Project Procurement Management
Project Procurement Management

- Project need materials, equipment, consultants, training, and many other goods and services.
- Project procurement management is the process of purchasing the products necessary for meeting the needs of the project scope.
- It involves planning, acquiring the products or services from sources, choosing a source, administering the contract, and closing out the contract.
- It can be applied to internal work orders, formal agreements, and contracts between organizational units within a single entity.
Project Procurement Management

- When buying anything from a vendor, the buyer needs a contract, which becomes a key input to many of the processes within the project.

- The contract, more than anything else, specifies the rules and agreements for the project.

- The project manager should interact with a legal, contracting or procurement department to deal with contracts.

- When the seller is completing its obligations to supply a product, PMI treats those obligations as a project itself.
Project Procurement Management

- All the process in the Procurement Management will be performed for each items to be acquired or purchased.
- Centralized/Decentralized Contracting
Project Manager's Role in Procurement

- The project manager must be involved in the creation of contracts and fulfills the following key roles:
  - Know the procurement process
  - Understand contract terms and conditions
  - Make sure the contract contains all the project management requirements such as attendance at meetings, reports, actions and communications deemed necessary
  - Identify risks and incorporate mitigation and allocation of risks into the contract
Project Manager's Role in Procurement

- Help tailor the contract to the unique needs of the project
- Fit the schedule for completion of the procurement process into the schedule for the project
- Be involved during contract negotiation to protect the relationship with the seller
- Project the integrity of the project and the ability to get the work done
- Uphold the entire contract, not just the contract statement of work
- Work with the contract manager to manage changes to the contract
The Sequential Procurement Processes

1. Plan Procurements
2. Conduct Procurements
3. Administer Procurement
4. Close Procurements
Project Procurement Management Processes

1. Plan Procurements: the process of documenting project purchasing decisions, specifying the approach, and identifying potential sellers

2. Conduct Procurements: the process of obtaining seller responses, selecting a seller, and awarding a contract

3. Administer Procurements: the process of managing procurement relationships, monitoring contract performance, and making changes and corrections as needed

4. Close Procurements: the process of completing each project procurement
12.1 Plan Procurements

- Is the process of documenting project purchasing decisions, specifying the approach, and identifying potential sellers.

- Procurement planning is the process of identifying which part of the project should be procured from resources outside of the organization. It is concerned with determining what to procure, when, and how.

- Generally, procurement decisions are made early on in the planning processes. Procurement planning centers on four elements:
  - Whether or not procurement is needed?
  - What to procure?
  - How much to procure?
  - When to procure?
12.1 Plan Procurements

- This process also includes consideration of potential sellers, particularly if the buyer wishes to exercise some degree of influence and control over acquisition decisions.

- The requirements of the project schedule can significantly influence the strategy during this process.

- This process includes consideration of the risks involved with each make or buy decision.

- It also includes reviewing the type of contract planned to be used with respect to mitigating risks, sometimes transferring risks to sellers.
# 12.1 Plan Procurements

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Tools &amp; Techniques</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scope Baseline</td>
<td>1. Make-or-buy analysis</td>
<td>1. Procurement management Plan</td>
</tr>
<tr>
<td>4. Risk register</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Risk related contractual agreements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Activity Resource requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Project schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Activity cost estimates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Cost Performance baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Environmental factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Organizational process assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Procurement Documents
2. Source selection criteria
3. Change request
12.1 Plan Procurements: Inputs

1. Scope Baseline: Describes the need, justification, requirements and current boundaries for the project. It contains: The scope statement (The project scope statement defines the project work, and only the required work, to complete the project, it also defines the limitations of the project), WBS, and the WBS Dictionary.

2. Requirements Documentation: may include:
   - Imp information about project requirements that is considered during planning for procurements.
   - Requirements with contractual and legal implications that may include health, safety, security, performance, environmental, insurance, intellectual property rights, licenses, permits, etc—all of which are considered when planning for procurements.

