



بسم الله الرحمن الرحيم

(( وَقُلْ رَبِّ زِدْنِي عِلْمًا ))

(اللهم صل وسلم وبارك على سيد الخلق سيدنا محمد)

**PMP (Project Management Professional)**

**Presented by**

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# **Project Procurement Management**

## **Unit 12**

# Project Procurement Management

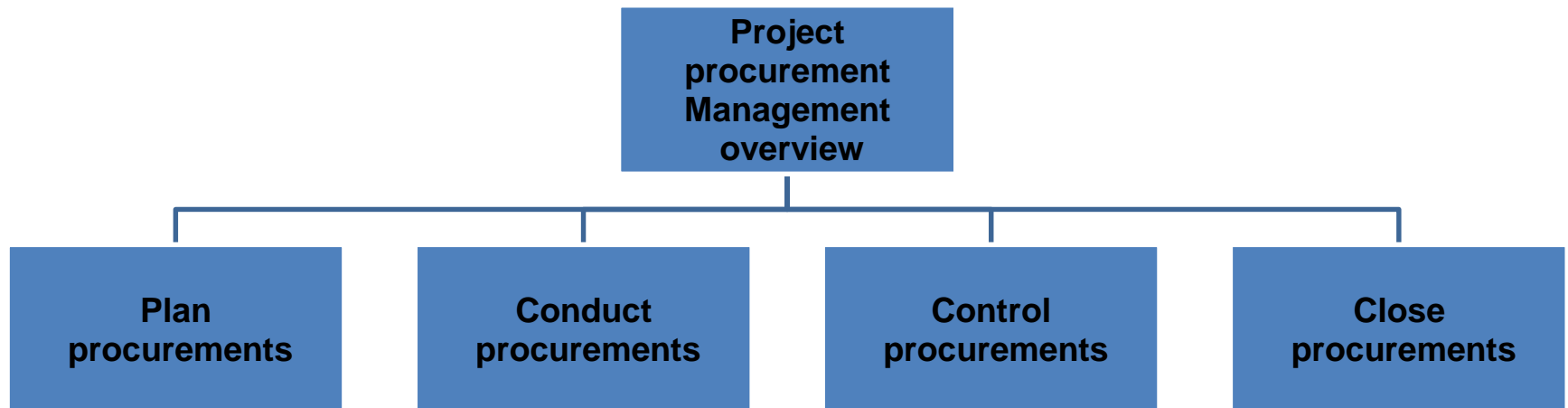
- The processes necessary to purchase or acquire products, services, or results needed from outside the project team.
- Includes the contract management and change control processes required to develop and administer contracts, or purchase orders issued by authorized project team members.
- Includes administering any contract issued by an outside organization **(the buyer)**, and administering contractual obligations placed on the project team by the contract.

# Project Procurement Management

- The seller can be called  
A contractor, subcontractor, vendor, service provider, or supplier.
- The buyer can be called  
A client, customer, prime contractor, contractor, acquiring organization, service requestor, or purchaser.
- The seller can be viewed during the contract life cycle first as  
A bidder, then as the selected source, and then as the contracted supplier or vendor.
- Terms and conditions of the contract become key inputs to many of the seller's management processes.

		Process Group				
Knowledge Area	Integration	Develop Project Charter	Develop Project Management Plan	Direct & Manage Project Execution	Monitor & Control Project Work  Perform Integrated Change Control	Close Project or Phase
	Scope		Plan Scope Management Collect Requirements Define Scope Create WBS		Validate Scope Control Scope	
	Time		Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resource Estimate Activity Duration Develop Schedule		Control Schedule	
	Cost		Plan Cost Management Estimate Costs Determine Budget		Control Costs	
	Quality		Plan Quality Management	Perform Quality Assurance	Control Quality	
	HR		Develop HR Plan	Acquire Project Team Develop Project Team Manage Project Team		
	Comm.		Plan Communication management	Manage Communications	Control Communication	
	Risk		Plan Risk Management Identify Risks Perform Qualitative Analysis Perform Quantitative Analysis Plan Risk Responses		Control Risks	
	Procurement		Plan Procurements	Conduct Procurements	Control Procurements	Close Procurements

# Project Procurement Management



# Project Procurement Management

## 12.1 Plan Procurement Management

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

## 12.2 Conduct Procurements

The process of obtaining seller responses, selecting a seller, and awarding a contract.

## 12.3 Control Procurements

The process of managing procurement relationships, monitoring contract performance, and making changes and corrections as needed.

## 12.4 Close Procurements

The process of completing each project procurement.

# 12.1 Plan Procurement Management

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

What to acquire, How to acquire it, How much is needed, and When to acquire

Includes consideration of potential sellers

Includes consideration of the risks involved with each make-or-buy decision.



