

# DEPARTMENT OF HEALTH AND HUMAN SERVICES

## DIRECTIVE FOR ACQUISITION STRATEGY



Issued by the  
Office of the Secretary  
Office of the Assistant Secretary for Financial Resources (ASFR)  
Office of Grants and Acquisition Policy and Accountability (OGAPA)  
Division of Acquisition  
March 2015  
Revised 04/23/2015

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<b>Date</b>	<b>Revision/Action</b>
04/02/2015	Updated programs/projects "P/P" acronym throughout this document
04/23/2015	Added Appendix C and updated 2.1.5, 2.2.8 and Appendix B – Risks Mgmt.

## Chapter 1 – Acquisition Strategy General Overview

### 1.0 Introduction

The Department of Health and Human Services' (HHS) requires a tailored Acquisition Strategy (AS) **for all programs/projects (P/P) augmented by contractor services/support**, in order to provide the conceptual basis of the overall mission and business need to be followed by the Program/Project Manager (P/PM). A strategy that is carefully developed and consistently executed is one of the keys to successful P/P management.

### 1.1 Purpose

The purpose of this directive is to provide a resource of information that HHS P/PMs should find useful in structuring, developing, and executing an acquisition strategy. A process for developing and executing an AS is provided together with criteria for evaluating a proposed strategy. However, this directive alone **does not** provide the P/PM with a definitive AS for particular programs. Well informed, educated, and innovative applications and judgments concerning the particular mission need are necessary to structure a successful acquisition strategy. P/PMs should continue to seek guidance, data, and assistance from available sources as they prepare and revise their acquisition strategy.

In general, a primary goal in developing an AS is to minimize the time and cost of satisfying an identified, validated need consistent with common sense, sound business practices, and basic policies. An AS is required when a mission need is defined and the P/P will be augmented by contractor support. The AS is prepared prior to milestones and addresses the critical elements of the P/P to include: management approach; business strategy; risks; technology: resources; requirements roadmap, procurement forecasting; testing; training; milestone schedules; implementation phases; and other logistics support over the entire P/P life cycle. The strategy evolves through an iterative process and becomes more definitive in describing the relationship of the essential elements of a P/P. Each AS must be updated whenever there is a change to the approved strategy or as the approach and P/P elements are better designed. Furthermore, it must be tailored to meet the specific needs of individual P/P in compliance with HHS policies.

The AS is not the same as the Acquisition Plan (AP) required by [FAR Subpart 7.1](#). In contrast, it is a top-level description, in sufficient detail to allow senior leadership and other decision authorities to assess whether the strategy makes good business sense, effectively implements laws and policies, and reflects management's priorities. Once approved, the AS provides a basis for more detailed planning.

### 1.2 Benefits

This directive sets forth four primary benefits that accrue from the development and maintenance of a comprehensive AS:

#### 1.2.1 Organized and Consistent Approach

The AS serves as a master checklist ensuring that all important issues and alternatives are considered. At any point in the acquisition process, the strategy must address the entire P/P, with primary emphasis on the next P/P phase. Documenting the AS is a means of performing

adequate strategic planning in the beginning and throughout the program, thereby reducing potential diversions from program objectives that could have adverse cost, schedule, and technical consequences.

### **1.2.2 Decision Aid**

An up-to-date AS reflecting current conditions, acts as a decision aid in several ways. The strategy assists in prioritizing and integrating many diverse functional requirements, evaluating and selecting important issue alternatives, identifying the opportunities and times for critical decisions, and providing a coordinated approach to the economical and effective achievement of P/P objectives. When the AS is reviewed and approved, a credible, realistic approach to conduct the P/P can be established and advocated by the P/PM to the Division Head up through the Department, and if required, on to the Congress and the White House. The AS aids in forming a consensus through recognition that the developed approach optimizes the management of the P/P driving expected outcomes and results, especially when augmented by procuring services and/or systems to support the P/P.

