Project Delivery Systems
&
Contract Management

Content

- **Basic Elements of Contract**
- **Contracting Parties**
- **Types of The Construction Contracts**
- **Contract Management Processes**
  - ✓Tender Process
  - ✓Contract Writing Process
  - ✓Signing and Distribution Process
  - ✓Implementation of Contract

- The Contract is a document or a set of documents that expresses the expectations and responsibilities of the parties involved in a project and protects each party's rights regarding the project.

The Contract is defined as a legal procedure that causes many (two or more) biased responsibilities.

Basic Elements of Contract

- In principle, it is a process that does not depend on the shape.

  >>> It can be done as oral, written and formal.

- It is a promissory transaction.

  >>> One side is burden with debt as other side has a right to claim.

Scope of Contract

- Liabilities taken by all parties due to Debtor-creditor relationship.
- These responsibilities should be explained one by one in the contract and made lawful.

Aim of Contract

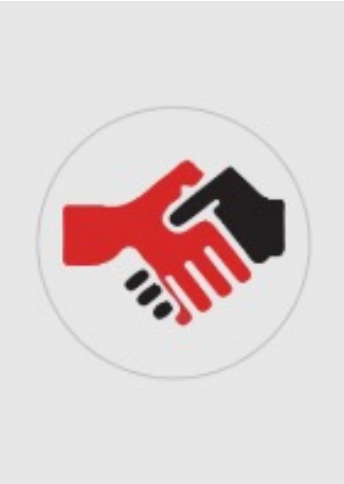
is to provide

- Rights,
- Duties and responsibilities,
- Distribution of risks.

Contract Management

The main purpose of contract management;
to ensure that the contract reaches its target effectively without exceeding the specified period and without dispute>>>

So; Contract Management aims to fulfil liabilities of all parties which involves in the contract.



What is the gains of successful Contract Management

- It ensures that the works are completed with minimum deviation and in accordance with the contract documents as much as possible
- Planned and controlled management of potential costs of risks
- Effectively management of Commercial Arbitration and Judgement
- Managing financial and time losses as a result of disagreement processes, minimizing losses and maximizing benefits and negotiating effectively with negotiations and / or mediation committees (DAB) **>>> cost saving and effectiveness**

Construction Contracts

The construction contract is the contract where the client owes to the contractor in exchange of immovable construction and delivery of it.

In this contract, while the contractor owes a liability to create a construction work, the client also owes to pay a price.

Contracting Parties

❑ Client/Employer

The person who pays for the construction.

❑ Contractor

The person who has responsibility to construct a project.

Natural Person: In jurisprudence, a natural person is a person that is an individual human being.

Legal Person: is human or non-human entity, in other words, any human being, firm, government agency that is recognized as having privileges and obligations such as having the ability to enter into contracts, to sue, and to be sued.

The Liabilities of Constructor

1. Constructing a project as it is written in the contract.
2. Providing required equipment and tools
3. Providing necessary materials
4. Delivery of construction project
5. Loyalty and thoughtfulness

Liabilities of Client

1. Paying the price
2. Providing material
3. General Notice
4. Inspection and General Notice
5. Transferring of land share in Construction agreement in return of land share

Types of Construction Contracts

1. **According to Financing Model**
   - Build-Operate-Transfer
   - Construction agreement in return of land share
2. **According to Structure of Constructor**
   - Coalition (Joint Venture, Consortium)
   - Sub-Contractors
3. **Engineering Consultancy Contract**
4. **Standard and Non-Standard Contract**
   - Public Procurement Contracts
   - FIDIC
5. **According to Project Delivery Systems**
6. **According to Payment Methods**
   - Unit Price, Lump Sum, Turnkey

1. Contracts According to Financing Model

1.1 Built-Operate-Transfer type Construction Contract Share

It is special financing model developed for public projects which requires advanced technology and huge financial resources.

The people who use that project pay the price by purchasing services offered in these projects.

1. Contracts According to Financing Model

1.2 Construction contract in return for land

These types of contract is signed between landowner and the contractor who undertakes the construction.

The contractor promises to carry out the construction process on the land, while the landowner promises to distribute share of land as it is negotiated with the contractor. Namely, the contractor get the price of the construction not as money but as immovable property.

(!) Since it is the most widely applied type of contract in the construction sector, it is the type of contract where the most conflicts are observed.

Difference Between Joint Venture and Consortium

Joint Venture: Share-holders are liable to client from all part of the project.

Consortium: Each share-holder's liability to client is limited to their own portion which is incated in contract clearly.

