Project Management Professional (PMP)

Section (12)
Project Procurement Management



Project Procurement Management

- The processes necessary to purchase or acquire products, services, or results needed from outside the project team.
 - Project Procurement Management includes:
 - The contract management & change control processes required to develop and administer contracts or purchase orders issued by authorized project team members.
 - Controlling any contract issued by an outside organization (the buyer) that is acquiring deliverables from the project from the performing organization (the seller)
 - Administering contractual obligations placed on the project team by the
 contract.

Project Procurement Management

- The Project Procurement Management processes:
 - 12.1 Plan Procurement Management
 - 12.2 Conduct Procurements
 - 12.3 Control Procurements
 - 12.4 Close Procurements



Project Procurement Management Overview 12.1 Plan Procurement 12.2 Conduct 12.3 Control Management **Procurements** Procurements .1 Inputs .1 Inputs .1 Inputs .1 Project management plan .1 Procurement management .1 Project management plan .2 Requirements documentation .2 Procurement documents .3 Risk register .2 Procurement documents .3 Agreements .4 Activity resource 3 Source selection criteria .4 Approved change requests requirements .4 Seller proposals .5 Work performance reports .5 Project schedule .5 Project documents .6 Work performance data .6 Activity cost estimates .6 Make-or-buy decisions .7 Stakeholder register .7 Procurement statement of .2 Tools & Techniques .8 Enterprise environmental .1 Contract change control factors .8 Organizational process assets .9 Organizational process assets .2 Procurement performance .2 Tools & Techniques reviews 2 Tools & Techniques 1 Bidder conference .3 Inspections and audits .1 Make-or-buy analysis .2 Proposal evaluation .4 Performance reporting .2 Expert judgment techniques .5 Payment systems .3 Market research .3 Independent estimates .6 Claims administration .4 Meetings .4 Expert judgment .7 Records management system .5 Advertising .3 Outputs .6 Analytical techniques .3 Outputs .1 Procurement management .7 Procurement negotiations .1 Work performance information .2 Change requests .2 Procurement statement of .3 Project management plan .3 Outputs .1 Selected sellers updates work .3 Procurement documents .2 Agreements .4 Project documents updates .4 Source selection criteria .3 Resource calendars .5 Organizational process assets .5 Make-or-buy decisions .4 Change requests updates .5 Project management plan .6 Change requests .7 Project documents updates updates .6 Project documents updates 12.4 Close Procurements .1 Inputs .1 Project management plan .2 Procurement documents .2 Tools & Techniques .1 Procurement audits .2 Procurement negotiations .3 Records management system .3 Outputs .1 Closed procurements .2 Organizational process assets updates

Figure 12-1. Project Procurement Management Overview



12.1 Plan Procurement Management

The process of <u>documenting</u> project procurement decisions, specifying the approach, and identifying potential sellers.

- The key benefit of this process is:
 - It determines whether to acquire outside support, and if so, what to acquire, how to acquire it, how much is needed, and when to acquire it.



Inputs

- .1 Project management plan
- .2 Requirements documentation
- .3 Risk register
- .4 Activity resource requirements
- .5 Project schedule
- .6 Activity cost estimates
- .7 Stakeholder register
- .8 Enterprise environmental factors
- .9 Organizational process assets

Tools & Techniques

- .1 Make-or-buy analysis
- .2 Expert judgment
- .3 Market research
- .4 Meetings

Outputs

- .1 Procurement management plan
- .2 Procurement statement of work
- .3 Procurement documents
- .4 Source selection criteria
- .5 Make-or-buy decisions
- .6 Change requests
- .7 Project documents updates

Figure 12-2. Plan Procurements: Inputs, Tools & Techniques, and Outputs



- 12.1.1.1 Project Management Plan (Out: 4.2)
- 12.1.1.2 Requirements Documentation (Out: 5.2)
- 12.1.1.3 Risk Register (Out: 11.2)
- □ 12.1.1.4 Activity Resource Requirements (Out: 6.4)
- 12.1.1.5 Project Schedule (Out: 6.6)
- 12.1.1.6 Activity Cost Estimates (Out: 7.2)
- 12.1.1.7 Stakeholder Register (Out: 13.1)
- 12.1.1.8 Enterprise Environmental Factors (Out: 2.1.5)
- 12.1.1.9 Organizational Process Assets (Out: 2.1.4)



- 12.1.1.1 Project Management Plan (Out: 4.2)
 - The project management plan describes the need, justification, requirements & current boundaries for the project.