### **1.2.3 Means of Achieving Agreement**

The AS serves as the basis for preparing the plans and activities to accomplish the mission or business need. It becomes an agreement between the P/PM and the Division Head or other designated Decision Authority for achieving program objectives and goals. The AS should document the P/P lifecycle to include risks, budget information, internal/external resources, requirements roadmap, business strategy, leading to acquisition alternatives to be explored during the execution of the AS and building the acquisition plan. Thus, the AS is the base from which all functional planning proceeds. Key elements of the AS are reiterated in the AP.

### **1.2.4 Directive and Baseline on Rules/Assumptions**

The AS documents the ground rules and assumptions that preceded and then led to P/P initiation. It acts as a road map and also documents P/P progress through periodic updates, and therefore, provides a documented audit trail for succeeding P/PMs. It also serves as a standard by which Division Heads or Department Officials can measure P/P progress in terms of management and results.

## **1.3 Goals of an Acquisition Strategy**

Shorten the life-cycle time. Consider the following:

- **Streamlining:** The P/PM shall streamline all acquisitions so that they contain only those requirements that are essential, cost effective, and address an expected outcome established for the P/P.
- **Tailoring:** A tailored AS may vary the way in which core activities are to be conducted, the formality of reviews and documentation, and the need for other supporting activities. P/PMs shall work with their decision authorities to tailor any documentation and decision points to the needs of the individual P/P.

- **Integrated Project Teams (IPTs):** The use of IPTs is a key tenet of strategy development. These teams are comprised of subject matter experts who the P/PM must coordinate with on an on-going basis in order to truly realize the success of a P/P throughout the lifecycle.

Control (and where possible reduce) the life-cycle cost of existing systems and new system acquisitions. Consider the following:

- **Competition:** Full and open competition must be applied unless one of the limited statutory exceptions are approved. The AS must describe plans to attain P/P goals via competition in all increments and life-cycle phases for all planned acquisitions.
- **Cost as an Independent Variable (CAIV):** CAIV is a process that helps arrive at cost objectives (including life-cycle costs) and helps the requirements community set performance objectives (based cost-schedule-performance trade-offs during each phase of the acquisition process). The CAIV process is used in the development of an AS for acquiring and operating affordable HHS services/systems to set aggressive, achievable cost objectives and manage the achievement of these objectives.
- **Integrated Digital Environment (IDE):** The P/PM shall be responsible for establishing a data management system and appropriate IDE that meets the data requirements of the program throughout its total lifecycle.

Maximize open system architecture (to permit system update in step with technological advances and changing threats). Consider the following:

- **Commercial services, systems and commercial items:** In developing and updating the AS, the P/PM shall consider all prospective sources of supplies and/or services that can meet the need. Commercial and non-developmental items shall be considered as the primary source of supply. Market research and analysis shall be conducted to determine the availability and suitability of existing commercial and non-developmental items prior to the preparation of any product description and during the development phases.
- **Standard/commercial interface requirements specifications:** P/PMs shall establish open systems objectives, document their approach specifying the level(s) of openness of the system, and devise an open systems strategy to achieve these objectives. The strategy focuses on fielding superior capability more quickly and more affordably by using multiple suppliers (if feasible) and commercially supported practices. Open system-based commercial items are defined as items that use open standards as their primary interface standards.
- **Interoperability:** Compatibility, interoperability, and integration are key goals that must be satisfactorily addressed for all acquisition programs when applicable. Where appropriate, include discussion of interoperability and commonality of components/systems that are similar in function to other HHS component programs. This is particularly true of computers, large scale systems, and software engineering.

## Chapter 2 - Acquisition Strategy Characteristics

### 2.0 Introduction

An AS must provide the basis for meeting the organization's mission and business needs and established P/P objectives, thereby acting as an aid in gaining P/PM acceptance, support, and approval.

### 2.1 Characteristics/Criteria

Accordingly, five characteristics are required for a credible AS: realism, stability, resource balance, flexibility, and managed risk. This section provides a working definition of each criterion, explains why it is important and what pressures work against it, and outlines the steps necessary to achieve it.

