

PROJECT PROCUREMENT MANAGEMENT

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Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

**Knowledge
Areas**

Project Management Process Groups

**Initiating
Process
Group**

**Planning
Process
Group**

**Executing
Process
Group**

**Monitoring
and Controlling
Process Group**

**Closing
Process
Group**

**12. Project
Procurement
Management**

**12.1 Plan
Procurement
Management**

**12.2 Conduct
Procurements**

**12.3 Control
Procurements**

Project Procurement Management includes the processes necessary to purchase or acquire products, services, or results needed from **outside the project team**

Develop and administer

- ✓ Agreements such as contracts
- ✓ Purchase orders
- ✓ Memoranda of agreements (MOAs)
- ✓ Internal service level agreements (SLAs)

The definition the Contract

A contract is a mutually binding agreement that

- obligates the seller to provide the specified products, services, or results
- obligates the buyer to compensate the seller

and represents a legal relationship that is subject to remedy in the courts.

KEY CONCEPTS FOR PROJECT PROCUREMENT MANAGEMENT

- The project manager does not have to be a trained expert in procurement management laws and regulations but should be **familiar enough** with the procurement process to make **intelligent decisions** regarding contracts and contractual relationships
- Anything not in the contract **cannot be legally enforced**
- When working internationally, project managers should keep in mind the effect that **culture and local law** have upon contracts and their enforceability, **no matter how clearly a contract is written**

The seller

- ✓ Contractor
- ✓ Vendor
- ✓ Service provider
- ✓ Supplier

The buyer

- ✓ The owner of the final product
- ✓ The acquiring organization
- ✓ A service requestor
- ✓ The purchaser

Agreements

Simple

- Defined quantity of labor **hours** at a specified labor rate

Complex

- **Multiyear** international construction contracts

Decentralized purchasing

For **smaller organizations** or startup companies and those without a purchasing, contracting, or procurement department, the **project manager** may assume the purchasing authority role to negotiate and sign contracts directly

Centralized purchasing

For **more mature organizations**, the actual procurement and contracting functions will be carried out by a **separate department** with the specific role to purchase, negotiate, and sign contracts

TRENDS AND EMERGING PRACTICES IN PROCUREMENT MANAGEMENT

- **Advances in tools** In the construction field, the increasing use of the building information model (BIM) in software tools
 - ✓ can substantially **reduce** construction **claims**
 - ✓ reducing both **costs** and **schedule**
- **More advanced risk management**
- **Changing contracting processes**
- **Logistics and supply chain management**
- **Technology and stakeholder relations**
- **Trial engagements**

TAILORING CONSIDERATIONS

- **Complexity of procurement**
- **Physical location**
- **Governance and regulatory environment**
- **Availability of contractors**

PLAN PROCUREMENT MANAGEMENT

Description

- 1- Documenting project procurement decisions
- 2- Specifying the approach
- 3- Identifying potential sellers.

Key Benefit

It determines:-

- 1- **Whether** to **acquire** goods and services from outside the project
- 2- **What to acquire** as well as how and when to acquire it

12.1 PLAN PROCUREMENT MANAGEMENT

Inputs

- .1 Project charter
- .2 Business documents
 - Business case
 - Benefits management plan
- .3 Project management plan
 - Scope management plan
 - Quality management plan
 - Resource management plan
 - Scope baseline
- .4 Project documents
 - Milestone list
 - Project team assignments
 - Requirements documentation
 - Requirements traceability matrix
 - Resource requirements
 - Risk register
 - Stakeholder register
- .5 Enterprise environmental factors
- .6 Organizational process assets

Tools & Techniques

- .1 Expert judgment
- .2 Data gathering
 - Market research
- .3 Data analysis
 - Make-or-buy analysis
- .4 Source selection analysis
- .5 Meetings

Outputs

- .1 Procurement management plan
- .2 Procurement strategy
- .3 Bid documents
- .4 Procurement statement of work
- .5 Source selection criteria
- .6 Make-or-buy decisions
- .7 Independent cost estimates
- .8 Change requests
- .9 Project documents updates
 - Lessons learned register
 - Milestone list
 - Requirements documentation
 - Requirements traceability matrix
 - Risk register
 - Stakeholder register
- .10 Organizational process assets updates