- It includes, the scope baseline contents:
 - Project scope statement.
 - WBS
 - WBS dictionary



- □ 12.1.1.2 Requirements Documentation (Out: 5.2)
 - Requirements documentation may include:
 - Important 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, equal employment opportunity, licenses, and permits all of which are considered when planning for procurements.



- 12.1.1.3 Risk Register (Out: 11.2)
 - □ The risk register provides the list of risks, along with the results of risk analysis and risk response planning.

- □ 12.1.1.4 Activity Resource Requirements (Out: 6.4)
 - Activity resource requirements contain information on specific needs such as people, equipment, or location.



- 12.1.1.5 Project Schedule (Out: 6.6)
 - Project schedule contains information on required timelines or mandated deliverable dates.
- □ 12.1.1.6 Activity Cost Estimates (Out: 7.2)
 - Cost estimates developed by the procuring activity are used to evaluate the reasonableness of the bids or proposals received from potential sellers.
- □ 12.1.1.7 Stakeholder Register (Out: 13.1)
 - The stakeholder register provides details on the project participants and their interests in the project.



- 12.1.1.8 Enterprise Environmental Factors (Out: 2.1.5)
 - The enterprise environmental factors that can influence the Plan Procurement Management process include:
 - Marketplace conditions.
 - Products, services, and results that are available in the marketplace.
 - Suppliers, including past performance or reputation.
 - Typical terms and conditions for products, services, and results or for the specific industry.
 - Unique local requirements.



- 12.1.1.9 Organizational Process Assets (Out: 2.1.4)
 - The various types of contractual agreements used by the organization also influence decisions for the Plan Procurement Management process.
 - The organizational process assets that influence the Plan Procurement Management process include:
 - Formal procurement policies, procedures, and guidelines.
 - Management systems that are considered in developing the procurement management plan and selecting the contractual relationships to be used.
 - An established multi-tier supplier system of prequalified sellers based on prior experience.



- □ 12.1.2.1 Make-or-Buy Analysis
- □ 12.1.2.2 Expert Judgment
- 12.1.2.3 Market Research
- □ 12.1.2.4 Meetings



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



- 12.1.2.2 Expert Judgment
 - Expert judgment is often used to assess the inputs to and outputs from this process.
 - Expert purchasing judgment can also be used to develop or modify the criteria that will be used to evaluate seller proposals.
 - Expert legal judgment may involve the services of legal staff to assist with unique procurement issues, terms, and conditions.



- 12.1.2.3 Market Research
 - Market research includes <u>examination</u> of industry and specific vendor capabilities.
 - Procurement teams may leverage information gained at conferences, online reviews and a variety of sources to identify market capabilities.



- 12.1.2.4 Meetings
 - Research alone may not provide specific information to formulate a procurement strategy without additional information interchange meetings with potential bidders.



- □ 12.1.3.1 Procurement Management Plan
- □ 12.1.3.2 Procurement Statement of Work
- □ 12.1.3.3 Procurement Documents
- □ 12.1.3.4 Source Selection Criteria
- □ 12.1.3.5 Make-or-Buy Decisions
- □ 12.1.3.6 Change Requests
- □ 12.1.3.7 Project Documents Updates



- 12.1.3.1 Procurement Management Plan
 - The procurement management plan is a component of the project management plan that describes how a project team will acquire goods and services from outside the performing organization.

- 12.1.3.2 Procurement Statement of Work
 - The statement of work (SOW) for each procurement is developed from the project scope baseline and defines only that portion of the project scope that is to be included within the related contract.



- 12.1.3.3 Procurement Documents
 - Procurement documents are used to solicit proposals from prospective sellers.
 - Terms such as bid, tender, or quotation are generally used when the seller selection decision will be based on <u>price</u>
 - While a term such as proposal is generally used when other considerations, such as <u>technical capability or technical approach</u> are paramount.



- □ 12.1.3.4 Source Selection Criteria
 - Source selection criteria are often included as a part of the procurement documents.
 - Such criteria are developed and used to rate or score seller proposals, and can be objective or subjective.
 - Selection criteria may be limited to only the purchase price if the procurement item is readily available from a number of acceptable sellers.
 - Purchase price in this context includes both the cost of the item and all ancillary expenses such as delivery.