3. Teaming Agreements: are legal contractual agreements between two or more entities to form a partnership or joint venture, or some other arrangement as defined by the parties. The agreement defines the buyer/seller roles for each party. Whenever a teaming agreement is in place for a project, the roles of buyer and seller are predetermined.
12.1 Plan Procurements: Inputs

4. **Risk Register**: Includes risk related information such as the identified risks, risk owners and risk responses

5. **Risk related contract decisions**

6. **Activity Resource Requirements**: contains information on specific needs such as people, equipment or location

7. **Project Schedule**: contains information on required timelines or mandated deliverable dates

8. **Activity Cost Estimates**: developed by the procuring activity are used to evaluate the reasonableness of the bids or the proposals received from potential sellers

9. **Cost Performance Baseline**: provides details of the planned budget overtime

10. **Enterprise Environmental Factors**: include but are not limited to market place conditions, products, services, and results that are available in the marketplace, suppliers, including past performance and reputation, unique local requirements, typical terms and conditions for products, services or results or for the specific industry (Sole Sources, Single Source & Oligopoly)

11. **Organizational Process Assets**: How the procurement process work within the performing organization
12.1 Plan Procurements – Tools & Techniques

- **Make-or-buy analysis**: general management technique used to determine whether an organization should make or perform a particular product or service inside the organization or buy from someone else.

- Often involves financial analysis.

- Experts, both internal and external, can provide valuable inputs in procurement decisions.
12.1 Plan Procurements – Tools & Techniques

1. Make-or-Buy Analysis

<table>
<thead>
<tr>
<th>Reasons to Make</th>
<th>Reasons to Buy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less costly</td>
<td>Less costly</td>
</tr>
<tr>
<td>Use in-house skills</td>
<td>In-house skills aren’t available or don’t exist</td>
</tr>
<tr>
<td>Control of work</td>
<td>Small volume of work</td>
</tr>
<tr>
<td>Control of intellectual property</td>
<td>More efficient</td>
</tr>
<tr>
<td>Learn new skills</td>
<td>Transfer risks</td>
</tr>
<tr>
<td>Available staff</td>
<td>Available vendor</td>
</tr>
<tr>
<td>Focus on core project work</td>
<td>Allows project team to focus on other work items</td>
</tr>
</tbody>
</table>
Make or Buy Decision

- Sample Question:

  - You are trying to decide whether to lease or buy an item for your project. The daily lease cost is Dhs. 120. To purchase the item investment cost is Dhs. 1000 and the daily cost is Dhs. 20. How long will it take for the lease cost to be the same as the purchase cost?
Make or Buy Decision

Answer:

- Let D equal the number of days when the purchase and lease costs are equal.
- \[ QR \ 120 \ D = QR \ 1000 + QR \ 20 \ D \]
- \[ QR \ 120 \ D - QR \ 20 \ D = QR \ 1000 \]
- \[ QR \ 100 \ D = QR \ 1000 \]
- \[ D = QR \ 1000 / QR \ 100 \]
- \[ D = 10 \]

The least cost will be the same as the purchase cost after ten days.
Make-or-Buy Example

- Assume you can lease an item you need for a project for $800/day; to purchase the item, the cost is $12,000 plus a daily operational cost of $400/day.
- How long will it take for the purchase cost to be the same as the lease cost?
Make-or Buy Solution

- Set up an equation so both options, purchase and lease, are equal

- In this example, use the following equation; let $d$ be the number of days to use the item:

  $12,000 + 400d = 800d$

  Subtracting $400d$ from both sides, you get:

  $12,000 = 400d$

  Dividing both sides by $400$, you get:

  $d = 30$

- If you need the item for more than 30 days, it is more economical to purchase it
12.1 Plan Procurements – Tools & Techniques

2. Expert Judgment

- Expert judgment for procurement management planning can come from the following:
  - Units or individuals within the performing organization
  - Consultants and subject matter experts
  - Professional, trade, or technical associations
  - Industry groups
12.1 Plan Procurements – Tools & Techniques