	Joint Venture	Consortium
New Company	New company is established	New company is not established. Each partner protect their own legal person.
Number of Project	For one Project	One or more than one
Liability	The partner company is liable for the entire project.	Each company is responsible for the project's own portion of the project.

1. Contracts According to Financing Model

1.2 Construction contract in return for land

- Completing the project
- Delivery of the project
- Elimination of defects and deficiencies of the defective work

Liabilities of Contractor

- Delivering the land for construction
- Providing proxy to the contractor when necessary
- Making plans and projects in accordance with the zoning status and contract
- Obtaining Construction Permits
- Transfer of land share as it is in contract

Liability of Clients

2. According to Structure of Constructor

2.1 Coalition

A) Joint Venture:

Joint Venture, companies establish a company by building a unit of cooperation (appropriate financing, staff, equipment and materials) for a single project.
This company is liable to client for all part of the Project.
According to Public Procurement Law, Contract should be signed by all share-holders of Joint Venture

Among the parties;

- Limited Purpose and Time Element
- Common Purpose Element
- Common Management Factor
- Partnership must be available.

Main Elements of Joint Ventures

B) Consortium:

Firms establish cooperation for one or more than one Project by protecting their own legal person.

Each consortium partner is responsible for his / her own actions against the owner.

In this kind of contracts, Liabilities of each share-holder should be indicated clearly.

2. According to Structure of Constructor

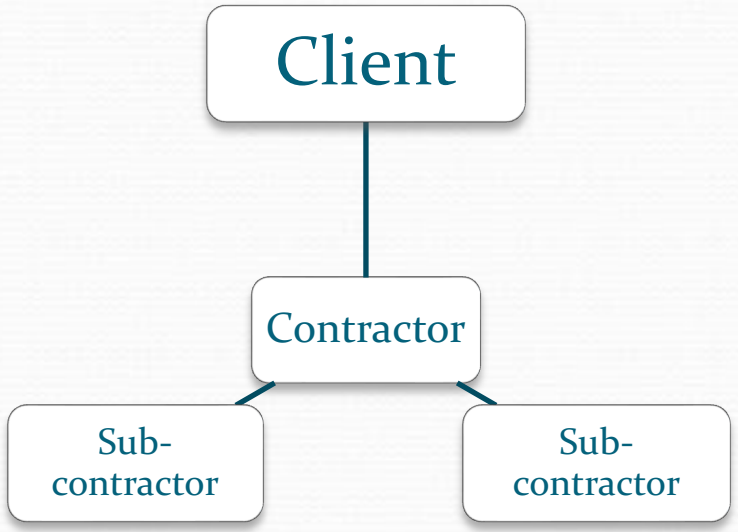
2.2 Sub-contractor contracts

The relationship between the employer (the business owner / administration), the worker and the subcontractor.

✓The client does not have a direct contract with subcontractors;

✓but the client expects the performance of the work from the prime contractor.

✓The prime contractor cannot work with the subcontractor which the contracting entity does not approve.



3. Engineering Consultancy Contracts

- Contracts signed between the client and the consultant engineer* and have responsibility for both parties.

Türk Müşavir Mühendisler ve Mimarlar Birliği
Association of Turkish Consulting Engineers and Architects

(*) Consultant Engineer's responsibilities;

- To prepare feasibility
- Basic planning, financing program
- Preparation of technical studies and specifications
- Supervision of construction works
- Advice to the employer in the tender process
- Inspection of materials / manufactures
- Etc..

4. Standard and Non-Standard Contracts

The general conditions in construction contracts are often linked to a certain standard.

Depending on the scope of the construction project, these standards are determined according to national specifications or type contracts prepared by international professional organizations.

KAMU İHALE KURUMU 2002

FIDIC

WIDELY USED STANDARD CONTRACTS

FIDIC (Fédération Internationale du Batiment et des Travaux Publics) International contract conditions for çivil engineers	International Federation of Consulting Egineers
RIBA Formu Royal Institute of British Architects	England
ICE Contract Institute of Civil Engineers	England
Overseas Civil Conditions of Contract - ACE Formu Associtation of Consulting Engineers in the UK ve Export Group for the Constructional Industries	England
NEC New Engineering Contract	England
RIAI Formu Royal Institute of the Architects of Ireland	Ireland
EUC European Union Contract	EU
AIA CONTRACT American Institute Of Architect	America
Sample Contract Of Engineering Advancement Association Of Japan	Japan
KİK (Public Procurement Law) Standard Contracts for Construciton Works	Turkey

4. Standard Contracts

All parties work with a contract that is familiar to them.