#### 2.1.1 Realism

An AS is realistic if the program objectives are attainable and the strategic approach to satisfying them can be successfully implemented with reasonable assurance. Realism cannot be easily quantified, but there are some measurable properties. For example, a two-fold increase in present performance may be more realistic (attainable) than a three-fold increase. Ranking methodologies, as well as probability and statistical analyses, are practical measurement techniques.

Only a realistic approach will elicit support for the P/P at all levels. A strategy that is unrealistic can result in continuous turmoil and crises, and may lead to ultimate failure. With mounting evidence that certain milestones are not attainable, the first reaction is to try "Band-Aid" approaches, such as shifting funds from another area or deferring the work. Even if such temporary measures work, the activities that were "taxed" may be placed in an underfunded position. Deferred activities can cause interface and scheduling problems, leading to more temporary patches. The best way to avoid such a situation is to set requirements related to technical, cost, and schedule factors well within capabilities. Simply stated, the AS should represent a conceptual plan that is neither too optimistic nor too conservative—another way of defining realism.

The P/PM must recognize that there are pressures in this role that work against realism. Some of the more common forms of pressure are cited below.

- **Competing Alternative Approaches:** An immediate goal of a P/PM is to gain program acceptance and to see that it is approved, funded, and started. This requirement often induces unrealistic conditions such as matching or exceeding the claimed capability or milestones of a competing approach, or accepting beyond state-of-the-art performance requirements based on an insupportable analysis of a future threat to the P/P.
- **Acceptance of an Inflexible Set of Requirements:** This stance does not permit trade-offs, and forces the P/PM to force-fit an AS, introducing unrealistic conditions.
- **Strategy Directed by Higher Authority:** Pressures on the P/PM from the upper echelons may lead to an AS with limited alternatives and insufficient planning, or introduce over-optimism with regard to schedule and resource risks.

- **Low Program Priority:** A low priority P/P may tempt the P/PM to recite doctrinally correct P/P concerns and avoid documentation of relevant interests and concerns.
- **P/PM Reaction to Micro-Management:** The P/PM may adopt a “close to the vest” syndrome, so that minimal details of the conceptual approach are presented, which in turn reduces the guidance available to functional managers in their efforts to support the P/P.
- **Strong Competition:** Competing systems or strong high-level opposition to the P/PM may induce the P/PM to counter by introducing unrealistic goals or management approaches in the AS.

There is no simple formula for achieving realism. It entails detailed study of the risks, assessment of the state-of-the-art in all technology areas, review of past performance on similar acquisitions or systems, and a survey of industry capability, followed by the attainment of a consensus once the analysis is complete. Studies take time and resources, but since realism is such an important criterion for a successful strategy, every effort should be made to support this undertaking in critical areas.

### 2.1.2 Stability

Acquisition stability is the characteristic that inhibits negative external or internal influences from seriously disrupting P/P progress. Negative influences frequently cause changes in cost, schedule, or performance requirements that can threaten the achievement of milestones.

It would be naive to assume that any significant P/P will not encounter situations that can change the course of the P/P to some extent. Some of these situations may be well beyond any strategic program control.

Any change in critical system or acquisition parameters can ripple throughout the P/P and cause serious disruptions, reduce confidence in program estimates and assumptions, increase Government and contractor risk, and reduce morale and motivation. Frequently, when a major change is made, as in funding, a “downstream” parameter such as operational readiness or logistics support bears the brunt of the change, and the P/P operational capability can be significantly affected. However, there are many potential causes of instability that can be countered to some extent by a carefully designed AS.

#### 2.1.2.1 Five Key Factors Working Against Stability

- **The Funding Process:** A number of exogenous factors may produce changes to the yearly funding levels. The changes may require P/P stretch-outs, a reduction in services or system operational capability, or reduced quantities.
- **Requirements Changes:** The perceived risk levels may change or the Mission Owner may desire more or less capability, any one of which may result in disruptions.
- **Changing Acquisition Policy or Philosophy:** Changing administrations, executives, or political climates can result in revised policy, which may exert pressures to change the AS to conform to the new thinking.