3. Contract Types

- **Fixed Price Contract**
  - In this type of contract one price is agreed upon for all the work.
  - The buyer has the least cost risk, provided the buyer has a completely defined scope, because the risk of higher costs is borne by the seller.
  - The seller is most concerned with the contract statement of work in this type of contract.
12.1 Plan Procurements – Tools & Techniques

3. Contract Types

- **Firm Fixed Price Contracts (FFP):**
  - The most commonly used contract type because price of the goods is set at the onset and not subject to change unless the scope of work changes.
  - Any cost increase due to adverse performance is the responsibility of the seller.
  - Under this type of contract the buyer must precisely specify the product or services to be procured, and any changes to the procurement specification can increase the costs to the buyer.
Fixed Price Contract Variations

- Fixed Price Incentive Fee Contracts (FPIF)
  - There are also incentives for fixed price contracts.
  - Contract = Dhs. 1,100,000.
  - For every month early the project is finished, an additional Dhs. 10,000 is paid to the seller.
Fixed Price Contract Variations

- Fixed Price Economic Price Adjustment (FPEPA)
  - Sometimes a fixed price contract allows for price increases if the contract is for multiple years.
  - Example
    - Contract = Dhs. 1,100,00 but a price increase will be allowed in year two based on the Consumer Price Increase report for year one. Or the contract price is Dhs. 1,100,000 but a price increase will be allowed in year two to account for increases in specific material costs.
Purchase Order

- A purchase order is the simplest type of fixed price contract.
- This type of contract is normally unilateral (signed by one party) instead of bilateral.
- It is usually used for simple commodity procurements.
- Purchase orders are considered contracts when they are accepted either by performance (Material is shipped by the seller) or by signing a purchase order.

Example

- Contract to purchase 30 linear meters of wood at Dhs. 40 per meter.
Cost-reimbursable Contract

- The seller's cost are reimbursed, plus an additional amount.

- The buyer has the most cost risk because the total costs are unknown.

- This form of contract is often used when the buyer can only describe what is needed, rather than what to do.

- The seller will therefore write the detailed contract statement work.
Cost-reimbursable Contract - Variations

- **Cost plus Fixed Fee (CPFF)**

- This is the most common type of cost reimbursable contract.

- In this type, the buyer pays all costs, but the fee (or profit) is fixed at a specific amount.

- This helps to keep the seller's costs in line because a cost overrun will not generate any additional fee or profit. Fees only change with approved change orders.

  - **Example**

    - Contract = Cost + Fee of Dhs 100,000
Cost-reimbursable Contract - Variations

- Cost Plus Fee (CPF) or Cost Plus Percentage of Costs (CPPC)

- This type of cost reimbursable contract requires the buyer to pay for all costs plus a percent of costs as a fee. Sellers are not motivated to control costs because the seller will get paid profit on every cost without limit.

  - Example

  - Contract = Cost + 10% of costs as fee.
Cost-reimbursable Contract - Variations

- Cost Plus Incentive Fee (CPIF)

- This type of cost reimbursable contract pays all costs and an agreed upon fee, plus a bonus for beating the performance objectives stated in the contract.
Cost-reimbursable Contract - Variations

- Cost Plus Award Fee Contracts (CPAF):
  - The seller is reimbursed for all legitimate costs, but the majority of the fees is only earned based on the satisfaction of certain broad subjective performance criteria defined and incorporated into the contract.
  - The determination of the fee is solely on the subjective determination of seller performance by the buyer, and is generally not subject to appeals.
Time and Material (T&M) or Unit Price

- This type of contract is usually used for small amounts.
- The contract is priced on a per hour or per item basis and has elements of fixed price contract (in the fixed price per hour) and a cost reimbursable contract (in the material costs and the fact that the total cost is unknown).
- In this type of, the buyer has a medium amount of cost risks compared to CR and FP because the contract is usually for small amounts and for a shorter length of time.