# 12.1 Plan Procurement Management

- Project management plan(Input)
- Requirements Documentation (Input)
- Risk Register (Input)
- Activity Resource Requirements (Input)
- Project Schedule (Input)
- Activity Cost Estimates (Input)
- Stakeholder register (Input)
- Enterprise Environmental Factors (Input)
- Organizational Process Assets (Input)

# 12.1 Plan Procurement Management

## Contract Types

Contracts are a legally binding documents (formal agreement), should state all requirements.

Contract must be followed and everything provided in it must be done.

Any change must be written and formally controlled and approved by both parties.

Contracts are legal relationships subjects to remedy in the courts.

The project management team may seek support early from specialists in contracting, purchasing, law, and technical disciplines.

# 12.1 Plan Procurement Management

## Contract Types

### 1. Fixed Price Contracts

- Involves setting a fixed total price for a defined product or service to be provided.
- May incorporate financial incentives for achieving or exceeding project objectives.
- Sellers under fixed-price contracts are legally obligated to complete such contracts, with possible financial damages if they do not.
- Changes in scope can be accommodated, but generally at an increase in contract price.

# 12.1 Plan Procurement Management

## Contract Types (Input)

### 1. Fixed Price Contracts

- Firm fixed price contracts (FFP )
  - The most commonly used contract type is the FFP.
  - Any cost increase is the responsibility of the seller.

**Example: Fixed-Price Contract**

Contract = \$1,100,000.

# 12.1 Plan Procurement Management

## Contract Types (Input)

### 1. Fixed Price Contracts

- Fixed price incentive fee contracts (FPIF )
  - Gives the buyer and the seller some flexibility in that it allows for deviation from performance, with financial incentives tied to achieving agreed to metrics.
  - Under FPIF contracts, a price ceiling is set, and all costs above the price ceiling are the responsibility of the seller.

#### Example: Fixed Price Incentive Fee Contract

Contract = \$1,100,000. For every month early the project is finished, an additional \$10,000 is paid to the seller.

# 12.1 Plan Procurement Management

## Contract Types (Input)

### 1. Fixed Price Contracts

- Fixed Price with Economic Price Adjustment contracts (FB-EPA)
  - Used whenever the sellers performance period spans a considerable period of years, as is desired with many long-term relationships

#### Example: Fixed Price Economic Price Adjustment Contract

Contract = \$1,100,000, but a price increase will be allowed in year two based on the US Consumer Price Index report for year one.

*Or*

Contract = \$1,100,000, but a price increase will be allowed in year two to account for increases in specific material costs.

# 12.1 Plan Procurement Management

## Contract Types (Input)

### 2. Cost-reimbursable contracts

- Cost plus fixed fee contracts (CPFF)
  - The seller is reimbursed for all allowable costs for performing the contract work, and receive a fixed fee payment calculated as a percentage of the initial estimated project costs.
- Cost plus incentive fee contracts (CPIF)
  - The seller is reimbursed for all allowable costs for performing the contract work and receives a predetermined incentive fee based upon achieving certain performance objectives as set forth in the contract
- Cost plus award fee contracts (CPAF)
  - The seller is reimbursed for all legitimate costs, but the majority of the fee is only earned based on the satisfaction of certain broad subjective performance criteria defined and incorporated into the contract

# 12.1 Plan Procurement Management

## Make-or-buy analysis (Tools & Techniques)

A make-or-buy analysis is a general management technique used to determine whether particular work can be best accomplished by the project team or must be purchased from outside sources.

- Budget constraints may influence make-or-buy decisions.
- If a buy decision is to be made, then a further decision of whether to purchase or lease is also made.
- A make-or-buy analysis should consider all related costs; both direct costs as well as indirect support costs.



# 12.1 Plan Procurement Management

## Make-or-buy analysis (Tools & Techniques)

### *Example*

Purchase investment cost is \$2000, Daily cost is \$40 and Daily Lease cost \$240. How long will it take for the lease cost to be the same as the purchase cost?

- $2000 + 40 * X = 240 * X$
- $2000 = 240 * x - 40 * x$
- $2000 = (240 - 40)x$
- $X = 2000 / 200 = 10 \text{ days}$

# 12.1 Plan Procurement Management

Expert Judgment (Tools & Techniques)

Market Research (Tools & Techniques)

Meetings (Tools & Techniques)

# 12.1 Plan Procurement Management

## **Procurement Management Plan (Output)**

- Types of contracts to be used;
- Standardized procurement documents,
- Managing multiple suppliers;
- Any constraints and assumptions that could affect procurements;
- Handling the make-or-buy decisions
- Identifying prequalified sellers,