- **Industry Risks:** Contractors may be faced with an untenable risk or profit position through buy-in, loss of a major contract, or failure to modernize. The consequences may require additional P/P funds, time, and may possibly result in new acquisitions.
- **Organizational and Personnel Changes:** These changes may result in lack of continuity, lack of accountability, loss of audit trail, and/or changes in directions, processes, and procedures.

#### 2.1.2.2 Four elements related to AS can enhance P/P stability

- **Direction:** A strategy must impart a sense of knowing where the program is headed, and when and how each goal will be achieved by delineating overall P/P objectives, approaches, and control procedures.
- **Advocacy:** P/Ps that lack high-level support are initial targets for change. The P/PM must know who the initial supporters are, keep them informed, and if feasible, cultivate new supporters.
- **Commitment:** The P/PM should strive for agreements that cannot easily be canceled. If the government establishes an agreement with an external party, then a measure of stability is achieved. A significant example is a Multi-Year Procurement contract.
- **The use of IPTs:** When properly oriented and challenged, the multifunctional members of the IPT become committed to P/P success, thereby reducing parochial or functional imbalances that could otherwise lead to future instability.

#### 2.1.3 Resource Balance

Resource balance is a condition of equilibrium between and within major P/P objectives that are competing for resources. The achievement of cost, schedule, and performance requirements uses resources of time, people, facilities, and funds—all of which are limited.

Implementing Cost as an Independent Variable (CAIV), an Acquisition Reform initiative, facilitates the achievement of this resource balance. The degree of balance is difficult to measure directly, but it can be measured in terms of risk in meeting objectives. In this sense, a balanced P/P is one for which all the risks are approximately equal, where the risk measure includes establishment of priorities and assessment of damages in case of failure.

The P/PM must respond to high-level direction, which often presents conflicting demands. For example, consider the following set of P/P objectives: the acquisition-cycle time must be reduced, operational testing under realistic conditions must be held to a realistic minimum, and high performance and readiness must be achieved. Overemphasis on one objective could jeopardize the chances of meeting other objectives. By understanding the priorities, relationships, risks, and required resources for each objective, the P/PM can develop a strategy that provides the necessary balance and the justification to say “No,” or “Yes, but ...,” with conviction when changes by the Division Head, Department, contractors, or others, are requested.

Parochialism is probably the major pressure working against balance. Just as the P/PM must do everything legitimately possible to ensure P/P success, functional managers operate from the

same premise relative to their functional area. The P/PM must recognize that the mission owner want the products, services, or systems and want it quickly; financial offices want to lower P/P cost; and the contractors will want to lower risk. Again, the use of IPTs should help to achieve balance.

In addition, external situations may have a severe impact on balance. Examples include the emerging importance of competing priorities, limited resources, and reduced funding because of the economic climate.

Understanding the mission requirements and priorities of objectives is a key factor in achieving balance. **Resources must be allocated to achieve a required level of capability with acceptable risk.** Last but not least is the amount of resources—understand it is typically rarely enough to accomplish everything with ease.

#### **2.1.4 Flexibility**

Flexibility is a characteristic of the AS related to the ease with which changes and failures can be accommodated without significant changes in resource requirements. An AS that allows for no change in approach is one that is destined to be challenged by events.

As with the other characteristics discussed, there rarely is a single measure that can be used to quantify flexibility. One useful analysis approach can be called “what if?” — a form of contingency planning.

Examples are:

- What if a drop-out occurs with one of the major contractors?
- What if the technical development of the XYZ component fails?
- What if a new technology becomes available?
- What if Congress cuts the program budget by 15 percent?
- What if the only capable contractor does not modernize its skills and competencies?
- What if a certain activity is completed 6 months later than planned?