Benefits

- The two sides represent the degree of fairness in contracts.
- The conditions of contract has been prepared by experts.
- Helps to manage project risks.
- Reduces inefficiency in contract preparation and contract review. Moreover facilitates cooperation between parties
- Saving time and cost
- Creating common basis for evaluation and comparison of tenders

4. Standard and Non-Standard Contracts

4.1 Public Procurement Contracts

- Public Procurement Law No. 4734: The purpose of this law is to determine the principles and procedures to be applied in the tenders of public institutions or organizations subject to public law or which are under public control or who use public resources.

- Public Procurement Contracts Law No. 4735: The purpose of this Law is to determine the principles and procedures related to the regulation and implementation of contracts in accordance with the Public Procurement Law.

4. Standard and Non-Standard Contracts

4.2 Standard Contracts >>> FIDIC Contracts

Due to the complex nature of the contracts and the technical characteristics of the contracts, the implementation of the construction contracts has resulted in the standard rules.

FIDIC was founded in 1913 in Belgium.

In 1972, when Turkish contractors started working abroad, they met with FIDIC.

In 1987, the Association of Turkish Consulting Engineers and Architects became a member of FIDIC.

Uluslararası Mühendis-Müşavirler Federasyonu

Federatıon Internatıonale Des Ingenieurs Conseils

4.2 Standard Contracts >>> FIDIC Contracts

- **The Red Book** provides conditions of contract for construction works where the design is carried out by the Employer. The current Red Book bears little resemblance to its predecessors. Earlier versions of the Red Book were drafted for use on civil engineering projects. The current edition drops the words “civil engineering” from the title and this signifies a move away from the Red Book only being applicable to civil engineering works.

- **The Yellow Book** provides conditions of contract for construction works where the design is carried out by the Contractor. The current Yellow Book bears little resemblance to its predecessors. The current edition drops the words “electrical and mechanical works” from the title and in line with the rest of the FIDIC suite the focus is now more on type of procurement rather than the nature of the works.

- **The Silver Book** is suitable for use on process, power and private-infrastructure projects where a Contractor is to take on full responsibility for the design and execution of a project. Risks for completion to time, cost and quality are transferred to the Contractor and so the Silver Book is only suitable for use with experienced Contractors familiar with sophisticated risk management techniques.

- The Short Form of Contract is recommended for engineering and building work of relatively small capital value. The Guidance Notes for the **Green Book** recommended that generally it should not be used on projects with a contact value greater than US$500,000.

5. According to Project Delivery Systems

Relations Between Stake-Holders in Construction Contract Management

- The role of stakeholders in the construction contract varies according to the project delivery system.
- When selecting the project delivery system, the decision is to decide whether the number of contracts, For instance, the project with one contractor or with more than one contractor.

5. According to Project Delivery Systems

- **Single contractor-based contracts**
- It is a commonly used type of contract. The client and sole selected contractor are negotiated. Design contract represents the relation between the contractor and architect/engineer.

  - Relations between Contractor and subcontractors are organized using Subcontracting Contracts.
  - Relations between Contractor and Suppliers are organized using Supply Contracts
  - Relations between Engineer and Architect are organized using Consultancy Contracts
  - Relations between Contractor and Client are organized using Construction Contracts
  - Relations between Architect/Engineer and Client are organized using Design Contracts