Contract Types

1- Fixed-price contracts

➤ Firm Fixed Price (FFP) or Lump Sum

The most **commonly** used contract type is the FFP. It is favored by most buying organizations because the price for goods is set at the outset and not subject to change unless the scope of work changes

➤ Fixed Price Incentive Fee (FPIF)

Gives the buyer and seller some **flexibility** in that it allows for deviation from performance, with financial **incentives** tied to achieving agreed-upon metrics. Typically, such financial incentives are related to **cost, schedule, or technical performance** of the seller. Under FPIF contracts, a **price ceiling** is set, and all costs above the price ceiling are the responsibility of the seller

➤ Fixed Price with Economic Price Adjustment (FPEPA)

Whenever the seller's performance period spans a considerable **period of years**, if the payments are made in a **different currency**.

Examples:

FP: Contract = \$1M

FPIF: Contract = \$1M + for every month added \$1000

FPEA: Contract = \$1M + additional pricing based on Government Center Bank depreciation rate.

2-Cost-reimbursable contracts

Cost Plus Fixed Fee (CPFF)

The seller is reimbursed for all allowable costs for performing the contract work, and receives a **fixed fee payment** calculated as a percentage of the initial estimated project costs

Cost Plus Incentive Fee (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 (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**.

Examples:

CPFF = Cost plus \$100K as a fee

CPIF: look At exercises

CPAF: Contract = Cost Plus 5.000\$ for every
month production exceeds 100.000 unit the
maximum award 50.000

Exercise 1: Cost Plus incentive fee

Target cost	\$210.000
Target fee	\$25.000
Target price	\$235.000
Sharing Ratio	80/20
Actual cost	\$200.000
Final fee	
Final price	

Cost Saving = $210 - 200 = \$10\text{K}$

Seller share saving = $20\% * 10\text{K} = \$2\text{K}$

Final Fee = $25 + 2 = \$27\text{K}$

Final Price = $200 + 27 = \$227\text{ K}$

Exercise 2

Target cost	\$150.000
Target fee	\$20.000
Target price	\$170.000
Sharing Ratio	80/20
Actual cost	\$160.000
Final fee	
Final price	

Seller exceeded Cost

Excess cost = $150 - 160 = \$10\text{K}$

Seller share loss = $20\% * 10\text{K} = \$2\text{K}$

Final Fee = $20 - 2 = \$18\text{K}$

Final Price = $160 + 18 = \$178\text{ K}$

Fixed-incentive Exercise 3

Target cost	\$150.000
Target fee	\$30.000
Target price	\$180.000
Sharing Ratio	60/40
Actual cost	\$210.00
Ceiling Price	\$ 200.000
Final fee	
Final price	

Seller exceeded Cost

Excess cost = $150 - 210 = \$60K$

Seller share loss = $40\% * 60K = \$24K$

Fee = $30 - 24 = \$6K$

Price = $210 + 6 = \$216K$

The seller will only get the ceiling \$200K he pays 10K \$

3-Time and Material Contracts (T&M)

Hybrid type of contractual arrangement that contain aspects of both cost-reimbursable and fixed-price contracts

They are often used for

- ✓ Staff augmentation
- ✓ Acquisition of experts
- ✓ Any outside support when a precise statement of work cannot be quickly prescribed

Contract Types vs. Risk

Fixed Price (FP)

FFP

FP-EPA

FPIF

Time & Material

For small projects

Cost Reimbursable

CPFF

CPPC

CPAF

LOW



HIGH

HIGH



LOW

✓ Unclear requirements and SOW are a risk and have cost and schedule impacts.

DATA ANALYSIS - Make-or-buy analysis

- Determine whether work or deliverables **can best be accomplished by the project team** or should be purchased from outside sources
- Factors to consider in the make-or-buy decision include
 - ✓ the organization's **current resource allocation** and their skills and abilities
 - ✓ the need for **specialized expertise**
 - ✓ the desire to **not expand permanent employment obligations**
 - ✓ the need for **independent expertise**
- It also includes **evaluating the risks** involved with each make-or-buy decision
- Make-or-buy analysis may use
 - ✓ payback period
 - ✓ return on investment (ROI)
 - ✓ internal rate of return (IRR)
 - ✓ discounted cash flow
 - ✓ net present value (NPV)
 - ✓ benefit/cost analysis (BCA)