Through such analyses, the P/PM can identify areas where flexibility is needed as well as identify measures necessary to provide “back-up,” or alternative approaches to meeting P/P objectives.

One of the most predictable occurrences in P/P management is change. Flexibility enables the P/PM to deal with change—to bend but not break. Without flexibility, changes can throw a P/P out of balance, leading to instability, unrealistic approaches, insufficient resource allocations, and intolerable management problems.

As indicated in the discussion of stability, those who review a P/P should be given a strong feeling that the AS is directed toward successful accomplishments, with all major areas addressed. However, that does not mean that all approaches should be so firmly fixed that changes or failures cannot be accommodated. **Identifying the areas where change or failure is possible, and employing approaches to deal with them are signs of good strategic planning.** Unfortunately, some reviewers may insist on a strategy that excludes such possibilities, and

frequently there are pressures against maintaining “reserve resources.” If the nominal schedule estimates indicate a 5-year development, the reviewer may insist upon that target, even if the associated schedule allows no “slack” for dealing with any significant problems.

The first step in developing a strategy with sufficient flexibility, of course, is to identify areas in which there is a significant probability that changes or failures could occur. Not everything can be covered; otherwise the strategy becomes so flexible that it offers no firm basis for proceeding. One might adopt the approach that any significant potential change or failure with a subjective probability of occurrence of 20 percent or more should be addressed through a flexible strategy. This type of approach provides a direct lead-in to risk analysis which is addressed in section 2.1.5.

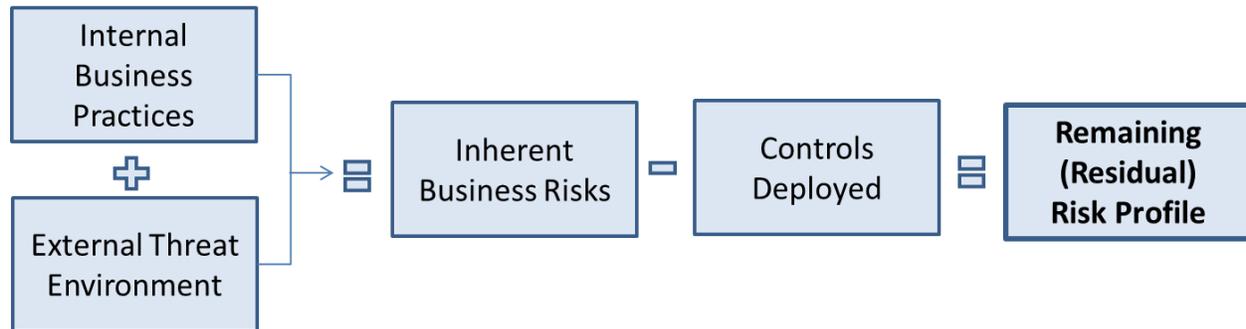
Six examples of ways to achieve P/P flexibility are presented below.

- **Requirements Flexibility:** Assure timely updates to decision authorities and work closely with the functional area experts. This will allow for flexibility within the operational plans for the P/P and enhance the potential for tradeoffs.
- **Contract flexibility:** Contracts can be written to provide needed flexibility in areas of uncertainty, reducing potential risk for both the Government and the contractor resulting from changes. One common example is the use of price-escalation indices to adjust for economic changes. Another example is a variable pricing provision related to varying quantities.
- **Functional Flexibility:** Ideally, the AS and supporting plans should be flexible enough to accommodate inevitable personnel turnovers, and allow for varying preferences in tactical implementing procedures on the part of senior official or P/PMs.
- **Funds Management:** As a general rule, the P/PM should not firmly allocate all resources at the start of a funding period. The maintenance of some unallocated funds (management reserve) provides a degree of funding flexibility.
- **Preplanned Product Improvement:** In technology areas of high risk and uncertainty, it may be prudent to plan for block changes of known emerging technology.
- **Evolutionary Acquisition (EA):** EA is an alternative approach that can be applied to system development. It entails plans for development of the core system (*e.g.*, the prime mover or platform), together with a supporting strategy to achieve operational requirements via an incremental development process, along with other required services.