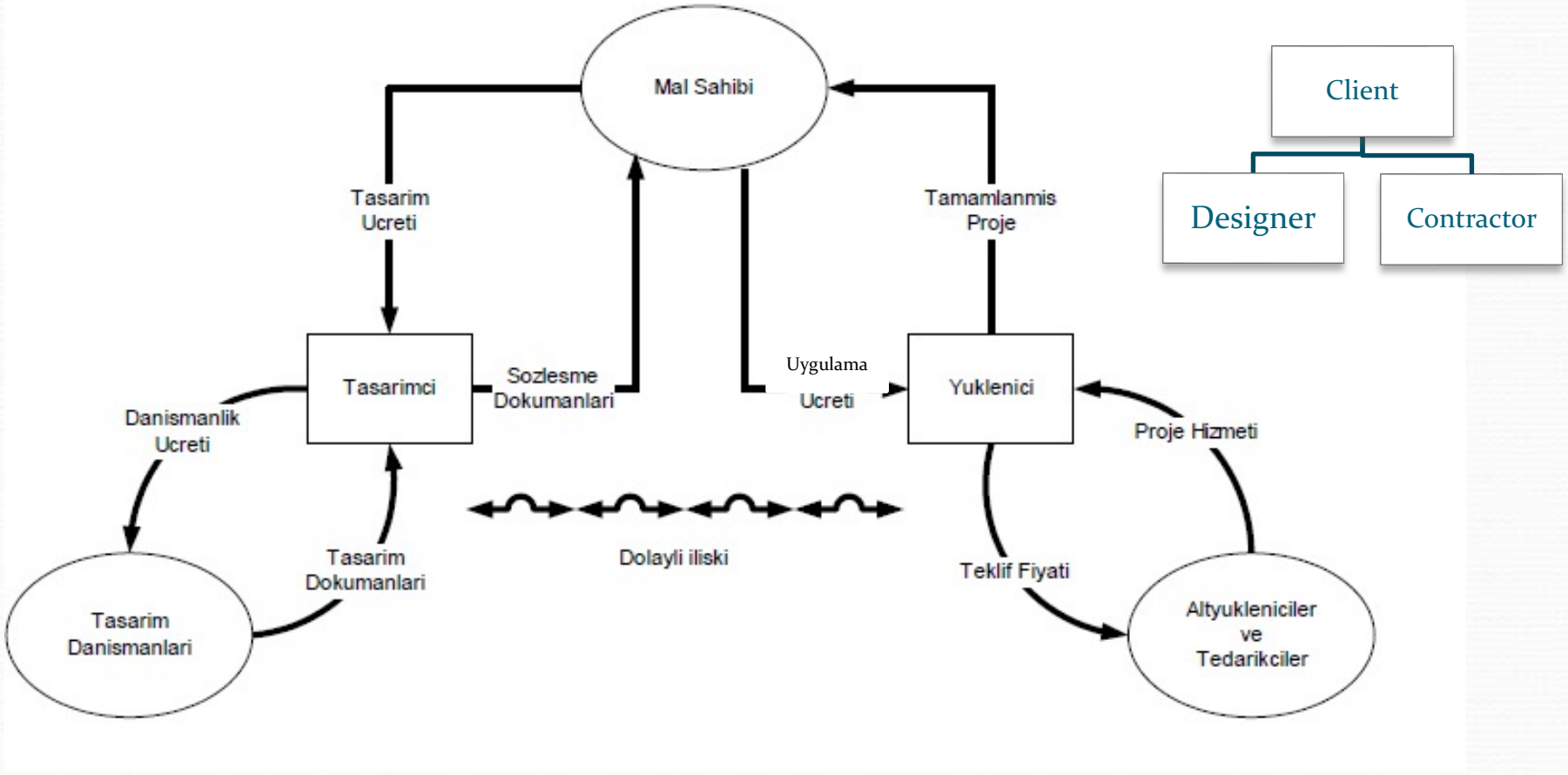
5. According to Project Delivery Systems

❖ Multi-Contractor based Contracts

- multi-contractor-based contracts may be used if sub-work groups (rough jobs, finishing works, electricity, machinery) are requested by the owner. The duty falls on the owner or project manager in order to ensure all necessary coordination in such contracts..
- The difference from single contractor-based contracts is that the owner's coordination task is more important.

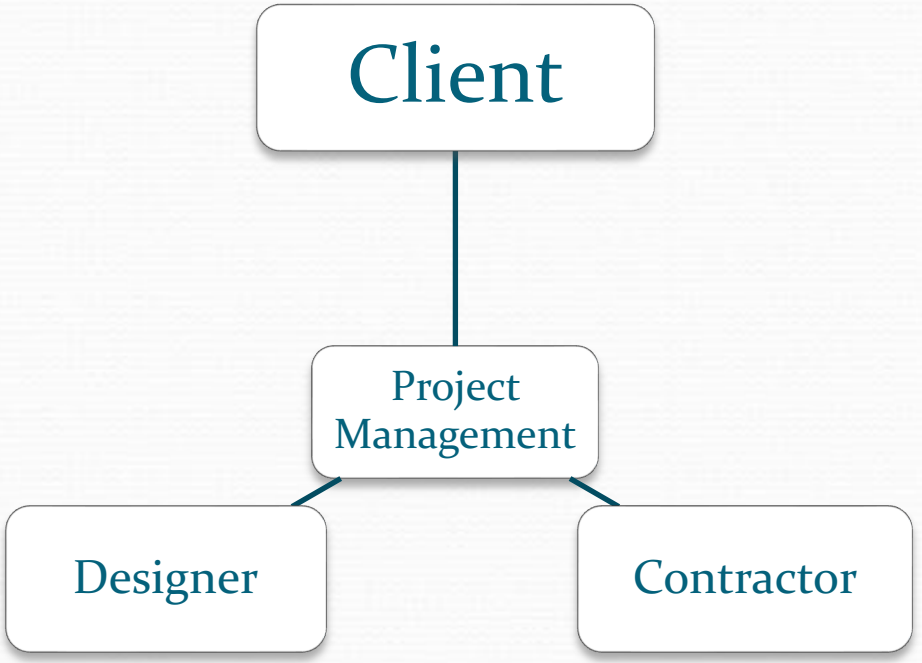
5. According to Project Delivery Systems