Exercise

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?

$$2000 + 40 * X = 240 * X$$

$$2000 = 240 * X - 40 * X$$

$$2000 = 200 * X$$

$$X = 10 \text{ Days}$$

SOURCE SELECTION ANALYSIS

- **Least cost.**
- **Qualifications only**
- **Quality-based/highest technical proposal score.**
- **Quality and cost-based**
- **Sole source**
- **Fixed budget**

SOURCE SELECTION CRITERIA

- Capability and capacity
- Product cost and life cycle cost
- Delivery dates
- Technical expertise and approach
- Specific relevant experience
- Adequacy of the proposed approach and work plan in responding to the SOW
- Key staff's qualifications, availability, and competence
- Financial stability of the firm
- Management experience
- Suitability of the knowledge transfer program, including training

PROCUREMENT MANAGEMENT PLAN

1. How procurement will be coordinated with other project aspects, such as project schedule development and control processes
2. Timetable of key procurement activities
3. Procurement metrics to be used to manage contracts
4. Stakeholder roles and responsibilities related to procurement, including authority and constraints of the project team when the performing organization has a procurement department
5. Constraints and assumptions that could affect planned procurements
6. The legal jurisdiction and the currency in which payments will be made
7. Determination of whether independent estimates will be used and whether they are needed as evaluation criteria
8. Risk management issues including identifying requirements for performance bonds or insurance contracts to mitigate some forms of project risk
9. Prequalified sellers, if any, to be used

Procurement Statement of Work (SOW)

- Develop from scope baseline
- Defines only that portion of the project scope that is to be included within the related contract
- Information included in a SOW can include
 - ✓ specifications
 - ✓ quantity desired
 - ✓ quality levels
 - ✓ performance data
 - ✓ period of performance
 - ✓ work location



Make-or-buy decisions

A make-or-buy analysis results in a decision as to whether particular work can best be accomplished by the project team or needs to be purchased from outside sources

PROCUREMENT STRATEGY

➤ Delivery methods

- ✓ For **professional services**, delivery methods include
 - buyer/services provider with no subcontracting
 - buyer/services provider with subcontracting allowed
 - joint venture between buyer and services provider
 - buyer/services provider acts as the representative
- ✓ For **industrial or commercial construction**, project delivery methods include
 - turnkey
 - design build (DB)
 - design bid build (DBB)
 - design build operate (DBO)
 - build own operate transfer (BOOT)

➤ Contract payment types

- ✓ Fixed-price contracts are suitable when **the type of work is predictable** and the requirements are well defined and not likely to change
- ✓ Cost plus contracts are suitable when the work **is evolving, likely to change**, or not well defined
- ✓ Incentives and awards may be used to **align the objectives** of buyer and seller

