

Chapter highlights

Purpose: This chapter discusses IT procurement planning, which include efforts by all personnel responsible for significant aspects of an IT project to ensure that they are coordinated and integrated in a comprehensive manner.

Key points:

- As an IT procurement best practice, comprehensive IT procurement planning is proven to provide multiple benefits to public procurement.
- Market research is central to sound IT procurement planning and market research results should be understood by the entire procurement project team.
- Strategic procurement planning helps the Commonwealth optimize performance, minimize price, increase achievement of socio-economic acquisition goals, evaluate total life cycle management costs, improve supplier access to business opportunities, and increase the value of each IT dollar.
- VITA may have an existing mandatory-use or optional-use statewide contract that would serve your IT procurement need. Agencies subject to VITA's IT procurement authority must determine whether one is available as a first step in the procurement planning process.

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11.0 Introduction

Procurement planning is the process by which all personnel responsible for significant aspects of a project have adopted specific roles and responsibilities and are integrated in a comprehensive manner. Procurement planning begins with the recognition of a specific IT business need. Procurement planning includes identification of what is needed, when it is needed, how it will be acquired and by whom. The amount of time necessary for the planning process is dependent upon the dollar value, risk, complexity and criticality of the proposed purchase. Procurement planning must also include budget planning. In general, the more costly and complex the IT procurement is, the more essential the need will be for a rigorous, well-planned, structured and disciplined procurement process.

VITA may have an existing mandatory-use or optional-use statewide contract that would serve your IT procurement need. Agencies subject to VITA's IT procurement authority must determine whether an existing statewide contract is available as a first step in the planning process. Using a statewide contract(s) may significantly reduce the time and cost for the IT acquisition, as these contracts are competitively procured as a result of the VPPA-required procurement process and the contracts are VPPA compliant. Current VITA statewide contracts may be found at this link: <https://vita.cobblestonesystems.com/public/>.

In addition, the procurement planning process must allow for the time necessary to comply with all Code-required VITA, CIO, Project Management Division (PMD), Enterprise Cloud Oversight Services (COV Ramp), Security and approvals and governance and oversight requirements for agency IT procurements covered in Virginia Code § 2.2-2007 through § 2.2-2021.

11.1 IT procurement planning principles

Here are several key IT procurement planning principles:

- Sourcing should be consistent with market capabilities and available spend rather than driving solutions toward prescriptive requirements.
- Strive for quick and easy IT solutions.
- IT solutions should be forward facing and positioned for future supportability.
- Procurement planning can prepare agencies for negotiating mutually collaborative agreements with IT suppliers. These agreements should reflect the best agreements in the marketplace.
- Agency stakeholders including the business owner, project manager, information security officer and procurement lead should be in constant collaboration.
- Consider all required processes and approvals (VITA, federal, other) in your procurement timeline for a realistic versus reactive procurement process.

11.2 Benefits of IT procurement planning

As an IT procurement best practice, IT procurement planning has been proven to generate multiple benefits for public procurement. IT procurement planning enables agencies to implement strategic IT sourcing concepts during the procurement process. Planning will also enable agencies to leverage the Commonwealth's purchasing power to obtain lower costs and better value. Developing a thorough IT procurement plan which assigns roles and responsibilities to the procurement project team members and defines the process steps will facilitate a better-value IT procurement. The IT procurement planning process should be a collaborative and synergistic effort between procurement project team members.

Please refer to [Appendix 11.2](#) of this manual for other potential benefits procurement planning.

11.3 IT Procurement planning roles and responsibilities

The agency's sourcing specialist or assigned procurement lead is responsible for the preparation and delivery of the procurement plan to the procurement project team. The table in [Appendix 11.3](#) lists various key procurement team roles and the responsibilities of each role. Commonwealth procurement personnel should be familiar with the nature and duties of each role. These roles vary for each project but are considered critical to the success of the procurement plan. For complex major IT procurements, the agency may require VITA PMD and other VITA technical experts be involved. The planning and sourcing process is intended to be collaborative as many steps are shared among team members. For a more in-depth discussion on these roles, go to [Chapter 24](#) of this manual, Requests for Proposals.

11.4 Market research

Market research is central to sound procurement planning and must be addressed and understood by the entire procurement project team. Market research sources must be substantial, credible, current and supportable and aligned with the project's business and functional objectives.

11.4.1 The purpose of market research

When little or no knowledge exists for the desired IT product, service or solution or available supplier resources, market research helps identify:

- Products, services or solutions available in the marketplace to address the business problem.
- Appropriate requirements based on how others have procured similar solutions.
- Realistic cost estimates and schedules.
- Customary practices such as warranty, financing, discounts for the IT product, service or solution.
- Distribution and support capabilities of potential suppliers including alternative arrangements and cost estimates.
- Availability and status of potential supplier sources.
- Lessons learned and implementation pitfalls and/or resolutions.
- The best deals/prices that have been obtained by other customers when acquiring a similar IT product, service or solution.