## **Procurement Statements of Work (Output)**

- The procurement SOW describes the procurement item in sufficient detail

## **Make-or-Buy Decisions (Output)**

# 12.1 Plan Procurement Management

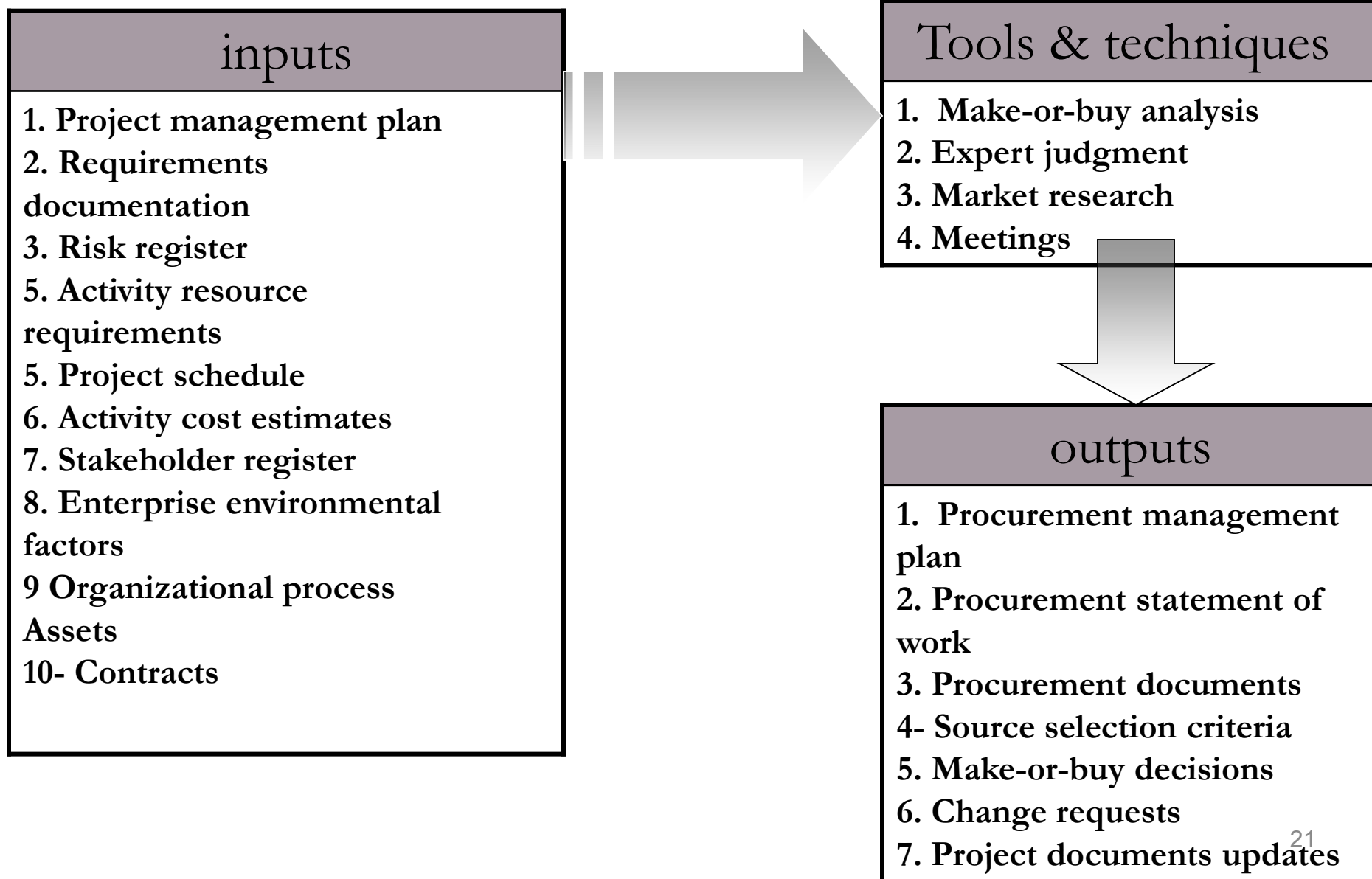
## **Procurement Documents (Output)**

## **Source Selection Criteria (Output)**

- Understanding of need.
- Overall or life-cycle cost.
- Technical capability.
- Financial capacity.
- Production capacity and interest.
- Past performance of sellers.

## **Change Requests (Output)**

# 12.1 Plan Procurement Management



## 12.2 Conduct Procurements

The process of obtaining seller responses, selecting a seller, and awarding a contract.

### **A weighting system can be used to:**

- Select a single seller that will be asked to sign a standard contract
- Establish a negotiating sequence by ranking all proposals by the weighed evaluation scores assigned to each proposal.

