputes once the contractor has carried out accelerative measures and incurred additional costs. Post to which the developer refuses to pay.

2. COORDINATION

In complex projects involving many specialist trades particularly mechanical and electrical installations, co-ordination is key, yet conflict arises because work is not properly coordinated.

This inevitably leads to conflict during installation which is often costly and time consuming to resolve, with each party blaming the other for problems that have arisen. Ineffective management control may result in a reactive defense to problems that arise, rather than a proactive approach to resolve the problem once they become apparent.

3. CULTURE

The personnel required to visualize, initiate, plan, design, supply materials and plants, construct, administer, manage, supervise, commission and correct defects throughout the span of a large construction contract is substantial. Such person may come from different social classes or ethnic backgrounds. Forming a teamwork approach across cultures can be very difficult where each culture has its own values.

4. DIFFERING GOALS

Personnel engaged on a large construction contract are likely to be employed by one of many subcontracted firms, including those engaged as suppliers and manufacturers. Each of these firms may have their own commitments and goals, which may not be compatible with each other and could result in disputes.

5. DELAY

Disputes frequently arise in respect of delays and who should bear the responsibility for them. Most construction contracts make provision for EOT for completion. The sole reason for this is that the owner can keep alive any rights to delay damages recoverable from the contractor.

On international construction projects the contractor's right of requesting for the EOT for completion was often addressed towards the end of the contract, when an overrun looked likely. From owner's perspective, this made the examination of the true causes of delay problematical and inevitably led to disputes between the contractor and the owner as to the contractor's proper entitlement.

6. DESIGN

Errors in design can lead to delays and additional costs that becomes the subject of disputes. Often no planning or sequencing is given to the release of design information, which then impacts on construction.

Equally, the design team sometimes abrogates their responsibilities for the design, leaving the contractor to draw and resolve any design deficiencies by carrying out that part of work itself to try to avoid delays. In doing so, innocently assuming the risk for any subsequent design failures.

7. ENGINEERING AND EMPLOYER REPRESENTATIVE

Personality of Engineer or employer's rep and their approach to proper and fair administration of contract on behalf of employer is crucial to avoiding disputes, yet a substantial proportion of disputes have been driven by Engineer exercising an uneven hand in deciding differences in favor of employer.

In domestic and international contracts, the Engineer traditionally had an independent and impartial role. This independence or impartiality was often not properly exercised, and in some cases there was clear evidence of bias by the Engineer towards the Employer.

Some contracts are open as to the constraints imposed on the Engineer; Engineers are subject to constraints in respect of variations and in the extension of time that can be given.

8. PROJECT COMPLEXITY

In complex construction projects the need to carry out a proper risk assessment before a contract is entered into is paramount. There are numerous examples of projects taking much longer than planned and contracted for because there was insufficient appreciation of the risks associated with the project's complexity.

Inevitably the delay and additional costs the contractor incurs and the own's right to claim damages for delay, often develop into bitter disputes.

9. QUALITY AND WORKMANSHIP

Traditional construction contracts, disputes often arise as to whether or not the completed work is in accordance with the specifications. The specification may be vague on the subject of the dispute, and each party to the contract may have a different view on whether the quality and workmanship is acceptable.

This issue is more in international contracts. Although great care may have to be taken to prescribe the quality of materials and their compliance with standards. In design and build contracts, perhaps the greatest deficiency is in the contract documentation, particularly the employer's requirements.

This inadequacy inevitably leads to claims by the contractor for additional cost, which if not resolved, can lead in turn to costly disputes.

10. SITE CONDITIONS

If the inadequate contract fails to describe which party to take the risk of the site conditions, disputes are inevitable when adverse site or ground conditions impede the progress of work or require more expensive engineering solutions.

Even if the Employer, in good faith provides detailed information on the site conditions to the contractor, if that information is discovered to be incorrect and the contractor has relied on it and acted upon it to their detriment, the Employer may be liable to the contractor for the consequences.

11. TENDER

Time allowed to scrutinize the tender documents, prepare outline programme and methodology, carry out the risk assessment, calculate the price, and conclude the whole process with a commercial review is often impossibly short.

Mistakes in this process may have an adverse effect on the successful commercial outcome of the project. This approach does nothing to foster close and co-operative working relationships between the owner and the contractor during the progress of the work and inevitably leads to disputes.