### 2.1.5 Managed Risk

Every P/P is subject to uncertainties that may result in failure to achieve cost, schedule, or performance objectives. Exposure to these adverse possibilities constitutes acquisition risk. This particular risk is concerned with identifying and controlling uncertainties that threaten cost, schedule, performance objectives, and the development and implementation of actions to mitigate those uncertainties.

Sources of acquisition risk can be grouped into external and internal categories. Together the external and internal risks define the inherent risks the P/P faces. These are mitigated by controls to create a remaining risk profile for continual risk assessment and monitoring.



**External risks** originate from factors usually outside the control of the P/PM, and they are often associated with those requirements and constraints that define the P/P limits.

These risks include, but are not limited to:

- **Threat and Requirements:** Changes in the threat or a poorly defined requirement can result in redefinition of P/P performance objectives.
- **Funding:** The AS is developed based on an assumption of a certain level of funding. Significant changes in funding levels can force stretch-outs, performance reductions, or worst case, cancellation.
- **Contractor:** P/Ps are subject to adverse impact when events such as labor strikes or financial difficulties affect a contractor’s ability to function.
- **Politics:** P/PMs may receive direction from external sources (e.g., Congress) that impose certain cost and/or schedule constraints, which in turn will significantly increase the risk of meeting P/P objectives. The P/PM must understand how, where, and to what extent such directions impact P/P risks.
- **Acts of Nature:** Violent weather during key events in the acquisition cycle, earthquakes, fire, *etc.*—all are certainly outside the control of the P/PM.

**Internal Risks** are those over which the P/PM has more direct control. They result from decisions made within the Division that affect cost, schedule, performance, and technical approaches to be used when the AS is developed or modified.

They include:

- **Requirements:** Ill-defined or changing requirements create P/P risk, and this risk is particularly acute in the area of software development. Prototyping and other internal actions by the P/PM can mitigate the risk or the impact of the risk.
- **Technology:** Technology risks result from the use of immature technologies to strive for previously unattained performance levels. The more the P/P incorporates immature technology, the greater the uncertainty of cost, schedule or performance projections.
- **Design and Engineering:** This category encompasses risks associated with the ability to translate technological capabilities into reliable hardware and software configurations.

- **Manufacturing:** Manufacturing risks are associated with the ability of the government, and/or the contractor, to build the designed system to required performance and quality standards.
- **Support:** Support risks are associated with achieving reliability, availability, and maintainability objectives.
- **Cost and Schedule:** These risks entail the accuracy of the cost and schedule estimating process, along with their supporting assumptions. Risks are also infused into the schedule because of a critical path, a singularly constraining event, or a high level of concurrency.
- **Modeling and Simulation:** These risks are associated with the inability of a model or simulation to fully capture and emulate the performance characteristics of the system or component under development.

Since P/P risk is directly related to uncertainty in the P/P's ability to meet cost, schedule, and performance objectives, it can only be measured and controlled relative to these objectives, and within the context of the P/P strategy. Changes to the AS will generally result in a change to the level of risk; the remaining risk profile. **Thus the AS should be developed and continually updated with these project or program risks in mind** and it should form the basis for an effective risk management plan that can be integrated into the P/P WBS.

## 2.2 Other Critical Elements to Consider When Developing the Acquisition Strategy

A major function of the AS is to document the ground rules and assumptions under which the P/P was started, and by which future decisions will be gauged. The AS should become increasingly more definitive over time in describing the relationship of essential elements of the P/P listed in Section 1.2 of this document. In this context, such elements to consider in tailoring the AS include open systems; sources; cost, schedule, and performance risk management; CAIV; acquisition approach; environmental, safety, and health considerations; modeling and simulation approach; warranty considerations; and government property in the possession of contractors' consideration.

This list is not all-inclusive, and the AS should address other major initiatives that are critical to the success of a given program. The following 11 sections offer comment on several of the previously noted essential elements plus comments on other areas for consideration.