## 12.2 Conduct Procurements

- **Project Management Plan** (Input)
- **Procurement Documents** (Input)
- **Source Selection Criteria** (Input)
- **Seller Proposals** (Input)
- **Project Documents** (Input)
- **Make-or-Buy Decisions** (Input)
- **Procurement statement of work** (Input)
- **Organizational Process Assets** (Input)

# 12.2 Conduct Procurements

- **Bidder Conferences** (Tools & Techniques)
  - Bidder Conferences are meetings with prospective sellers prior to preparation of a proposal.
  - They are used to ensure that all prospective sellers have a clear, common understanding of the procurement.
  - Responses to questions may be incorporated into the procurement documents
- **Proposal Evaluation Techniques** (Tools & Techniques)
- **Independent Estimates** (Tools & Techniques)
  - Estimate of costs prepared by an outside professional estimator
- **Expert judgment** (Tools & Techniques)
- **Advertising** (Tools & Techniques)
- **Procurement negotiations** (Tools & Techniques)



# 12.2 Conduct Procurements

- **Selected Sellers** (Output)
- **Agreements** (Output)
  - The contract can be in the form of simple purchase order or a complex document
  - The major components in a contract document
    - Schedule baseline,
    - Pricing,
    - Payment terms,
    - Place of delivery,
    - Inspection and acceptance criteria,
    - Product support,
    - Penalties,
    - Incentives,
    - Change request handling

# 12.2 Conduct Procurements

- **Resource Calendars (Output)**
- **Change Requests (Output)**
- **Project Management Plan updates (Output)**
  - Cost baseline,
  - Scope baseline,
  - Schedule baseline, and
  - Procurement management plan.
- **Project Document updates (Output)**

# 12.2 Conduct Procurements

## inputs

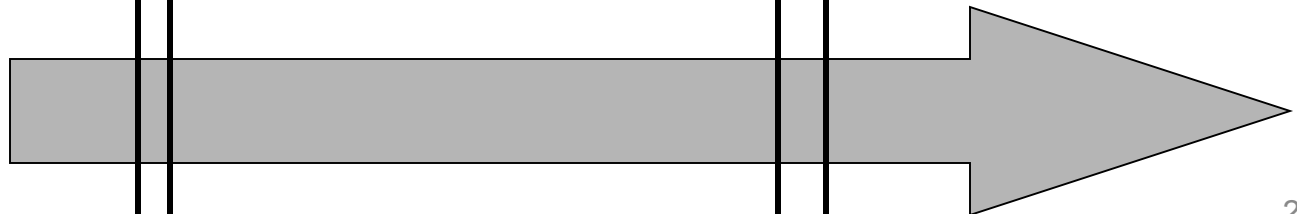
1. **Procurement management plan**
2. **Procurement documents**
3. **Source selection criteria**
4. **Seller proposals**
5. **Project documents**
6. **Make-or-buy decisions**
7. **Procurement statement of work**
8. **Organizational process assets**