11.4.2 Methods of market research

The procurement project team may utilize any of (or a combination of) the following methods to conduct market research:

- Acquire information about products, trends, product availability, business practices, product/service reliability and prices.
- Perform a Porter's Five Forces Industry Analysis and/or a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis to identify opportunities.
- Contact knowledgeable individuals in government and industry regarding market capabilities to meet requirements.
- Review the results of recent market research undertaken to meet similar or identical requirements.
- Conduct unbiased industry briefings or pre-solicitation discussions with potential suppliers to discuss requirements and obtain recommendations.
- Analyze the purchase history of requirements to determine the level of competition, prices and performance results.

- Research technical analysis publications.
- Publish a formal RFI to survey the market on the complete and final requirements.
- Research the status of applicable technology and the extent and success of its commercial application.

11.6 Key steps and milestones of IT procurement planning

For a full discussion on the principles and background of complex IT solution procurements, technical and functional requirements definition, evaluation guidelines, etc., refer to **Chapter 24** of this manual, Requests for Proposals. For the purpose of this chapter, however, the high-level key steps in developing a thorough IT procurement plan are shown in subsections 11.6.1 through 11.6.4 below.

11.6.1 Define business objectives

Step	Action
1.	Define scope and conditions of acceptance. The desired outcome of the objective is a clearly defined statement of the business problem(s) and the need(s) being procured, including the current technology and user environments. Considerations in defining the scope and conditions of acceptance include: Requirements for compatibility with existing or future systems, programs, strategic plans or initiatives, Cost, schedule and capability or performance constraints, or any enhancement phasing, Stability of the desired technology or requirements, Delivery and performance-based requirements, and Potential risks and trade-offs.
2.	Prepare market analysis to gain awareness of products/services/solutions readily available in the marketplace for purchase.
3.	Perform a “make vs. buy” analysis.
4.	Estimate investment costs: set established cost goals for the project and the rationale supporting them; discuss related cost concepts to be employed, including, when appropriate: Life cycle costs including repair parts, upgrades and maintenance. Fair cost estimate: develop a cost estimate given the requirements and current market trends. This estimate may be used as a benchmark for the evaluation of the reasonableness of the prices proposed.
5.	Create procurement project team.
6.	Define and assign team member roles and responsibilities.
7.	Develop a project plan/schedule.
8.	Discuss technical, cost and schedule risks and describe efforts to reduce risks and consequences of failure to achieve goals.
9.	Discuss any special security, data and/or confidentiality needs (i.e., HIPAA, VITA Security or Enterprise Solutions and Governance, SAS 70 audits, etc.).
10.	Address protections and remedies such as payment holdbacks, performance bonds, warranty provisions, liquidated damages provisions, intellectual property or insurance (i.e., errors and omissions, cyber security) requirements.

11.	Commit to the source-selection objectives for the procurement including the timing for submission and evaluation of proposals and the relationship of evaluation factors to the agency business needs.
12.	Prepare statement of objectives for the business owner/steering committee, if appropriate, and obtain business owner sign-off.

11.6.2 Develop requirements

Step	Action
1.	Develop and agree upon product, service and/or solution requirements.
2.	Utilize approved solicitation documents and templates as discussed in Chapter 24, RFPs and Competitive Negotiations, and Chapter 25, IT Contract Formation.
3.	Establish evaluation criteria that provide clear, concise definitions for each criterion.
4.	Develop a detailed scoring plan that explains how proposals will be evaluated and provides the specific meaning of the scoring methodology.
5.	Determine if a pre-bidders/pre-proposal conference is justified.
6.	Identify major project milestones and deliverables and identify the key logistic milestones that may affect competition. Determine if supplier payments should be tied to the major milestones or deliverables and if any holdback is required prior to final acceptance.
7.	Identify if there are other related project interdependencies that may affect the project's schedule.
8.	Discuss which contract type is appropriate or whether a specialized contract is needed and any specific terms and conditions. For cloud/SaaS procurements, see additional information and recommended solicitation language here: https://www.vita.virginia.gov/procurement/policies--procedures/procurement-tools/
9.	Identify or determine what business-based service levels are needed to develop a performance-based contract and apply desired remedies.
10.	Develop a change management plan to manage expectations and communications.
11.	Create Request for Proposal/Invitation for Bid package, including any attached specifications, diagrams, etc.
12.	Obtain any necessary review and/or approvals (i.e., legal, CIO, PMD) prior to solicitation release.

11.6.3 Issue and conduct solicitation

Step	Action
1.	Issue an RFP or IFB and fulfill all VPPA posting requirements.
2.	Answer questions received from suppliers in a public forum/posting.
3.	Receive bids/proposals.
4.	Facilitate collaborative team evaluation of bids/proposals.
5.	Evaluate and score each proposal received.
6.	Perform a price or cost analysis.
7.	Recommend top supplier(s).
8.	Negotiate contract(s).
9.	Prepare procurement files and award/post contract.
10.	Brief business owner/steering committee (as applicable), contract manager and de-brief team for solicitation closeout.
11.	Archive solicitation documents and procurement files.
12.	Conduct post-award orientation meeting with supplier and key stakeholders.