Example

- Contract = Dhs. 100 per hour + expenses or materials at cost
- or Dhs 10 per linear meter of wood.
Fixed-price contracts transfer the risk to the seller

<table>
<thead>
<tr>
<th>Cost Plus Percentage of Costs</th>
<th>Highest Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Plus Fixed Fee</td>
<td>High Risk</td>
</tr>
<tr>
<td>Cost Plus Incentive Fee</td>
<td>Medium Risk</td>
</tr>
<tr>
<td>Fixed-Price</td>
<td>Low</td>
</tr>
<tr>
<td>Time and Materials</td>
<td>Low</td>
</tr>
</tbody>
</table>

T&M can be a high risk for buyer if contract does not include a “total not-to-exceed” clause, also called an NTE clause.
<table>
<thead>
<tr>
<th>Contract Type</th>
<th>Acronym</th>
<th>Attribute</th>
<th>Risk Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Plus Fixed Fee</td>
<td>CPFF</td>
<td>Actual costs plus profit margin for seller</td>
<td>Cost overruns represent risk to the buyer</td>
</tr>
<tr>
<td>Cost Plus Percentage of Cost</td>
<td>CPPC</td>
<td>Actual costs plus profit margin for seller</td>
<td>Cost overruns represent risk to the buyer. This is the most dangerous contract type for the buyer</td>
</tr>
<tr>
<td>Cost Plus Incentive Fee</td>
<td>CIPF</td>
<td>Actual costs plus profit margin for seller</td>
<td>Cost overruns represent risk to the buyer</td>
</tr>
<tr>
<td>Fixed-Price</td>
<td>FP</td>
<td>Agreed price for contracted product; can include incentives for the seller</td>
<td>Seller assumes risk</td>
</tr>
<tr>
<td>Lump-Sum</td>
<td></td>
<td>Agreed price for contracted product; can include incentives for the seller</td>
<td>Seller assumes risk</td>
</tr>
<tr>
<td>Firm-Fixed-Price</td>
<td>HFP</td>
<td>Agreed price for contracted product</td>
<td>Seller assumes risk</td>
</tr>
<tr>
<td>Fixed Price Incentive Fee</td>
<td>FPIF</td>
<td>Agreed price for contracted product; can include incentives for the seller</td>
<td>Seller assumes risk</td>
</tr>
<tr>
<td>Time and Materials</td>
<td>T&amp;M</td>
<td>Price assigned for the time and materials provided by the seller</td>
<td>Contracts without “not-to-exceed” clauses can lead to cost overruns</td>
</tr>
<tr>
<td>Unit-Price</td>
<td></td>
<td>Price assigned for a measurable unit of product or time (for example, $150 for engineer’s time on the project)</td>
<td>Risk varies with the product. Time represents the biggest risk if the amount needed is not specified in the contract</td>
</tr>
</tbody>
</table>
12.1 Plan Procurements - Outputs

1. Procurement Management Plan

- How vendors will be selected, the type of contracts to be used
- The process of independent estimating (also known as should-cost estimates)
- The relationship between the project team and the procurement office within the performing organization (if one exists)
- The procurement forms, such as contracts, that the project team is required to use
- How multiple vendors will be managed to supply their contracted product
- The coordination between sellers and the project team and among project activities, project reporting, scheduling, business operations, and other project concerns
- Risk management issues etc
12.1 Plan Procurements - Outputs

2. Procurement Statements of Work

- A procurement statement of work (SOW) contains the details of the procurement item in clear, concise terms. It includes the following elements:
  - The project objectives
  - A description of the work of the project and any post-project operational support needed
  - Concise specifications of the product or services required
  - The project schedule, time period of services, and work location
# Statement of Work (SOW) Template

I. **Scope of Work:** Describe the work to be done to detail. Specify the hardware and software involved and the exact nature of the work.

II. **Location of Work:** Describe where the work must be performed. Specify the location of hardware and software and where the people must perform the work.

III. **Period of Performance:** Specify when the work is expected to start and end, working hours, number of hours that can be billed per week, where the work must be performed, and related schedule information.

IV. **Deliverables Schedule:** List specific deliverables, describe them in detail, and specify when they are due.

V. **Applicable Standards:** Specify any company or industry-specific standards that are relevant to performing the work.