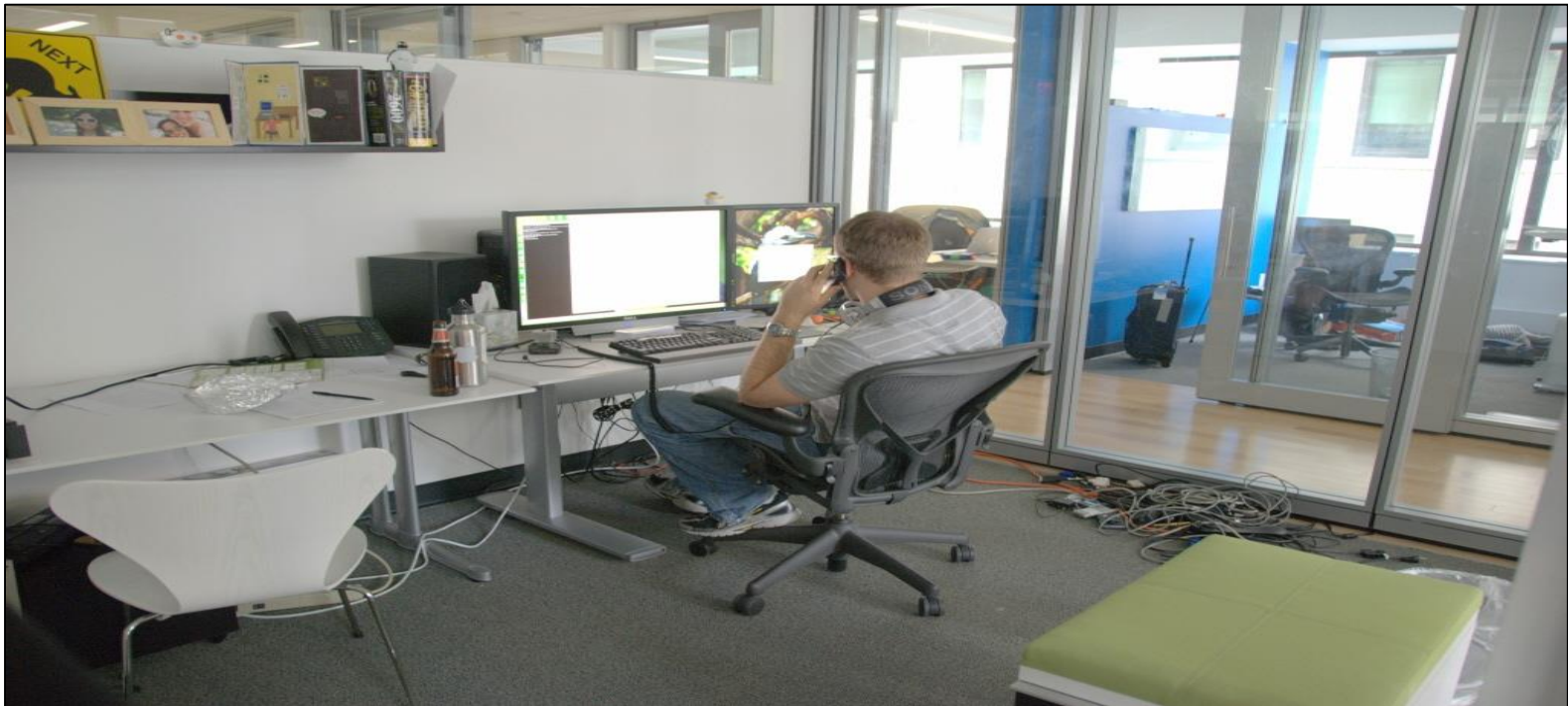
➤ Procurement phases

BID DOCUMENTS

- Request for Information (RFI)
- Invitation For Bid (IFB)
- Request For Proposal (RFP)
- Request For Quotation (RFQ)

Independent Cost Estimates

For large procurements, the procuring organization may elect to either **prepare its own independent estimate** or have a cost estimate prepared by **an outside professional estimator** to serve as a **benchmark** on proposed responses



CONDUCT PROCUREMENTS

Description

- 1-Obtaining seller responses
- 2-Selecting a seller
- 3-Awarding a contract

Key Benefit

- 1-Selects a **qualified seller**
- 2- Implements the legal agreement for delivery

12.2 CONDUCT PROCUREMENTS

Inputs

- .1 Project management plan
 - Scope management plan
 - Requirements management plan
 - Communications management plan
 - Risk management plan
 - Procurement management plan
 - Configuration management plan
 - Cost baseline
- .2 Project documents
 - Lessons learned register
 - Project schedule
 - Requirements documentation
 - Risk register
 - Stakeholder register
- .3 Procurement documentation
- .4 Seller proposals
- .5 Enterprise environmental factors
- .6 Organizational process assets

Tools & Techniques

- .1 Expert judgment
- .2 Advertising
- .3 Bidder conferences
- .4 Data analysis
 - Proposal evaluation
- .5 Interpersonal and team skills
 - Negotiation

Outputs

- .1 Selected sellers
- .2 Agreements
- .3 Change requests
- .4 Project management plan updates
 - Requirements management plan
 - Quality management plan
 - Communications management plan
 - Risk management plan
 - Procurement management plan
 - Scope baseline
 - Schedule baseline
 - Cost baseline
- .5 Project documents updates
 - Lessons learned register
 - Requirements documentation
 - Requirements traceability matrix
 - Resource calendars
 - Risk register
 - Stakeholder register
- .6 Organizational process assets updates

Bidder Conferences

(also called contractor conferences, vendor conferences, and pre-bid conferences)

Are **meetings** between the **buyer** and **prospective sellers** prior to proposal submittal.