11.6.4 Manage and administer contract

Step	Action
1.	Determine the processes by which the contract will be managed and administered including: • Contract status reporting requirements. • Preliminary, production and/or cutover technical reviews/testing • Acceptance process and how inspection and acceptance corresponding to the statement of work's performance criteria will be monitored and enforced. • Invoice review process. • Product or service deficiency reporting. • Contract changes and amendments process. • Service level agreements and performance metrics including how such service levels will be monitored, measured, and reported. • VITA governance and oversight compliance
2.	Manage product warranties.
3.	Direct change management: administer changes, budget changes, contract modifications, etc.
4.	Resolve contract disputes.
5.	Create realistic and justifiable remedies for non-performance, non-conformance of deliverables and/or unmet service level commitments. Ensure that all project requirements are complete.
6.	Terminate/expire contract: Terminate contract for default. Supplier may fail to deliver or fail to make progress. Terminate contract for convenience.

Make sure that the contract file includes all required backup and supporting data according to your agency's record retention policies and the Virginia Freedom of Information Act's requirements.

11.7 Other considerations affecting the IT procurement planning process

11.7.1 Lease vs. buy analysis

Public bodies may acquire IT equipment by lease or purchase. The decision to lease should be the result of a careful financial analysis of all factors involved, especially the total cost of ownership to the Commonwealth for the expected period of use. Lease vs. buy cost analyses are based on the "contract or program life" of the items being purchased. "Contract or program life" is the anticipated life cycle of the requirement for which the equipment is used, less any reasonable estimated length of time when a lower cost substitute capability becomes available. When the analysis indicates leasing is the least costly acquisition method, public bodies may enter into a lease contract. The terms of such contract should be equal to the predicted "contract or program life."

11.7.2 Build vs. buy analysis

Due to the seemingly short product lifetime of computer systems and software, agencies are presented with the dilemma of whether it makes more sense to build a custom system or buy a packaged solution. When building or buying a new IT system, there are a number of things to consider. For a custom system design, an agency will have to deal with hard costs such as development, testing and implementation. For off-the-shelf packages, there is initial package cost, ongoing license fees, and possibly costs to customize, configure, modify, test and maintain. For application service provider, software-as-a-service or other cloud-based solutions, consider the security and data privacy requirements to determine if hosting should really be provided by the agency or VITA, or if a private cloud is required vs. a public one, and consider all associated costs for the different data hosting and data storage environments. Build vs. buy decision points are the same regardless of the procurement:

- Cost
- Time to market
- Market conditions
- Architecture
- Support costs
- Availability of skilled resources
- Strategic value

When evaluating whether to build or buy, an agency must understand the total costs during the software life cycle, which are typically seven or eight years. Research studies show that 70% of software costs occur after implementation. A rigorous lifecycle analysis that realistically estimates ongoing maintenance by in-house developers often shows that it is cheaper to buy than create a solution. In addition, as more cost-effective, attractive market solutions become available, it may be more favorable to replace aging proprietary applications with proven commercial solutions. Please refer to [Appendix 11.7.2](#) for a list a key decision points to consider when conducting a build vs. buy analysis.

11.8 IT spend management

Strategic sourcing begins with a spend analysis and identification of commodities. Spend analysis is the structured process of critically analyzing a public body's IT spend and then using this information to make business decisions about to acquire needed commodities and services effectively and efficiently. This process

helps optimize performance, minimize price, evaluate total life cycle management costs, and increase the value of each IT dollar spent. Spend management in conjunction with procurement planning may be used to achieve the following procurement objectives:

- Understanding the potential for savings with a higher degree of certainty.
- Revising sourcing approaches to generate savings.
- Improving procurement processes and practices.

A broad overview of the spend management assessment process includes these steps:

- Examine and collect data and establish baselines on what is being bought in current spending. (What is being bought where and for how much?)
- Assess the supply market. (Who offers what?)
- Identify leverage opportunities by evaluating top spending areas.
- Identify savings opportunities and demand management opportunities.

11.9 Outcomes of IT procurement planning

IT procurement planning may drive different expected results such as:

- Reduction in the number of overall contract awards
- Understanding and managing total cost of ownership
- More purchasing options—lease vs. buy
- Data-driven decision making
- Improved risk mitigation prior to award
- More identification of opportunities where suppliers can add value
- Increased understanding of the IT industry—procurement staff become more knowledgeable about supply chains and costs.
- Performance driven contracts—data driven supplier performance (i.e., automated and electronic tracking systems).
- Improved relationships with suppliers—more communication, face-to-face meetings (quarterly review sessions).