VI. **Acceptance Criteria:** Describe how the buyer organization will determine if the work is acceptable.

VII. **Special Requirements:** Specify any special requirements such as hardware or software certifications, minimum degree or experience level of personnel, travel requirements, and so on.
12.1 Plan Procurements - Outputs

3. Make-or-Buy Decisions

- Change Requests: change requests to the project management plan, its subsidiary plans, or other components may result from this process.

- Procurement Documents: are used to solicit proposals from the prospective sellers.

  - Request for Proposals: used to solicit proposals from prospective sellers.
    - A proposal is a document prepared by a seller when there are different approaches for meeting buyer needs.
  
  - Requests for Quotes: used to solicit quotes or bids from prospective suppliers.
    - A bid, also called a tender or quote (short for quotation), is a document prepared by sellers providing pricing for standard items that have been clearly defined by the buyer.
4. Procurement Documents

- Procurement documents may include the following:

- Information for Sellers
  - Background information
  - Procedures for replying
  - Guidelines for preparation of the response
  - Form of response required
  - Evaluation Criteria
  - Pricing forms

- Contract Statement of work

- Proposed terms and conditions of the contract (legal and business)
Procurement Documents

- **Non-Disclosure Agreement**
  - This is an agreement between the buyer and any prospective sellers stating what information or documents they will hold confidential and control, and who in their organization will gain access to the confidential information.

- **Standard Contract**
  - Companies frequently have standard, preauthorized contracts for the purchase of goods or services. These types of standard contracts need no further legal review if used as they are.

- **Special Provisions (Special Conditions)**
  - The project manager should determine what needs to be added, changed or removed from the standard provisions, so that the resulting contract addresses the particular needs of the project.
Procurement Documents

- **Letter of Intent**
  - NOT a contract but a letter, without legal binding, that says the buyer intends to hire the seller.

- **Privity**
  - Contractual relationship.

- **Example**
  - Company A hires company B to do some work for them. Company B subcontracts to company C. The project manager for A is at the job site and tells company C to stop work. Generally, does company C have to listen?
## Procurement Documents

<table>
<thead>
<tr>
<th>Document</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bid</td>
<td>From seller to buyer. Price is the determining factor in the decision-making process</td>
</tr>
<tr>
<td>Quotation</td>
<td>From seller to buyer. Price is the determining factor in the decision-making process</td>
</tr>
<tr>
<td>Proposal</td>
<td>From seller to buyer. Other factors—such as skill sets, reputation, ideas for the project solution—may be used in the decision-making process</td>
</tr>
<tr>
<td>Invitation for bid (IFB)</td>
<td>From buyer to seller. Requests the seller to provide a price for the procured product or service</td>
</tr>
<tr>
<td>Request for quote (RFQ)</td>
<td>From buyer to seller. Requests the seller to provide a price for the procured product or service</td>
</tr>
<tr>
<td>Request for proposal (RFP)</td>
<td>From buyer to seller. Requests the seller to provide a proposal to complete the procured work or to provide the procured product</td>
</tr>
</tbody>
</table>
5. Source Selection Criteria:

- Source Selection criteria are included in the procurement document to give the seller an understanding of the buyer's needs and help them decide if they should bid or make a proposal on the work.

- During Select sellers, this criteria become the basis by which the bids or proposal are evaluated by the buyer.

- Selection criteria can be limited to purchase price if the procurement item is readily available from a number of acceptable sellers.
12.1 Plan Procurements - Outputs

- The following list includes some of the criteria you can consider using for evaluating proposals and bids:
  - Comprehension and understanding of the needs of the project as documented in the contract SOW
  - Technical ability of vendor and their proposed team and the technical approach
  - Experience on projects of similar size and scope, including references, past performance of sellers
  - Project management approach
  - Management approach
12.1 Plan Procurements - Outputs

- The following list includes some of the criteria you can consider using for evaluating proposals and bids:
  - Financial stability and capacity, production capacity and interest
  - Intellectual and proprietary rights
  - Overall or life cycle cost: will the selected seller produce the lowest total cost of ownership (purchase cost plus operating cost)
  - Risk
  - Warranty
  - Business Size and type, references
12.2 Conduct Procurements

- Is the process of obtaining seller responses, selecting a seller and awarding a contract.