Geleneksel Sistem (Design-Bid-Build)

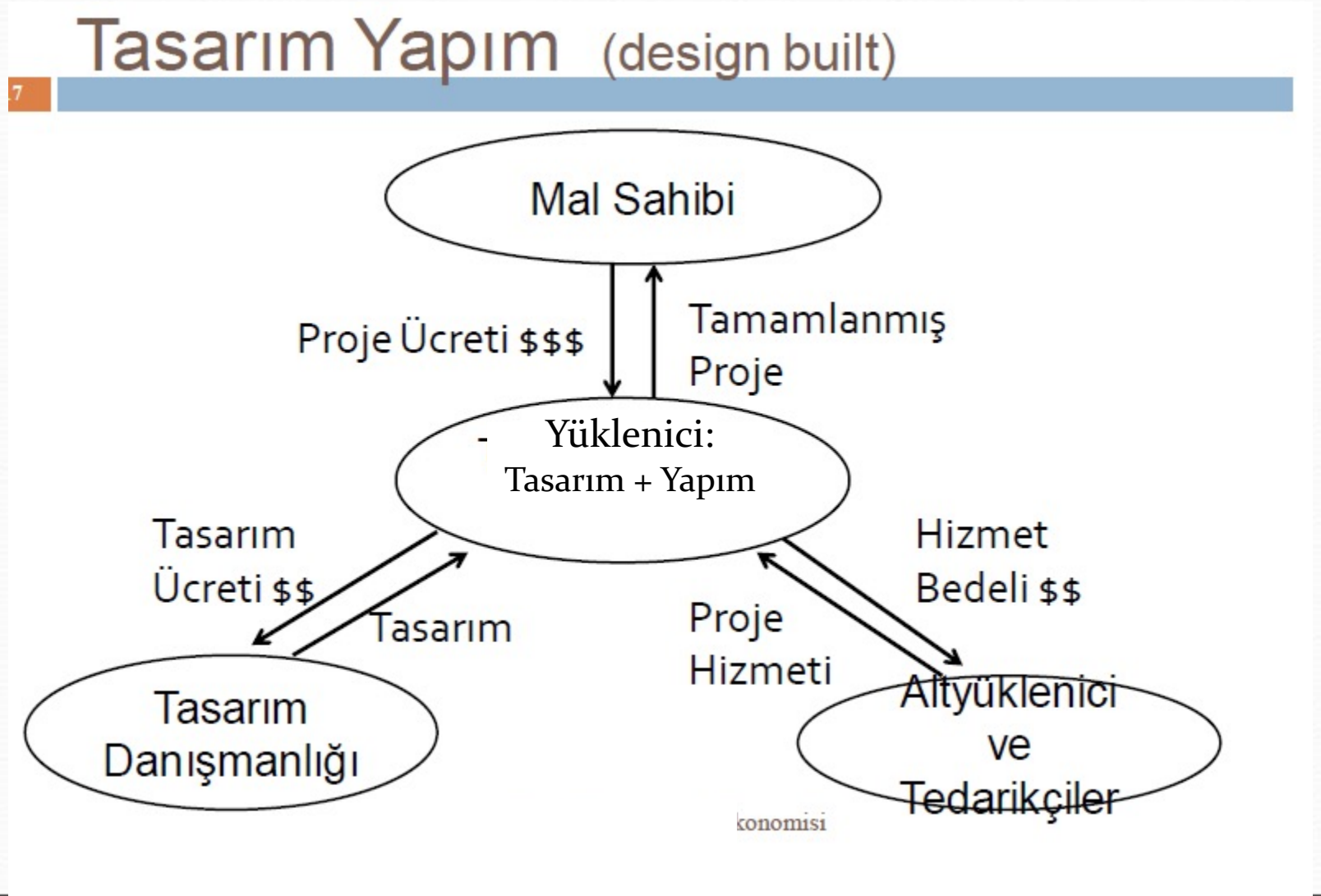


5. According to Project Delivery Systems

Yapım Yönetimi (construction management)



5. According to Project Delivery Systems



6. According to Payment Methods

- Unit price

Unit prices are determined by combining material and labour costs, expenses and profit of contractor.