- ☐ 12.1.3.5 Make-or-Buy Decisions
 - A make-or-buy analysis results in a decision of whether particular work can best be accomplished by the project team or needs to be purchased from outside sources.
 - If the decision is to make the item, then the procurement plan may define processes and agreements internal to the organization.
 - A buy decision drives a similar process of reaching agreement with a supplier for the product or services.



- 12.1.3.6 Change Requests
 - A decision that involves procuring goods, services, or resources typically requires a change request. Other decisions during procurement planning can also create the need for additional change requests.
- 12.1.3.7 Project Documents Updates
 - Project documents that may be updated include:
 - Requirements documentation.
 - Requirements traceability matrix.
 - Risk register.

12.2 Conduct Procurements

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

- The key benefit of this process is:
 - It provides alignment of internal and external stakeholder expectations through established agreements.



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 conference
- .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 documents updates

Figure 12-4. Conduct Procurements: Inputs, Tools & Techniques, and Outputs



- □ 12.2.1.2 Procurement Documents (Out: 12.1)
- □ 12.2.1.3 Source Selection Criteria (Out: 12.1)
- □ 12.2.1.4 Seller Proposals
- □ 12.2.1.5 Project Documents (Out: 11.5)
- □ 12.2.1.6 Make-or-Buy Decisions (Out: 12.1)
- □ 12.2.1.7 Procurement Statement of Work (Out: 12.1)
- □ 12.2.1.8 Organizational Process Assets (Out: 2.1.4)



- □ 12.2.1.1 Procurement Management Plan (Out: 4.2)
 - The procurement management plan describes how the procurement processes will be managed from developing procurement documentation through contract closure.

- □ 12.2.1.2 Procurement Documents (Out: 12.1)
 - Procurement documents provide an audit trail for contracts and other agreements.



- 12.2.1.3 Source Selection Criteria (Out: 12.1)
 - Source selection criteria can include information on the supplier's required capabilities, capacity, delivery dates, product cost, life-cycle cost, technical expertise, and the approach to the contract.

- □ 12.2.1.4 Seller Proposals
 - Seller proposals, prepared in response to a procurement document package, form the basic information that will be used by an evaluation body to select one or more successful bidders (sellers).



- 12.2.1.5 Project Documents (Out: 11.5)
 - Project documents that are often considered include the risk-related contract decisions included within the risk register.

- □ 12.2.1.6 Make-or-Buy Decisions (Out: 12.1)
 - Organizations procuring goods or services analyze the need, identify resources, and then compare procurement strategies when deciding to buy.
 - Organizations also evaluate the need of buying products versus making the items themselves.

- 12.2.1.7 Procurement Statement of Work (Out: 12.1)
 - The procurement statement of work provides suppliers with a clearly stated set of goals, requirements, and outcomes from which they can provide a quantifiable response.

- □ 12.2.1.8 Organizational Process Assets (Out: 2.1.4)
 - Elements of the organizational process assets that can influence the Conduct Procurements process include:
 - Listings of prospective and previously qualified sellers.
 - 📜 Information on relevant past experience with sellers, both good and bad.

- □ 12.2.2.1 Bidder Conferences
- □ 12.2.2.2 Proposal Evaluation Techniques
- □ 12.2.2.3 Independent Estimates
- □ 12.2.2.4 Expert Judgment
- 12.2.2.5 Advertising
- □ 12.2.2.6 Analytical Techniques
- □ 12.2.2.7 Procurement Negotiations



- 12.2.2.1 Bidder Conferences
 - Bidder conferences (sometimes called: contractor conferences, vendor conferences, and pre-bid conferences) are meetings between the buyer and all prospective sellers prior to submittal of a bid or proposal.

- □ 12.2.2.2 Proposal Evaluation Techniques
 - On complex procurements, where source selection will be made based on seller responses to previously defined weighted criteria, a formal evaluation review process will be defined by the buyer's procurement policies.

- 12.2.2.3 Independent Estimates
 - For many procurement items, the procuring organization may elect to either prepare its own independent estimate, or have an estimate of costs prepared by an outside professional estimator, to serve as a benchmark on proposed responses.
- 12.2.2.4 Expert Judgment
 - May be used in evaluating seller proposals. The evaluation of proposals may be accomplished by a multi-discipline review team with expertise in each of the areas covered by the procurement documents and proposed contract.