They are used to ensure that

- All prospective bidders have a **clear and common understanding** of the procurement
- No bidders receive preferential treatment



Advertising

placing advertisements in
general circulation
publications such as
selected newspapers

Wednesday, Nov 25, 2015

Website Marketing Weekly Tips!

Providing Web Business Strategies, Tactics, Tools, & Resources since 1998

Published by Multiple Stream Media

Issue #105, Published on Nov 19, 2015

This Week's Topics

Design & Optimization

Converting Websites Through Effective Web Site Design and Your Website Content.



Have you ever done a search for a popular keyword term in Google and found a website listed on top of the search results that you couldn't click off of fast enough? You might have wondered how such a terrible web site could make it to the top of the search engines. What you may not know is that the age of the website largely determines its value to the search engines and allows it to rank well for relevant keywords, regardless of whether it has an effective web site design and content. [Read the full story](#)

Strategies & Tactics

3 Simple Ways to Write and Submit Your Articles.



Important news meant for writers and at the same time to non-writers as well. This is the moment to begin digging up those creative writing skills of yours back. With the arrival of current communication tools, comes the age of information-based marketing, which is one of the oldest, most important and efficient methods in driving targeted traffic to sites and converting them into probable buyers. [Read the full story](#)

Advertising & Lead Gen

Some Important Pointers On Effectively Advertising A Website.



There is a certain amount of detail that goes into having a business and keeping it successful on a full time basis. One of the biggest issues that needs to be addressed is the concept of effective website advertising ideas. This may sound like a no-big deal, but in the business world, this is huge. [Read the full story](#)

Social Media Promotion

Advertising Solutions

- [Email Advertising](#)
- [Banner Advertising](#)
- [Photo Text Advertising](#)
- [Full Page Advertising](#)
- [Pay Per Click Advertising](#)
- [Collaboration Leads](#)
- [Newsworthy Advertising](#)
- [Business Story List](#)
- [Smart Ad Placement](#)
- [Classified Advertising](#)

Automation Solution

- [Lead Management](#)
- [Landing Page Creator](#)
- [Tracking and Reporting](#)
- [Follow Up System](#)

Design And Creative Solutions

- [Email Ad Design](#)
- [Conversion Services](#)
- [Article Writing And Submissions](#)
- [Press Release Distribution](#)

Affiliate Opportunities

- [Media Affiliate Program](#)
- [Recruiting Affiliate Program](#)
- [Business Story List Affiliate Program](#)
- [AdClickMedia PPC Program](#)

[Learn more](#) ➔

INTERPERSONAL AND TEAM SKILLS - Negotiations

- Procurement negotiation clarifies the **structure, rights, and obligations** of the parties and other terms of the purchases so that mutual agreement can be reached prior to signing the contract
- The negotiation should be **led by a member of the procurement team** that has the authority to sign contracts
- **The project manager** and other members of the project management team may be present during negotiation to **provide assistance** as needed

AGREEMENTS (Contracts)

1. Procurement statement of work or major deliverables
2. Schedule, milestones, or date by which a schedule is required
3. Performance reporting
4. Pricing and payment terms
5. Inspection, quality, and acceptance criteria
6. Warranty and future product support
7. Incentives and penalties
8. Insurance and performance bonds
9. Subordinate subcontractor approvals
10. General terms and conditions
11. Change request handling
12. Termination clause and alternative dispute resolution mechanisms

CONTROL PROCUREMENTS

Description

- 1-Managing procurement relationships
- 2-Monitoring contract performance
- 3-Making changes and corrections as appropriate
- 4-Closing out contracts

Key Benefit

Ensures that both the **seller's and buyer's** performance **meet** the **project's requirements** according to the terms of the legal agreement

12.3 CONTROL PROCUREMENTS

Inputs

- .1 Project management plan
 - Requirements management plan
 - Risk management plan
 - Procurement management plan
 - Change management plan
 - Schedule baseline
- .2 Project documents
 - Assumption log
 - Lessons learned register
 - Milestone list
 - Quality reports
 - Requirements documentation
 - Requirements traceability matrix
 - Risk register
 - Stakeholder register
- .3 Agreements
- .4 Procurement documentation
- .5 Approved change requests
- .6 Work performance data
- .7 Enterprise environmental factors
- .8 Organizational process assets