Unit prices are determined by the amount of contractor proposal and estimated project production.

In this type of contract, the contractor is paid according to the amount of work done in the implementation phase of the work.

6. According to Payment Methods

- Lump sum – Fixed fee

Used in the main work items of a project.

According to the contract and project requests specified in the contract documents, the contractor will provide the owner with a single price in return for the work done.

In this type of public procurement contracts implemented in Turkey it is preferable, and are fixed by law.

6. According to Payment Methods

- Turnkey

Used for an entire project.

In this tender method, the client and the contractor agree on the total price of the building to be built.

The Contractor undertakes to complete the work, project, specification and contract without additional request.

The contract stipulates that the total cost for construction will be paid at what stages of construction and in what amounts.

6. According to Payment Methods

- Cost Receiver Contracts
- In case the cost of the work is not certain, the contractor and the investor shall make an agreement with a payment formula, which shall be calculated on the basis of the costs to be incurred, without specifying any fixed price before the contract. The contractor shall be awarded a certain percentage of the costs specified in the contracts.

Fixed Fee Contract	Cost Receiver Contract
• Contractor takes all risks related to cost • In all case, Contractor has to complete the job as it is specified. • No need for intense control.	• Investor takes all risks related to cost. • Contractor just need to show the best performance. • Intense control is necessary.

Contract Management Processes

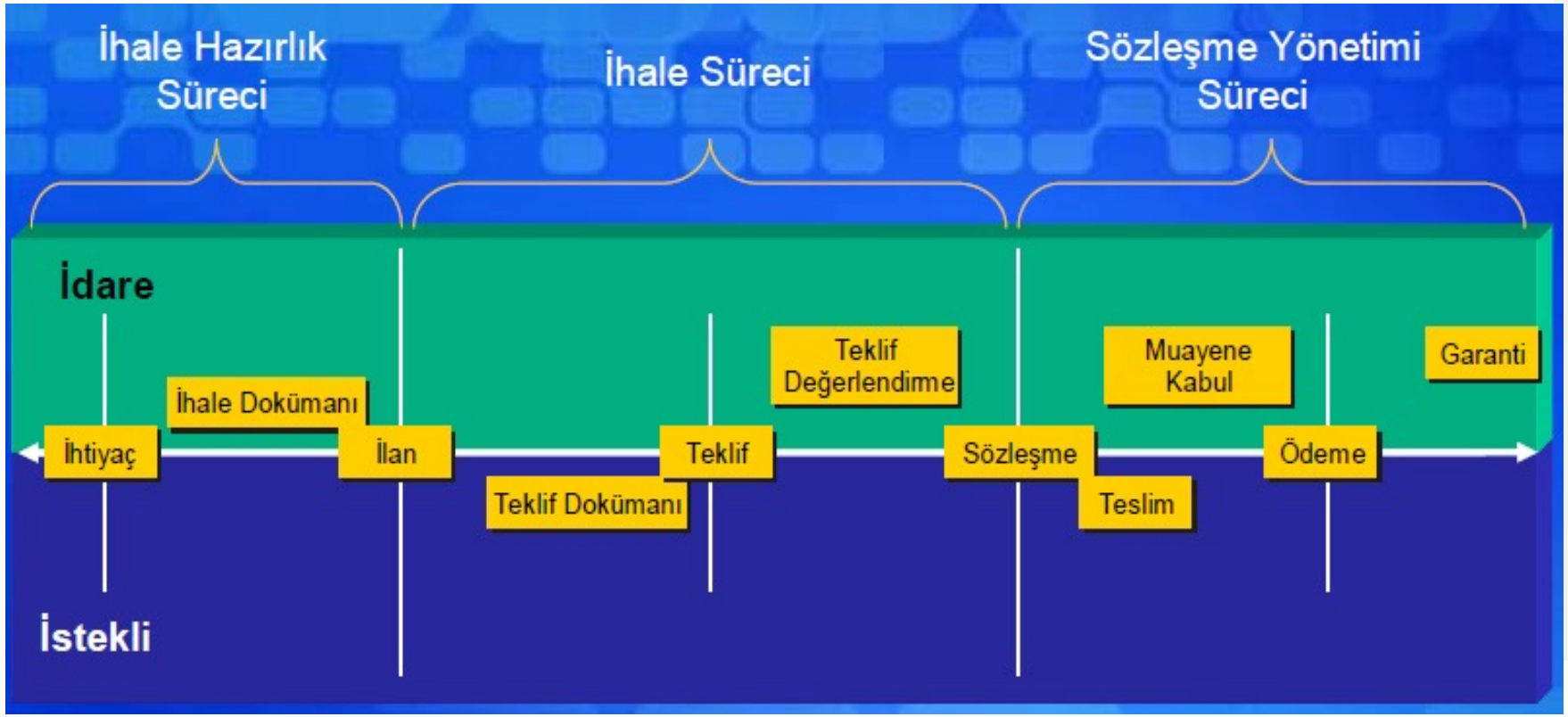
Contract management processes can be categorized into 4 group.