12. VARIATIONS

Variations are prime cause of construction disputes, particularly where there is a substantial number or variations impact on partially completed work or are issued as work is nearing completion. The

nature and number of variations can transform a relatively straightforward project into one of unmanageable complexity.

13. VALUE ENGINEERING

This term often lacks definition in construction contracts and can lead to disputes, particularly where the saving is to be shared between the contractor and the owner. Savings in respect of the supply and installation of the material or product in question might be relatively easy to determine and agree. Proper value engineering approach needs to take full account of the life cycle costs of any proposed change.

I. DISPUTE RESOLUTION

i. Common Causes of construction disputes.

1. ACCELERATION
2. COORDINATION
3. CULTURE
4. DIFFERING GOALS
5. DELAY
6. DESIGN
7. ENGINEERING AND EMPLOYER REPRESENTATIVE
8. PROJECT COMPLEXITY
9. QUALITY AND WORKMANSHIP
10. SITE CONDITIONS
11. TENDER
12. VARIATIONS
13. VALUE ENGINEERING

ii. Dispute resolution

“Dispute resolution represents a variety of method through which potential litigants may resolve disputes”.

Common Forms are

- a. Negotiation
- b. Mediation
- c. Conciliation
- d. Expert Appraisal
- e. Arbitration
- f. Litigation (also known as adjudication)

The first three focus on effective communication and negotiation, rather than using more combative processes.

- They avoid court and are often less time consuming and costly
- This process can help alleviate interpersonal disputes and conflicts within organizations, neighborhoods and businesses.
- The dispute resolution processes offer parties varying degrees of control over in the outcome.
 - a. At one end there is negotiation and mediation, in which the parties retain control and must voluntarily agree to the settlement
 - b. At the other end is arbitration and litigation in which parties essentially give up control and request a third party person (the arbitrator or judge) to impose a decision to resolve the dispute.
- The combination of these methods also exists.

a. Dispute resolution - Negotiation

Negotiation is one of the most common processes in the world. It is a process whereby parties to a dispute attempt to settle that dispute on their own without the assistance or intervention of a third party. Parties may either be represented by professional negotiators or conduct the negotiation themselves.

There is no set process for this method of dispute resolution (although obviously some methods work better than others) and parties' approach can range from extremely combative to extremely facilitative depending on them and on the nature of the dispute. Where no third party is involved there is no agreement or decision reached unless the parties reach it themselves.

b. Dispute resolution - Mediation

Mediation is the process whereby parties are assisted in their negotiations by a neutral third party (mediator) to identify the issues in dispute, generate options around these issues, and consider alternatives and to attempt to reach agreement that will meet the underlying needs and interests of both or all parties to the dispute. Mediators do not make decisions about who is right or wrong or

what the best outcome should be. A key advantage to mediation is that the parties have significant control over the end result.

Decision making power stays in the parties hands, and is not passed on to a judge or arbitrator. Instead, a mediator helps bring the parties together by establishing a framework for the negotiation within which all parties agree to participate. The mediator has no determinative power (cannot make decision for the parties) and most commonly, mediators do not offer substantive advice during the mediation. The mediator however controls the process of the mediation, that is the steps and stages of the meeting, and the parties themselves reach any agreement that is made. Mediation is not an appropriate method of dispute resolution in all cases.

c. Dispute resolution – Conciliation

Conciliation is a term often used interchangeably with mediation. Many statutory or judicial bodies use conciliation conferences in an attempt to settle matters before their tribunal or court.

Example family court conducts conciliation conferences chaired by registrar of the family court as part of the court process. These conferences are very often described by court as being mediations. Conciliators are usually recognized experts in the field of the dispute and are empowered to suggest or give advice on likely settlement terms.

It is not uncommon for the third party conciliator to be very persuasive and to recommend strongly certain outcomes that they believe are suitable. Conciliators have no determinative powers.

d. Dispute resolution – Expert Appraisal

Expert appraisal is a process where the parties nominate a mutually agreed third party, an expert in the field of their dispute, and request that person give his or her opinion of the probable outcome if the matter were to proceed to court.

The expert has no determinative powers, but his or her opinion is often very persuasive as both or all parties have already acknowledged the expert's status in the subject area.

e. Dispute resolution – Expert Appraisal

Arbitration is a process in which the parties to a dispute present the facts of their case to a neutral third party to make a determination on that dispute. The third party arbitrator is ordinarily a recognized expert in the specific field of the dispute. Arbitration is the process very close to judicial determination and parties adopt an adversarial (“A” vs “B”) stance.