Tools & Techniques

- .1 Expert judgment
- .2 Claims administration
- .3 Data analysis
 - Performance reviews
 - Earned value analysis
 - Trend analysis
- .4 Inspection
- .5 Audits

Outputs

- .1 Closed procurements
- .2 Work performance information
- .3 Procurement documentation updates
- .4 Change requests
- .5 Project management plan updates
 - Risk management plan
 - Procurement management plan
 - Schedule baseline
 - Cost baseline
- .6 Project documents updates
 - Lessons learned register
 - Resource requirements
 - Requirements traceability matrix
 - Risk register
 - Stakeholder register
- .7 Organizational process assets updates

Administrative activities for Control Procurements

- **Collection of data** and managing project records, including maintenance of detailed records of physical and financial performance and establishment of measurable procurement performance indicators
- **Refinement** of procurement plans and schedules
- Set up for **gathering, analyzing, and reporting** procurement-related project data and preparation of **periodic reports** to the organization
- **Monitoring** the procurement **environment** so that implementation can be facilitated or adjustments made
- Payment of **invoices**

DATA ANALYSIS

- **Performance Reviews.** for contracts measure, compare, and analyze quality, resource, schedule, and cost **performance against the agreement.**

This includes identifying work packages that are ahead or behind schedule, over or under budget, or have resource or quality issues.
- **Earned Value Analysis (EVA).** Schedule and cost variances along with schedule and cost performance indexes are calculated **to determine the degree of variance from target.**
- **Trend Analysis.** Can develop a forecast estimate at completion (EAC) for cost performance **to see if performance is improving or deteriorating**

Claims Administration

- **Contested** changes and potential constructive changes are those requested changes where **the buyer and seller cannot reach an agreement** on compensation for the change or cannot agree that a change has occurred
- Contested changes are called **claims** المطالبات. When they cannot be resolved, they become **disputes** نزاعات and finally **appeals** قضايا
- It may have to be handled in accordance with **alternative dispute resolution (ADR)** typically following procedures established in the **contract**
- Settlement of all claims and disputes through **negotiation is the preferred method**

Closed Procurement

1. The buyer, usually through its authorized procurement administrator, provides the seller with **formal written notice** that **the contract has been completed**
2. **Requirements for formal procurement closure** are usually defined in the terms and conditions of the **contract** and are included in **the procurement management plan**
3. **All deliverables** should have been provided **on time** and **meet technical and quality requirements**
4. There should be **no outstanding claims or invoices**
5. **All final payments** should have been made
6. The project management team should have **approved all deliverables** prior to closure



1- In a fixed price contract, the fee or profit is:

A-Unknown

B-Part of negotiation involved in paying every invoice

C-Applied as a line item to every invoice

D-Determined with the other party at the end of the project.

2- Which of the following is not a tool or technique of the Control Procurements process?

A- Expert judgment

B- Advertising

C- Claims administration

D- Inspection

3-The primary objective of incentive fee in a contract is to:

- A- Reduce costs for the buyer
- B- Help the seller control costs
- C-Synchronize objective
- D- Reduce risk for the seller by shifting risk to the buyer

4-Your company is receiving a shipment of goods from the seller when you get the procurement manager who tells you that the shipment does not meet the needs of the project. What should you do NEXT?

A- Send the shipment back

B- Accept the shipment

C- Issue a change order to change the contract specifications

D- Expect to receive a claim from the seller

5- If you are working on a project with constantly changing scope, which type of contract would work best when hiring an outside vendor to complete a portion of the work?

A- Lump sum

B- Cost-reimbursable

C- Time and material

D- Fixed price

6- What is the purpose of a bidder conference?

A- Awarding a contract to the most suitable vendor

B- Pre-qualifying the potential sellers

C- Ensuring all vendors have a clear understanding of the procurement

D- Developing a comprehensive seller's list

7. In your project, your subcontracting requirements of the machining of high-value equipment are very demanding. Hence, you have determined the technical criteria to evaluate the sellers. This is an example of:

- A. Objective evaluation criteria
- B. Source selection criteria
- C. Statement of work
- D. Work breakdown structure

8. For many procurement items, the procuring organization can either prepare its own cost estimates or have an outside professional estimator prepare a cost estimate. This estimate serves as a:

- A. True estimate
- B. Expected-cost estimate
- C. Benchmark estimate
- D. Accurate estimate



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