- ✓ Tender Process
- ✓ Contract Writing Process
- ✓ Signing and Distribution Process
- ✓ Implementation of Contract

1-Tender Process

Public Procurement Law No. 4734

It covers the procedures and conditions written in the Law and procurement of goods or services and the works completed after signing of the contract following the approval of the contracting authority, indicating that the works are left on one of the tenderers..



Tendering Procedures

Major Tendering Procedures

1. *Open Tendering*
2. *Selective Tendering*
3. *Negotiated Tendering*
4. ~~*Direct Tendering Procedure*~~

>>> direct supply

Open Tendering

Advantages

The open procedure allows all contractors interested in the tender to participate in the tender.

Open tender procedure provides competition.

The open tender procedure prevents the contractors from forming a union and negotiating the level of prices.

Disadvantages

Only a contractor can be successful when a large number of contractors bid on the tender. Therefore, the construction company may be unlikely to win the tender.

If the contractor who gives the lowest bid in public affairs is not employed, public trust can be disrupted. However, sometimes the tender is not given to the lowest bidder because the contractor is not good.

It may be difficult not to accept the price that the business owner thinks is best / effective. It is common for the contractor to give a very low price. This may result in longer periods of work and higher costs for the business owner.

Selective Tendering

- After the prequalification process, successful firms are invited for tendering.
- This procedure is used when project requires;
  - Expertise,
  - Advanced Technology

Selective Tendering

Advantages

The tenderer of the lowest bid can also be accepted because the competent contractors are invited to the tender.

It ensures competing contractors to set sufficient margins so that the industry achieves a certain level and stability.

Disadvantages

Caution should be exercised when deleting a company name from a particular list or not.

Tender proposal prices may be higher than those in open tendering procedures. However, it should be considered that this increase may be due to the refinement of better management, which ensures the end dates of the work and better quality.

If the composition of the company list is not changed for each contract, the company pollution may happen.

Selective Tendering

KİK md.20:

- Pre-qualification announcement:
  - Candidates must be given a pre-qualification announcement for at least 25 days to prepare their application.
    - Prequalification assessment:
  - Those who can not meet the stated minimum qualification requirements are not considered sufficient
    - The reasons for inadenquacy are notified in writing
  - All candidates who are found to be qualified are given at least 45 days to prepare their bids.
    - Invitation letter is sent to tenderers.
- Cancellation Of The Tenderer In The Tender Procedure Between Certain Bidders
  - The number of candidates that can be invited to tender is less than 5 or
  - The tender is cancelled if the number of tenderers is less than 3

Negotiated Tendering

The cases when Negotiated Tendering is used

- When there is no results obtained although open tendering or selective tendering,
- It is imperative that the tender be made urgently upon the emergence of unforeseen events such as natural disasters, epidemics, the danger of loss of life or property and unexpected or unexpected events by the administration.,
- Upon the emergence of special cases related to defense and security, it is compulsory to make the tender urgently.,
- The tender is not subject to mass production, which needs research and development process,
- Due to the specific nature and complexity of the procurement of goods or services, the technical and financial characteristics of the tender are not determined.

Negotiated Tendering

Procedure of Negotiation Tendering

- Firstly, the tenderers propose their offers which include technical details and methods of construction. Their offers don't contain information regarding price.
- The tender commission discusses with each tenderer on the methods and solutions that best meet the needs of the administration.
- Upon the clarification of the conditions as a result of the technical interviews, the tenderers who can meet these conditions are asked to give their final offers, including the quotations based on the technical specifications, which are reviewed and revised.

Negotiated Tendering

Advantages

The contractor can advise the architect in the process of design development.

The contractor can start material ordering and programming at an early stage and production can be relieved.

Disadvantages

The cost of the job is likely to be higher than the tender procedure.

Direct Supply Procedure

- This is not tendering at all.
- It is the method used by public institutions to provide their needs without a procurement notice and without a guarantee.

Advantages

– quick.

– May be cheaper.

Disadvantages

– No utilization of competition.