## Tools & techniques

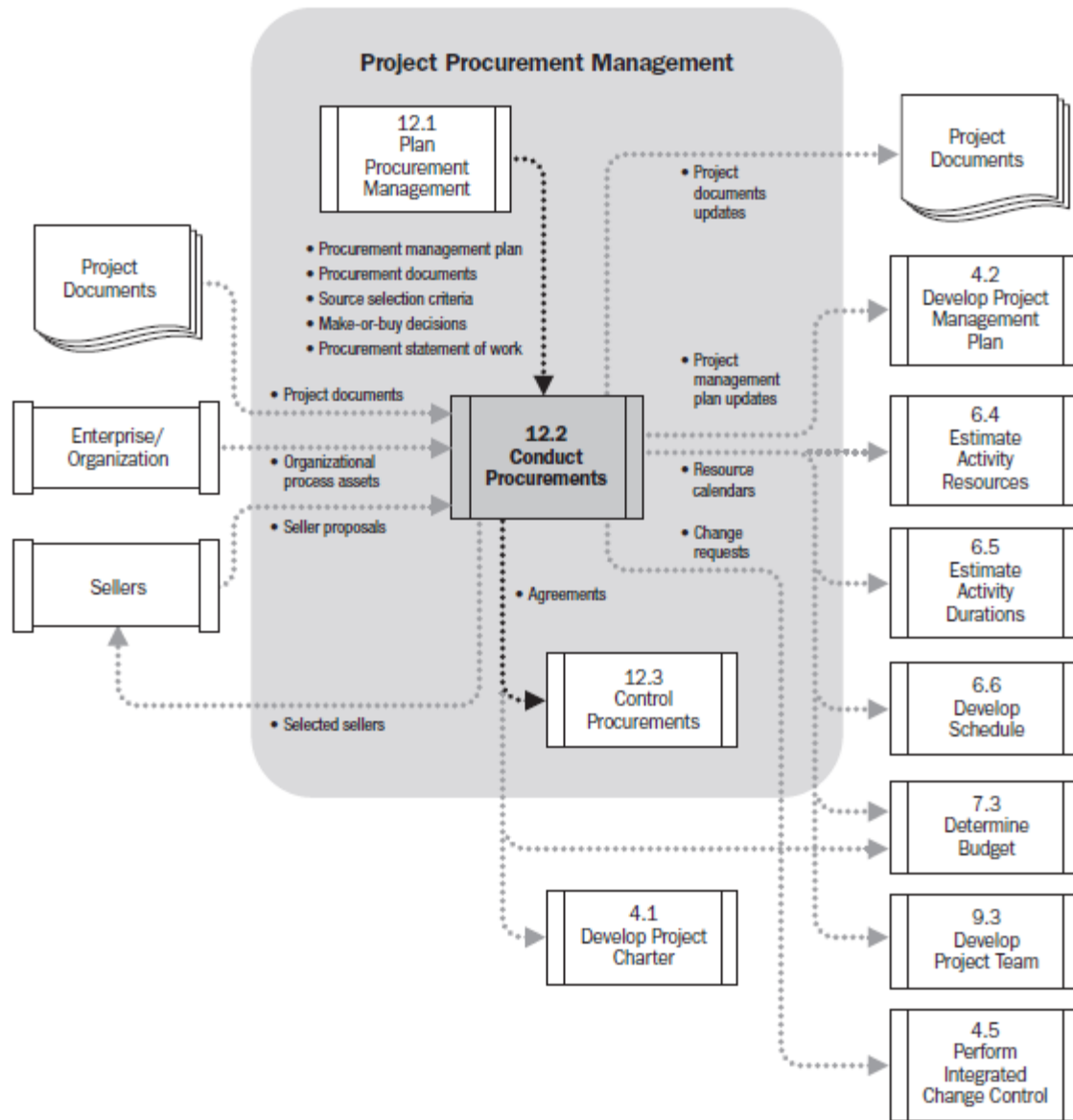
1. **Bidder conferences**
2. **Proposal evaluation techniques**
3. **Independent estimates**
4. **Expert judgment**
5. **Advertising**
6. **Analytical techniques**
7. **Procurement negotiations**

## outputs

1. **Selected sellers**
2. **Agreements**
3. **Resource calendars**
4. **Change requests**
5. **Project management plan updates**
6. **Project document updates**



# 12.2 Conduct Procurements



## **12.3 Control Procurement**

The process of managing procurement relationships, monitoring contract performance, and making changes and corrections as needed.

# **12.3 Control Procurement**

**Procurement Documents (Input)**

**Project Management Plan (Input)**

**Agreements (Input)**

**Performance Reports (Input)**

**Approved Change Requests (Input)**

**Work Performance data (Input)**

# 12.3 Control Procurement

## **Contract Change Control System (Tools & Techniques)**

- Defines the process by which the procurement can be modified.
- The contract change control system is integrated with the integrated change control system.

## **Procurement Performance Reviews (Tools & Techniques)**

## **Inspections and Audits (Tools & Techniques)**

## **Performance Reporting (Tools & Techniques)**

- Provides management with information about how effectively the seller

## **Payment Systems (Tools & Techniques)**

- All payments should be made and documented in strict accordance with the terms of the contract.

# 12.3 Control Procurement

## **Claims Administration (Tools & Techniques)**

- Changes where the buyer and seller cannot reach an agreement on compensation for the change

## **Records Management System (Tools & Techniques)**

- A records management system is used by the project manager to manage contract and procurement documentation and records.



# 12.3 Control Procurement

## inputs

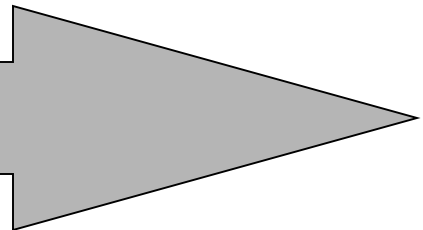
1. Procurement documents
2. Project management plan
3. contract
4. Performance reports
5. Project documents
6. Approved change requests
7. Work performance information