The main differences between arbitration and litigation are that arbitration proceedings and decisions are private, and the arbitrator is a third party expert specifically chosen by the parties. Arbitral decisions (also known as awards) may be registered at a court to give them the effect of a court order for the purposes of enforcement.

f. Dispute resolution – Litigation

Litigation is the most common form of dispute resolution in India. Surprisingly most disputes are not settled by court; indeed approximately 95% of civil cases commenced in court are settled

out of court prior to trial. Very often the methods of settling cases before trial may involve negotiation, mediation or conciliation, expert appraisal or a combination of these.

In the litigation process, parties submit their dispute to the relevant court and either magistrate or a judge decides the outcome of the dispute on their behalf. It is often a very time consuming and costly process. For many people the process is confusing even with the assistance of lawyers.

The judicial officer (the magistrate or the judge) acts as an impartial “Umpire” throughout the proceedings and ultimately makes a decision based on the facts and evidence placed before them. The decision forms an order of the court and is enforceable in the event any of the parties breaches that order.

Although many disputes can and ought to be resolved outside of the court process there are a number of situations where a judicial decision is essential and where the parties are not able to negotiate matters themselves. These include

- At least one of the parties is unwilling to negotiate with the other party
- Urgent application where a third party or organization required to act i.e. Like financial institute etc.

This dispute resolution process is the one with the least amount of party control and the greatest determinative power of the third party neutral – In this case, the Judge or Magistrate

g. Advantages and Disadvantages of ADR

i. Advantages

- More Flexible
- Select your own Arbitrator or Mediator
- A jury is not involved
- Reduced expenses
- ADR is speedy
- The results shall be kept confidential
- ADR permits more participation by Litigants
- ADR allows the parties to work together with arbitrator
- Less stress

ii. Dis advantages

- There is no guaranteed resolution
- Arbitration decisions are final
- Limits on arbitration awards i.e. only money related matters
- Fee for neutral arbitration
- Arbitrations captured in all contracts
- Non-binding arbitration leading to trial

II. ARBITRATION

“An act to consolidate and amend the law relating to domestic arbitration, international commercial arbitration and enforcement of foreign arbitral awards as also to define the law relating to conciliation and for matters connected therewith or incidental thereto”

This part shall apply where the place of arbitration is in India

Few Highlights of the arbitration and conciliation act is discussed is as follows:-

a. Clause 3. Receipt of written communication

Any communication deemed to have been received if it is delivered to the addressee personally or at his place of business, habitual residence or mailing address. If none of the places referred to, a written communication is deemed to have been received if it is sent to the addressee’s last known place of business, habitual residence or mailing address. The communication is deemed to have been received on the day it is so delivered. This section does not apply to written communications in respect of proceedings of any judicial authority.

b. Clause 4. Waiver of right to object

Any requirement has not been complied with and yet proceeds with the arbitration without stating his objection to such non-compliance without undue delay or, if a time limit is provided for stating that objection, within that period of time, shall be deemed to have waived his right to so object.

c. Clause 5. Extent of Judicial Intervention

Anything contained in any other law being in force, in matters governed by this part, no judicial authority shall intervene except where so provided in this part.

d. Clause 6. Administrative Assistance

In order to facilitate the conduct of the arbitral proceedings, the parties, or the arbitral tribunal with the consent of the parties, may arrange for administrative assistance by a suitable institution or person.

III. ARBITRATION AGREEMENT

e. Clause 7. Arbitration Agreement

An agreement by the parties to submit to arbitration all or certain disputes which have arisen or which may arise between them in respect of a defined legal relationship, whether contractual or not. Agreement may be in the form of an arbitration clause in a contract or in the form of separate agreement.

An arbitration agreement shall be in writing

- A document signed by parties
- An exchange of letters, telex, telegrams or other means of communication
- An exchange of statement of claim and defense in which the existence of the agreement is alleged by one party and not denied by other

Reference in a contract to a document containing an arbitration clause constitutes an arbitration agreement

f. Clause 8. Power to refer parties to arbitration where there is an arbitration agreement

A judicial authority before which an action is brought in a matter which is a subject of arbitration agreement. Application shall not be entertained unless it is accompanied with arbitration agreement. Issue is pending before the judicial authority, an arbitration may be commenced or continued and an arbitral award made.

g. Clause 9. Interim Measures by court

A party may, before, or during arbitral proceedings or at any time after the making of the arbitral award but before it is enforced. For the appointment of guardian for a minor or person of unsound mind for the purpose. Preservation, interim custody or sale of any goods which is a subject matter of arbitration. Securing the amount in dispute in arbitration.