Design Competitions

- When the administrations thinks that it is necessary, the may organize competitions. This competition can be award-winning or non-award winning. The designs evaluated by jury and scope of this competitions is listed below.
  - architecture,
  - landscape architecture,
  - engineering,
  - urban design projects,
  - city and region planning and
  - a plan of fine works

Design Competitions

Advantages

- The plan or design project chosen as a result of the competition may be more aesthetic than the ones not selected by the competition.
- The design can fully meet the expectations of the business owner.
- The business owner can learn more about the design and make the controls of the job more healthy.
- The business owner has the opportunity to choose the most suitable one among the different projects.
- Since the firm will issue a price on the selected project, it is easier to compare the prices with the business owner.
- Since the company enters the tender, the design costs are low because there is no design cost.

Disadvantages

- Because it is a two-stage tender , it is costly and it takes time to complete both phases.
- The overall costs of the design company that lost the competition increase and the cost increases.

Open Tender Procedure	Selective Tendering Procedure	Negotiated Tender
Document of Tender	Prequalification and Tender Documents	Document of Tender
Approval of tender	Approval of tender	Approval of tender
Setting Tender Commission	Setting Tender Commission	Setting Tender Commission
Notice of Tender	Pre-qualification	Notice of Tender
Viewing / Buying / Modifying the Tender Document	Viewing / Purchasing / Change and Explanation of Prequalification and Tender Documents	Viewing / Buying / Modifying the Tender Document
Proposal of Bids	Prequalification Assessment, Invitations for Bidding and Submission of Bids	Submission of Final Proposals including the Application for Proficiency, Assessment, Technical Interview and Price
Evaluation of Bids and Decision of Bidding	Evaluation of Bids and Decision of Bidding	Evaluation of Final Bids and Decision of Bidding
Notification of Contract Results and Contract	Notification of Contract Results and Contract	Notification of Contract Results and Contract

2- Contract Writing Process

1- Preparation of draft text by client(employer) / contractor

2- Sharing the draft text with the parties

3- Contract Negotiations

2-Contract Writing Process

- **Preparation of draft text by client (employer) / contractor**
  - **Ambiguous expressions, vagueness (!)**
  - **Contra Proferentem:**
  - **Ambiguous expressions are against the interest of the author of that expressions.**
- **Sharing the draft text with the parties**
  - Sharing for the organization.
  - Sharing contract with another side
- **Negotiations on the draft contract text**

What do Construction Contracts include?

- Agreement (Contract Text): Describes the names of the contractor and the employer, the time given to complete the structure, the form of payment to be used and the structure to be made.
- General Conditions of Contract: It covers the relationship between the employer and the contractor or the responsibilities of the employer's representative and the contractual provisions.
- Special and Additional Requirements: It covers the requirements of a project with its own characteristics.
- Technical Specifications: Determine the quality requirements for construction materials, equipment and workmanship.
- Drawings / Projects: Shows the quantitative requirements for the project and how the various parts can be combined to complete the project.

Basic Topics in Contracts

- Contracting Parties
- Definitions
- Subject of the Contract
- Type and cost of contract
- Payment methods and payment periods
- Time of the Work
- Rights and responsibilities of the parties
- Warranty period
- Provisional Acceptance/ Final Acceptance/Approval Process
- Criminal conditions and responsibilities
- Force majeure
- Resolutive Clause
- Guarantees
- Insurance
- Confidentiality / confidentiality obligation
- Terms of change
- Dispute matter

Important points, when preparing contract

- The contract should be clear and should not include ambiguous expressions.
- Discrepancies between the contract documents should be avoided and the priority of the documents to determine the relationship between these documents should be added to the contracts.
- Repetition in the contract should be avoided. A subject specified in one place should not be repeated elsewhere.
- The cost and duration of the work, the purpose of the contract (scope of work), delays, sanctions, force majeure, risk distributions between the parties, etc. should be clearly stated.
- The date and conditions for starting work must be clearly stated.
- The dispute resolution clause should be added to the agreements regarding the claims and disputes that may occur between the parties.
- The contract must be signed by those authorized to sign the contract.

3- Process of Signing and Distribution of Contract

1-Signing of Contract

2-Delivery of Guarantees

3- Sharing of Copy of Contracts with Related Departments

4- Implementation of Contract

- Mobilization & Demobilization
- Business Process Control (Milestone & responsibility matrix)
- Tracking Quality Applications
- Follow-up of Occupational Health and Safety Practices
- Acceptance-Provisional Acceptance-Final Acceptance
- Progress Payments and Payments
- Notice & Claim
- Warranty Processes (Repair, Maintenance, Replacement)
- Dispute Resolution
- Management of changes / revisions
- Performance Reviews
- Return of Guarantees
- Netting
- Termination of the Contract