## Tools & techniques

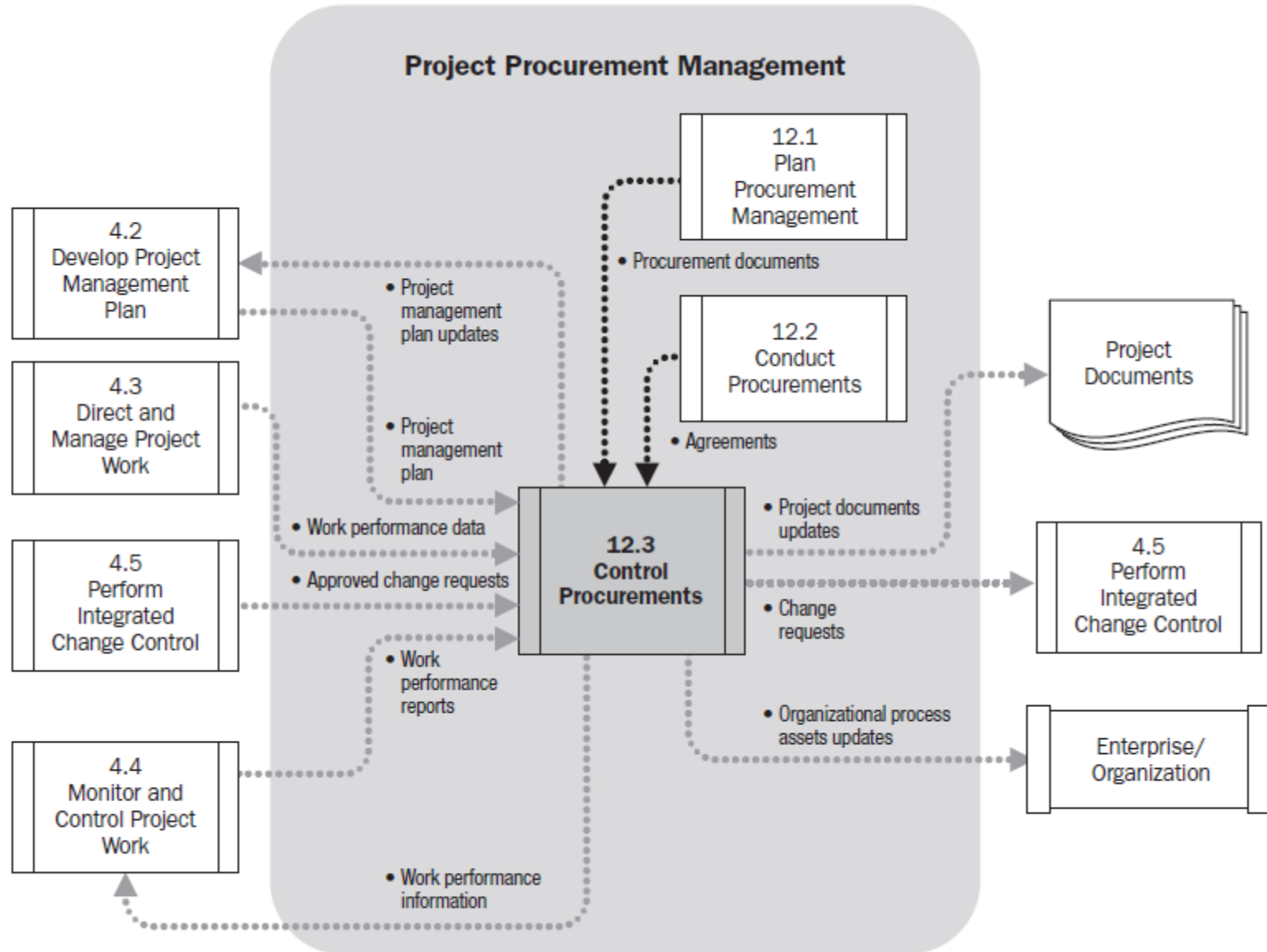
1. Contact change control system
2. Procurement performance reviews
3. Inspections and audits
4. Performance reporting
5. Payment systems
6. Claims administration
7. Records management system

## outputs

1. Procurement documentation
2. Organizational process assets updates
3. Change requests
4. Project management plan updates