- In this process the team will receive bids or proposals and will apply precisely defined selection criteria to select one or more sellers who are qualified to perform the work and acceptable as a seller.
## 12.2 Conduct Procurements

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Tools &amp; Techniques</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Procurement management plan</td>
<td>1. Bidder Conferences</td>
<td>1. Selected sellers</td>
</tr>
<tr>
<td>2. Procurement Documents</td>
<td>2. Proposal evaluation techniques</td>
<td>2. Procurement contract award</td>
</tr>
<tr>
<td>5. Seller proposals</td>
<td>5. Advertising</td>
<td>5. Project management plan</td>
</tr>
<tr>
<td>7. Make or buy decisions</td>
<td>7. Procurement Negotiations</td>
<td></td>
</tr>
<tr>
<td>8. Teaming agreements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Organizational Process Assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Project documents
- Make or buy decisions
- Teaming agreements
- Organizational Process Assets

- Selected sellers
- Procurement contract award
- Resource calendars
- Change requests
- Project management plan
- Project document updates
12.2 Conduct Procurements

- Procurement management plan
- Procurement Documents
- Source Selection Criteria
- Qualified seller list
- Seller proposals
- Project documents: risk register, risk related contract decisions
- Make or buy decisions
- Teaming agreements
- Organizational Process Assets: include, but are not limited to, listings of prospective and previously qualified sellers, information on the relevant past experience with the sellers, good and bad
12.2 Conduct Procurements – Tools & Techniques

- **Bidder Conferences**: Bidder conferences are meetings with prospective vendors or sellers that occur prior to the completion of their response proposal.

- **Proposal evaluation techniques**

- **Independent estimates / Should-Cost Estimate**: Comparing the cost to an estimate created in-house or with outside assistance.

- **Expert judgement**

- **Advertising**: Advertising is letting potential vendors know that an RFP is available.

- **Internet search**

- **Procurement Negotiations**: The project manager may be involved during negotiations to clarify project requirements, and if for no other reason than to protect the relationship to clarify project requirements, and if for no other reason than to protect the relationship with the other side.

  - Many projects go bad because of how negotiations were handled.
  
  - The objectives of negotiation are to:
    
    - Obtain a fair and reasonable price
    - Develop a good relationship with the seller
12.2 Conduct Procurements – Tools & Techniques

- Main Items to Negotiate
  - Responsibilities
  - Authority
  - Applicable Law
  - Technical and business management approaches
  - Contract financing
  - Schedule
  - Payment and price
12.2 Conduct Procurements – Outputs

1. Selected Sellers:

- A seller may simply be selected and asked to sign a standard contract
- A seller may be asked to make a presentation and then, if all goes well, go on to negotiations
- The list of sellers may be narrowed down to a few
- The short-listed sellers may be asked to make presentations and the selected seller then asked to go on to negotiations
- The buyer can negotiate with more than one seller
- Or some combination of presentations and negotiations
12.2 Conduct Procurements – Outputs

2. Procurement Contract Award:

- Contracts are known by many names: Agreement, Subcontract, Purchase order, Memorandum of understanding.
- Is awarded to each selected seller.
- A contract can be in the form of a simple purchase order or a complex document.
- A contract is a mutually binding legal agreement that obligates the seller to provide the specified products, services or results and obligates the buyer to compensate the seller.
- What do you need to have a legal contract?
  - An offer
  - Acceptance
  - Consideration - Something of value, not necessarily money
  - Legal capacity - Separate legal parties, competent parties
  - Legal purpose - You cannot have a contract for the sale of illegal goods
12.2 Conduct Procurements – Outputs

3. **Resource Calendars**: the quantity and the availability of contracted resources and those dates on which each specific resource can be active or idle are documented.

4. **Change Requests**

5. **Project Management Plan Updates**: components of the plan that may get updated include, but are not limited to:
   - Cost baseline
   - Scope baseline
   - Schedule baseline
   - Procurement Management Plan

6. **Project Document Updates**: docs that may get updated include, but are not limited to:
   - Requirements documentation
   - Requirements traceability documentation, and
   - Risk register
12.3 Administer Procurements

- This process consists of assuring that the performance of both parties to the contract meets contractual requirements.