Detention, prevention or inspection of any property and authorizing any person to enter upon any land or building in the possession of any party or authorizing any samples to be taken or any observation to be made or experiment to be tried. Interim injunction or the appointment of receiver. Such other interim measure of Protection

IV. COMPOSITION OF ARBITRAL TRIBUNAL

h. Clause 10. Number of Arbitrators:

Parties are free to determine the number of arbitrators provided such a number is not an even number. The arbitral tribunal shall consist of a sole arbitrator.

i. Clause 11. Appointment of Arbitrators:

A person of any nationality may be an arbitrator. Parties are free to agree on a procedure for appointing the arbitrator or arbitrators. Arbitration with three arbitrators, each party shall appoint one arbitrator, and the two arbitrators shall appoint the third arbitrator who shall act as the presiding arbitrator

The appointment of arbitrator (3 arbitrator) shall be made upon request of the party, by chief Justice or any person or institution designated by him if,

- Party fails to appoint an arbitrator within 30 days from receipt of request from other party.
- Two appointed arbitrators fail to agree on the third arbitrator within 30 days from date of appointment

The appointment of sole arbitrator (1 arbitrator) shall be made by chief Justice or any person or institution designated by him

- if the parties fail to agree on the arbitrator within 30days upon request by one party to the other.

Under an appointment procedure agreed upon by the parties

- A party fails to act as required under that procedure
- The two appointed arbitrators, fail to reach an agreement expected of them under that procedure
- A person including an institution, fails to perform any function entrusted to him

A party may request chief justice or any person or institution designated by him to take the necessary measure unless there are other means for securing the appointment.

Chief Justice or the person or institution designated by him, in appointing an arbitrator, shall have a due regard to

- Any qualification required of the arbitrator
 - Other considerations as are likely to secure the appointment of independent or impartial arbitrator
- In case of appointment of sole or third arbitrator in international commercial arbitration, the chief justice or institution designed by him may appoint an arbitrator of a nationality other than the nationalities of parties

j. Clause 12. Grounds for Challenge

When a person is approached in connection with his possible appointment as arbitrator, he shall disclose in writing any circumstances likely to give rise to justifiable doubts as to his independence or impartiality.

An arbitrator from time to time of his appointment and throughout the arbitral proceedings shall without delay, disclose to the parties in writing any circumstance unless the same is disclosed to parties earlier.

An arbitrator may be challenged only if

- Circumstances exist that give rise to justifiable doubts as to his independence or impartiality
- He does not possess the qualification agreed to by the parties

k. Clause 13. Challenge Procedures

Failing any agreement, a party who intend to challenge an arbitrator shall within 15 days after becomes aware of any circumstances send a written statement of reasons for challenge. Unless the arbitrator challenged withdraws from his office or other party agrees to the challenge, arbitral tribunal shall decide on the challenge

If the challenge under any procedure agreed upon by parties or is not successful, the arbitral tribunal shall continue the arbitral proceedings and make an arbitral award. Where the arbitral award is made, the party challenging the arbitrator may make an application for setting aside such

an arbitral award. Where an arbitral award is set aside on an application made, the court may decide as to whether the arbitrator who is challenged is entitled to any fees.

l. Clause 14. Failure or Impossibility to act

The mandate of an arbitrator shall terminate if

- He is unable to perform his functions or for other reasons fails to act without undue delay
- He withdraws from his office or the parties agree to the termination of his mandate.

If a controversy remains concerning any of the grounds, apply to court to decide on the termination of the mandate. An arbitrator withdraws from his office or a party agrees to the termination of the mandate of an arbitrator, it shall not imply acceptance of validity of any grounds

m. Clause 15. Termination of mandate or substitution of arbitrator

The mandate of an arbitrator shall terminate if

- With draws from his office for any reason or
- By or pursuant to agreement of the parties

When the mandate of an arbitrator terminates, a substitute arbitrator shall be appointed. Any hearing previously held may be repeated at the discretion of the arbitral tribunal. An order or ruling of the arbitral tribunal made prior to the replacement of an arbitrator shall be valid solely because there has been a change in composition of arbitral tribunal.