- 12.2.2.5 Advertising
 - Existing lists of potential sellers often can be expanded by placing advertisements in general circulation publications such as selected newspapers or in specialty trade publications.

- □ 12.2.2.6 Analytical Techniques
 - Procurements involve defining a need in such a way that vendors can bring value through their offerings.



- 12.2.2.7 Procurement Negotiations
 - Procurement negotiations clarify the structure, requirements & other terms of the purchases so that mutual agreement can be reached prior to signing the contract.



- □ 12.2.3.1 Selected Sellers
- □ 12.2.3.2 Agreements
- 12.2.3.3 Resource Calendars
- □ 12.2.3.4 Change Requests
- □ 12.2.3.5 Project Management Plan Updates
- □ 12.2.3.6 Project Documents Updates



- 12.2.3.1 Selected Sellers
 - The selected sellers are those who have been judged to be in a competitive range based upon the outcome of the proposal or bid evaluation, and who have negotiated a draft contract that will become the actual contract when an award is made.



- 12.2.3.2 Agreements
 - A procurement agreement includes terms and conditions, and may incorporate other items that the buyer specifies regarding what the seller is to perform or provide.

- □ 12.2.3.3 Resource Calendars
 - The quantity and availability of contracted resources and those dates on which each specific resource or resource group can be active or idle are documented.



- 12.2.3.4 Change Requests
 - Change requests to the project management plan, its subsidiary plans, and other components are processed for review and disposition through the Perform Integrated Change Control process (Section 4.5).



- 12.2.3.5 Project Management Plan Updates
 - Elements of the project management plan that may be updated include:
 - Cost baseline.
 - Scope baseline.
 - Schedule baseline.
 - Communications management plan.
 - Procurement management plan.



- 12.2.3.6 Project Documents Updates
 - Project documents that may be updated include:
 - Requirements documentation.
 - Requirements traceability documentation.
 - Risk register.
 - Stakeholder register.



12.3 Control Procurements

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

- The key benefit of this process is:
 - It ensures that both the seller's and buyer's performance meets procurement requirements according to the terms of the legal agreement.



Inputs

- .1 Project management plan
- .2 Procurement documents
- .3 Agreements
- .4 Approved change requests
- .5 Work performance reports
- .6 Work performance data

Tools & Techniques

- .1 Contract 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 Work performance information
- .2 Change requests
- .3 Project management plan updates
- .4 Project documents updates
- .5 Organizational process assets updates

Figure 12-6. Control Procurements: Inputs, Tools & Techniques, and Outputs



- □ 12.3.1.1 Project Management Plan (Out: 4.2)
- □ 12.3.1.2 Procurement Documents (Out: 12.1)
- □ 12.3.1.3 Agreements (Out: 12.2)
- □ 12.3.1.4 Approved Change Requests (Out: 4.5)
- □ 12.3.1.5 Work Performance Reports (Out: 4.4)
- □ 12.3.1.6 Work Performance Data (Out: 4.3)



- □ 12.3.1.1 Project Management Plan (Out: 4.2)
 - The project management plan describes how the procurement processes will be managed from developing procurement documentation through contract closure.

- □ 12.3.1.2 Procurement Documents (Out: 12.1)
 - Procurement documents contain complete supporting records for administration of the procurement processes; this includes procurement contract awards and the statement of work.



- 12.3.1.3 Agreements (Out: 12.2)
 - Agreements are understandings between parties, including understanding of the duties of each party.

- □ 12.3.1.4 Approved Change Requests (Out: 4.5)
 - Approved change requests can include modifications to the terms and conditions of the contract, including the procurement statement of work, pricing, and descriptions of the products, services, or results to be provided.



- □ 12.3.1.5 Work Performance Reports (Out: 4.4)
 - Seller performance-related documentation includes:
 - Technical documentation
 - Work performance information
- 12.3.1.6 Work Performance Data (Out: 4.3)
 - Work performance data includes:
 - The extent to which quality standards are being satisfied
 - The costs that have been incurred or committed
 - Identification of the seller invoices that have been paid.