- The Contract Administration process concerns monitoring the vendor’s performance and ensuring that all the requirements of the contract are met.

- Contracts are legal relationships, so it is important that legal and contracting professionals be involved in writing and administering contracts.
## 12.3 Administer Procurements

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Tools &amp; Techniques</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Contract management plan</td>
<td>3. Inspections and audits</td>
<td>3. Organizational process assets (updates)</td>
</tr>
<tr>
<td>4. Performance reports</td>
<td>5. Payment system</td>
<td>. Procurement management plan</td>
</tr>
<tr>
<td>5. Approved change requests</td>
<td>6. Claims administration</td>
<td>. Contract management plan</td>
</tr>
</tbody>
</table>
12.3 Administer Procurements : Inputs

- Contract
- Project Management Plan
  - Contract management plan
- Procurement Documents: contain complete supporting records for administration of the procurement processes. This includes procurement contract awards and the statement of work
- Performance reports: seller performance related documentation includes:
  - Seller developed technical documentation and other deliverable information provided in accordance with the terms of the contract
  - Seller performance reports that indicate which deliverables have been completed and which have not
12.3 Administer Procurements : Inputs

- Approved change requests: can include modifications to the terms & conditions of the contract.

- Work performance information: the extent to which the quality standards are being satisfied, what costs have been incurred, which seller invoices have been paid, etc.
12.3 Administer Procurements – Tools & Techniques

1. Contract change control system
2. Procurement performance reviews
3. Inspections and audits
4. Performance reporting
5. Payment system
6. Claims administration
7. Records management system
Contract change control system

- The contract change control system defines the procedures for how the contract may be changed.

- The system is part of integrated change control.

- It documents how to submit changes, establishes the approval process, and outlines authority levels.

- It includes a tracking system to number the change requests and record their status.
Suggestions for Change Control in Contracts

- Changes to any part of the project need to be reviewed, approved, and documented by the same people in the same way that the original part of the plan was approved.

- Evaluation of any change should include an impact analysis; how will the change affect the scope, time, cost, and quality of the goods or services being provided?

- Changes must be documented in writing; project team members should also document all important meetings and telephone phone calls.
Procurement performance reviews

- Buyer conducted performance reviews examine the seller’s performance on the contract to date.

- These reviews may be conducted at the end of the contract or at intervals during the contract period.

- Buyer reviews examine the contract terms and seller performance for elements such as these:
  - Meeting project scope
  - Meeting project quality
  - Staying within project budgets
  - Meeting the project schedule
As the vendor completes the contracted work, the seller will need to inspect the work for progress, compliance with contract requirements, and adherence to agreed-to time, cost, and quality constraints.
Performance reporting

- This tool and technique entails providing your managers and stakeholders with information about the vendor’s progress meeting the contract objectives.

- Performance reporting is part of communications and should be documented within the communications management plan.
Payment system

- Vendors submit seller invoices as an input to this process, and the payment system is the tool and technique used to issue payment.

- The organization may have a dedicated department, such as accounts payable, that handles vendor payments, or it might fall to the project manager.

- In either case, follow the policies and procedures the organization established regarding vendor payments.
Claims administration

- A claim is an assertion that the buyer did something that has hurt the seller and the seller asking for compensation.

- Another way of looking at claims is that they are a form of seller's change requests.

- Claims can get nasty. Imagine a seller that is not making as much profit as he hoped for, issuing claims for every action taken by the buyer.

- Claims administration involves documenting, monitoring, and managing changes to the contract.
Claims administration

- Changes that cannot be agreed upon are called contested changes.
- Contested changes usually involve a disagreement about the compensation to the vendor for implementing the change.
- You might believe the change is not significant enough to justify additional compensation, whereas the vendor believes they’ll lose money by implementing the change free of charge.
Claims Administration

- Contested changes are also known as disputes, claims, or appeals. These can be settled directly between the parties themselves, through the court system, or by a process called arbitration.