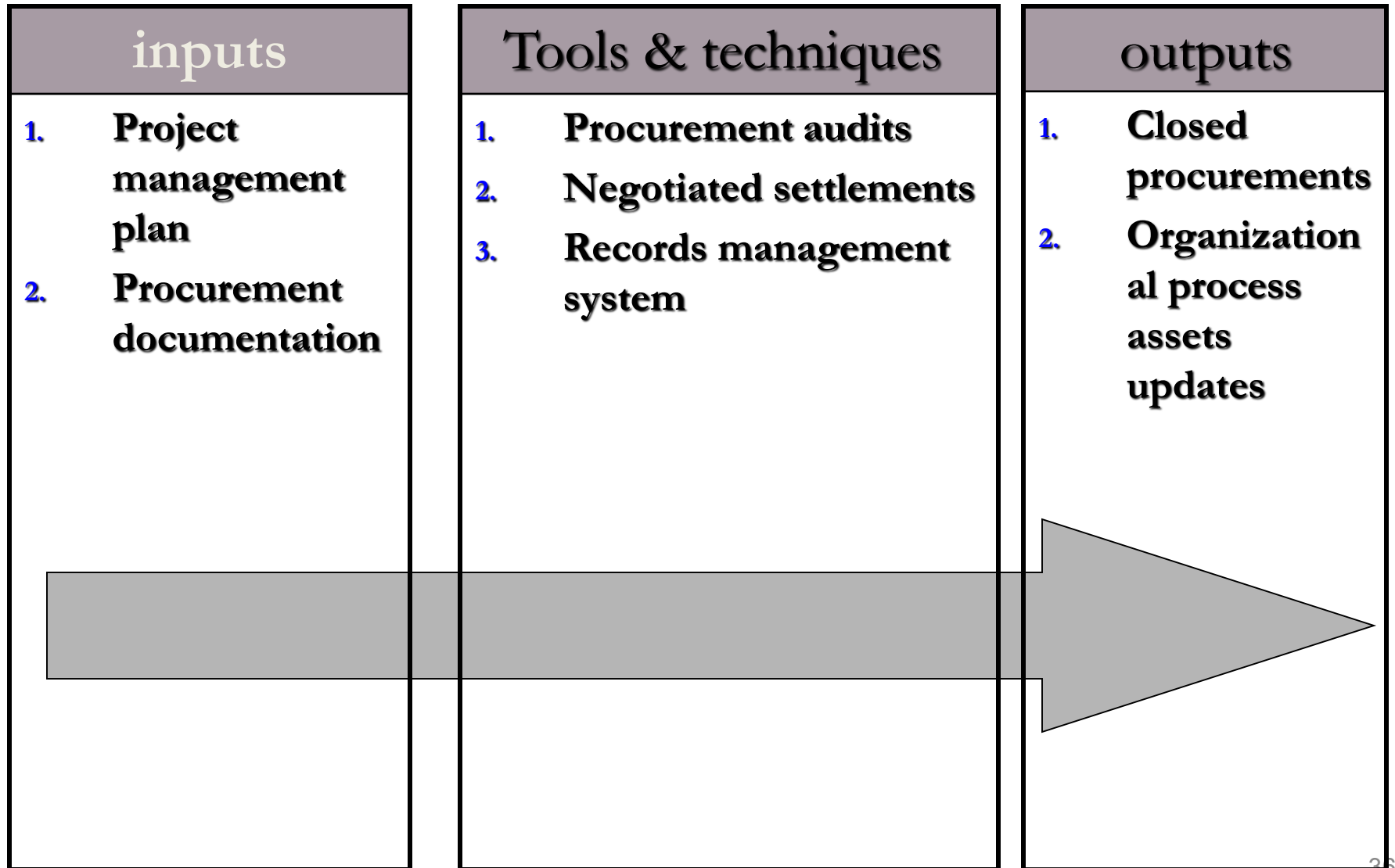
# 12.3 Control Procurement



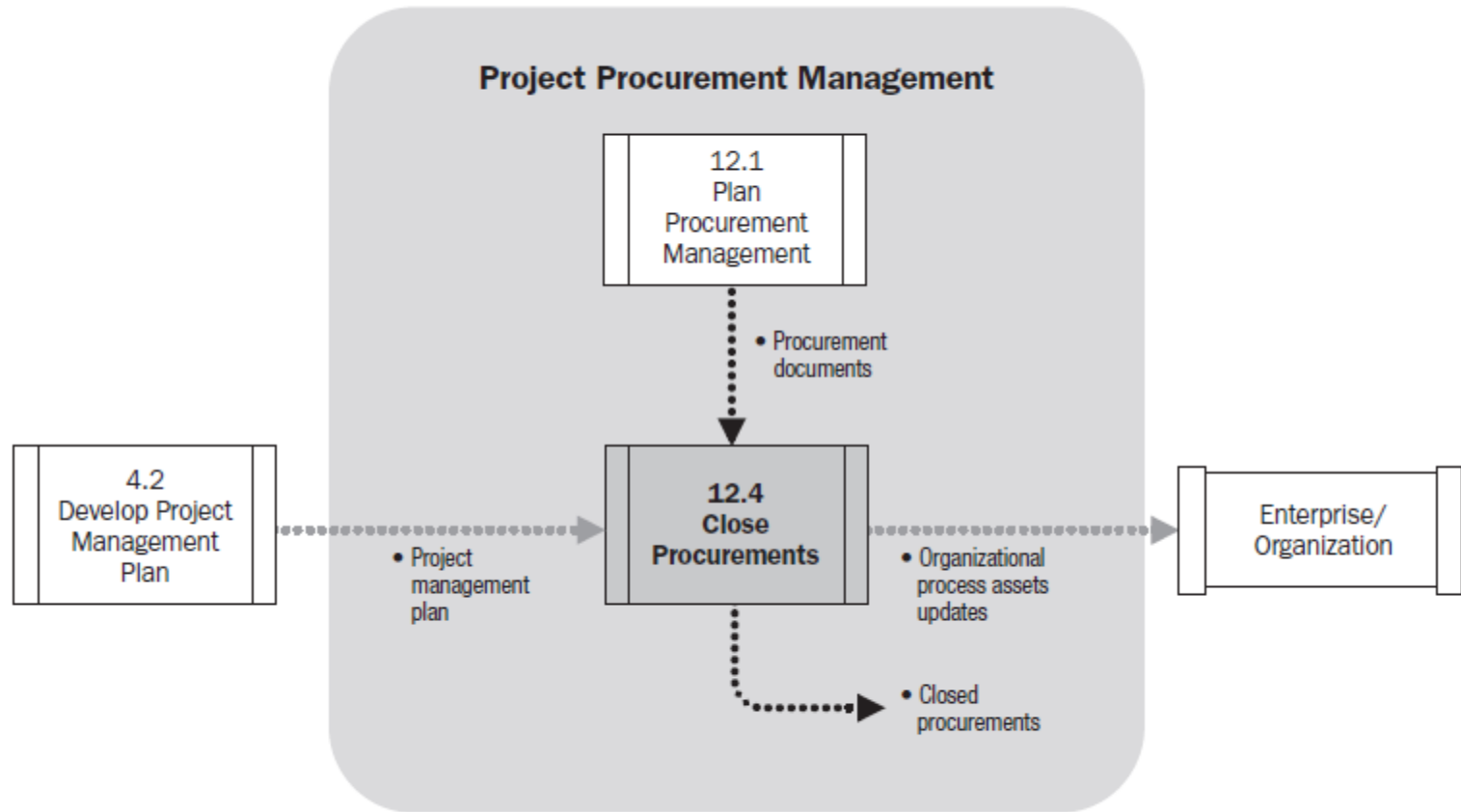
## 12.4 Close Procurements

The process of completing each project procurement and finalizing open claims, updating records to reflect final results and archiving such information for future use.

# Close procurements



# 12.4 Close Procurements



# Questions

1 ) What is the BEST way to describe how the contract's terms and conditions are created?

- A ) they are based on risk analysis.
- B ) They are created by the contracting officer assigned to the project.
- C ) They use only the company's existing standard terms and conditions.
- D ) They are based on the needs of the seller.

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2 ) You are managing procurement for a project and have arranged a bidder conference with the potential proposers. All of the following are appropriate for a bidder conference EXCEPT?

- A ) A walkthrough of the project scope.
- B ) An explanation of why particular terms and conditions are in the contract.
- C ) A request for bidders to offer their thoughts on problems with the scope of the work.
- D ) Working with the bidders to determine alternatives solutions for the project.

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3 ) Which type of contract is the seller MOST concerned about project scope ?

A ) Fixed price.

B ) Cost plus fixed fee.

C ) Time and material.

D ) purchase order.

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4 ) You receive 25 new computers from the seller, but were expecting only 20. In looking at the contract, you see that it says” seller to provide twenty (25) computers. What should you do FRIST?

A ) Issue a change order through the contract manager.