- □ 12.3.2.1 Contract Change Control System
- □ 12.3.2.2 Procurement Performance Reviews
- □ 12.3.2.3 Inspections and Audits
- □ 12.3.2.4 Performance Reporting
- □ 12.3.2.5 Payment Systems
- □ 12.3.2.6 Claims Administration
- □ 12.3.2.7 Records Management System



- 12.3.2.1 Contract Change Control System
 - A contract change control system defines the process by which the procurement can be modified.
 - It includes the paperwork, tracking systems, dispute resolution procedures, and approval levels necessary for authorizing changes.
 - The contract change control system is integrated with the integrated change control system.



- 12.3.2.2 Procurement Performance Reviews
 - A procurement performance review is a structured review of the seller's progress to deliver project scope and quality, within cost and on schedule, as compared to the contract.
 - It can include a review of seller-prepared documentation and buyer inspections, as well as quality audits conducted during seller's execution of the work.



- 12.3.2.3 Inspections and Audits
 - Inspections and audits required by the buyer and supported by the seller, as specified in the procurement contract, can be conducted during execution of the project to verify compliance in the seller's work processes or deliverables.
 - If authorized by contract, some inspection and audit teams can include buyer procurement personnel.



- 12.3.2.4 Performance Reporting
 - Work performance data and reports supplied by sellers are evaluated against the agreement requirements.
 - Work performance information from this evaluation is then reported as appropriate.
 - Performance reporting provides management with information about how effectively the seller is achieving the contractual objectives.



- 12.3.2.5 Payment Systems
 - Payments to the seller are typically processed by the accounts payable system of the buyer after certification of satisfactory work by an authorized person on the project team.
 - All payments should be made and documented in strict accordance with the terms of the contract.



- □ 12.3.2.6 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.

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



- □ 12.3.3.1 Work Performance Information
- □ 12.3.3.2 Change Requests
- □ 12.3.3.3 Project Management Plan Updates
- □ 12.3.3.4 Project Documents Updates
- □ 12.3.3.5 Organizational Process Assets Updates



- 12.3.3.1 Work Performance Information
 - Work performance information provides a basis for identification of current or potential problems to support later claims or new procurements.



- 12.3.3.2 Change Requests
 - Change requests to the project management plan, its subsidiary plans, and other components, such as:
 - The cost baseline
 - Schedule baseline
 - Procurement management plan
 - May result from the control procurements process.



- 12.3.3.3 Project Management Plan Updates
 - Elements of the project management plan that may be updated include:
 - Procurement management plan
 - Schedule baseline
 - Cost baseline

- 12.3.3.4 Project Documents Updates
 - Project documents that may be updated include:
 - Procurement documentation.



- □ 12.3.3.5 Organizational Process Assets Updates
 - Elements of the organizational process assets that may be updated include:
 - Correspondence
 - Payment schedules and requests
 - Seller performance evaluation documentation



12.4 Close Procurements

- The process of completing each procurement.
 - □ The key benefit of this process is:
 - It documents agreements and related documentation for future reference.



12.4.1 Close Procurements: Inputs

- □ 12.4.1.1 Project Management Plan (Out: 4.2)
 - The project management plan contains the procurement management plan, which provides the details and guidelines for closing out procurements.

- □ 12.4.1.2 Procurement Documents (Out: 12.1)
 - To close the contract, all procurement documentation is collected, indexed and filed.



12.4.2 Close Procurements: Tools and Techniques

- 12.4.2.1 Procurement Audits
 - A procurement audit is a structured review of the procurement process originating from the Plan Procurement Management process through Control Procurements.

- □ 12.4.2.2 Procurement Negotiations
 - In all procurement relationships, the final equitable settlement of all outstanding issues, claims, and disputes by negotiation is a primary goal.



12.4.2 Close Procurements: Tools and Techniques

- 12.4.2.3 Records Management System
 - A records management system is used by the project manager to manage contract and procurement documentation and records.
 - Contract documents and correspondence are archived through the records management system as part of the Close Procurements process.



12.4.3 Close Procurements: Outputs

- 12.4.3.1 Closed Procurements
 - The buyer, usually through its authorized procurement administrator, provides the seller with 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.



12.4.3 Close Procurements: Outputs

- □ 12.4.3.2 Organizational Process Assets Updates
 - Elements of the organizational process assets that may be updated include:
 - Procurement file
 - Deliverable acceptance
 - Lessons learned documentation



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