- Arbitration involves bringing all parties to the table with a third, disinterested party who is not a participant in the contract to try to reach an agreement.

- The purpose of arbitration is to reach an agreement without having to go to court.
Records Management System

- A contract is a formal, legal document. Recording keeping can be critical if actions taken or situations faced during a project are ever in question after the work is completed.

- This can happen related to unresolved claims or legal actions, or even in order to satisfy insurance needs.

- A record management system can be quite extensive, with one person assigned just to manage these records.

- They can also include indexing systems, archiving systems and information retrieval systems for projects with extensive documentation.
12.3 Administer Procurements - Outputs

1. Procurement documentation

2. Change Requests

3. Organizational process asset updates: correspondence, payment schedules and requests, seller performance evaluation documentation

4. Project management plan updates: docs that can get updated include: but are not limited to: procurement management plan, baseline schedule, etc
Procurement documentation

- This output includes (but isn’t limited to) all of the following:
  - Contract
  - Performance information
  - Warranties
  - Financial information (like invoices and payment records)
  - Inspection and audit results
  - Supporting schedules
  - Approved and unapproved changes
12.4 Close Procurements

- This process consists of finishing all the loose ends of the contract.

- This process is part of the close project process described in integration.

- Contract closure is done:
  - When a contract ends
  - When a contract is terminated before the work is completed
12.4 Close Procurements

- This process is concerned with completing and settling the terms of the contract.
- It supports the Close Project process because the Contract Closure process determines if the work described in the contract was completed accurately and satisfactorily.
- This is called product verification.
12.4 Close Procurements

- Close Project verifies and documents the project outcomes just like the Contract Closure process.

- Keep in mind that not all projects are performed under contract so not all projects require Contract Closure.

- However, all projects do require the Close Project process.

- Since verification and documentation of the project outcomes occur in both of these processes, projects that are performed under contract need to have project results verified only one time.
# 12.4 Close Procurements

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Tools &amp; Techniques</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement management plan</td>
<td>2. Records management system</td>
<td></td>
</tr>
<tr>
<td>2. Procurement Documentation</td>
<td>3. Negotiated Settlements</td>
<td>2. Organizational process assets (updates)</td>
</tr>
</tbody>
</table>

12.4 Close Procurements : Inputs

The Contract Closure process has two inputs:

- Project Management Plan – Procurement management plan
- Procurement Documentation
12.4 Close Procurements – Tools & Techniques

The Contract Closure process has three tools and techniques:

1. Procurement audits

2. Records management system.

3. Negotiated Settlements: In all procurement relationships the final equitable settlement of all outstanding issues, claims, and disputes by negotiations is a primary goal. Whenever settlement cannot be achieved by direct negotiation, some form of alternative dispute resolution (ADR) including mediation or arbitration may be explored. When all else fails, litigation in the courts is the least desirable option.
Procurement audits

- Procurement audits examine the procurement process to determine areas of improvement and to identify flawed processes or procedures.

- The primary purpose of the procurement audit is to identify lessons learned during the procurement process.

- This allows you to reuse the successful processes on other procurement items for this project, on future projects, or elsewhere in the organization.

- It also alerts you to problems in the process so that you don’t repeat them.
12.4 Close Procurements - Outputs

1. Closed Procurements:

- This is formal acceptance and closure of the contract.
- The buyer provides the seller with a formal written notice that the contract has been completed. Requirements for formal procurement closure are usually defined in the terms and conditions of the contract and are included in the procurement management plan.
- It’s your responsibility as project manager to document the formal acceptance of the contract.
- Many times the provisions for formalizing acceptance and closing the contract are spelled out in the contract itself.
12.4 Close Procurements - Outputs

1. Organizational process assets (updates): assets that may get updated, include but are not limited to:

- Procurement File: a complete set of indexed contract documentation, including the closed contract, is prepared for inclusion with the final project files.

- Deliverable acceptance: the buyer provides the seller with a formal written notice that the deliverables have been accepted or rejected.

- Lessons learned documentation