B ) Return the five extra computers.

C ) Make payment for the 25 computers.

D ) Call the seller and ask for clarification.

4 ) You receive 25 new computers from the seller, but were expecting only 20. In looking at the contract, you see that it says "seller to provide twenty (25) computers. What should you do FIRST?

A ) Issue a change order through the contract manager.

B ) Return the five extra computers.

C ) Make payment for the 25 computers.

D ) Call the seller and ask for clarification.

5 ) Company procedures require the creation of a lessons learned document. Which of the following is the BEST use of lessons learned?

- A ) Historical records for future projects.
- B ) Planning record for the current project.
- C ) Informing the team about what the project manager has done.
- D ) informing the team about the project management plan

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6 ) Which of the following BEST describes the project manager's role during the contracting process?

- A ) Project manager has only minor involvement.
- B ) Project manager should be the negotiator.
- C ) project manager should supply an understanding of the risks of the project.
- D ) project manager should tell the contract manager how the contracting process should be handled.

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7 ) You are trying to decide whether to lease or buy an item for your project. The daily lease cost is U.S. \$150. The investment cost to purchase the item is U.S. \$2000 and the daily cost is U.S. \$50. In how many days will the lease cost be the same as the purchase cost ?

A ) 10

B ) 15

C ) 20

D ) 25

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C ) 20

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Thank you