An effort should also be made to minimize inevitable redundancy with other P/P documentation.

### 2.2.1 Mission Need

For each defined mission and business need receiving favorable consideration at various milestones as reflected in the Milestone Decision Plan, members of the IPT play a crucial role in preparing for P/P milestone reviews. Prior to the first stage of the initial milestone development and each subsequent milestone, the role is that of translating the broadly-stated need into quantified operational performance parameters. This is accomplished through development and revision of the P/P overarching Management Plan and these parameters are to be stated as

objectives and thresholds. They will be displayed in several P/P documents and will serve as a basis for cost-schedule-performance tradeoffs.

A well-defined AS serves as a guiding compass in the tradeoff analyses.

### 2.2.2 Contracts

The AS should address the types of contracts that are planned for succeeding phases of the P/P, together with types of contract incentives and the incentive structures. All contemplated deviations and waivers should be addressed.

The content of this section may be liberally used in the AP, which is a companion and supporting document that follows the approval of the AS.

### 2.2.3 Technology

The technology portion of the AS should address the transition of critical technologies that must be applied to the developing systems, as well as the strategies to reduce technological risk, with sufficient detail to provide a strategic outline for those who develop the systems engineering plan. Examples are: technology demonstration programs, and/or the utilization of non-developmental items (NDIs) (with emphasis on commercial items) to reduce technological risk. This portion of the strategy should also address the key aspects of the software development approach, identify the mission critical computer resources, and identify related planning and support issues.

### 2.2.4 Software Development

The AS should address key aspects, including risks, of the proposed software development approach. It should state how the chosen software development approach supports the system-level AS.

### 2.2.5 Commodity Information Technology (IT)

The AS should address opportunities to leverage existing commodity IT investments. Commodity IT is information technology that is common across multiple organizations within or between Federal Agencies. Commodity IT offers opportunities for easily achievable savings from consolidated acquisitions of IT goods and services, and potential opportunities to reduce duplication or replace IT systems providing commodity IT services and products. The various categories of Commodity IT are listed table 2-1 below, sorted by function.

**Table 2-1 IT Commodity Categories**

Enterprise IT	IT Infrastructure	Business Systems
Email	Desktop and Laptop Systems	Financial Management Systems
Collaboration Tools (not Email)	Network Storage	Human Resource Systems
Identity and Access Management	Help Desk (End User Support)	Grants-Related Federal Financial Assistance

Enterprise IT	IT Infrastructure	Business Systems
IT Security ( <u>not</u> Identity and Access Management)	Mainframes and Servers	Grants-Related Transfers to State and Local Governments
Web Hosting, Web Infrastructure, and Web Content	Telecommunications	

### 2.2.6 P/P Integration Services/Support

The AS should address key aspects of the P/P Integration Services/Support required (when applicable) which will require special management focus by the P/PM in order to reduce P/P risk, providing sufficient detail to act as a strategic outline for those who develop the integration services/support plan. In this regard, integration services/support should be a performance detailed in the AS (who, what, when, where, and how). If the plan is to include acquisition requirements for P/P Integration Services/Support it must be clearly described in the AS, to include placing the burden on the contractor to respond to interchangeability; interoperability; and form, fit, and function requirements.

### 2.2.7 Deliverables

The deliverables portion of the AS is concerned with ensuring the contractor will deliver capability or products within stated timeframes.

When applicable to the P/P, this planning should also provide a strategic outline for those who develop the plans for desired services or products to be delivered.

Earned value management (EVM) is a project management tool and technique that integrates a project's scope with the related budget and schedule to permit detailed assessment of overall performance during the life of the project. EVM applies to acquisitions that involve development effort. This would include not only those acquisitions designated by the agency as major systems but also those acquisitions that include significant development, modification, or upgrade during the operational or steady-state phase of a program.

The AS should address how the offeror's/contractor's EVM System will be verified for compliance with the American National Standards Institute/Electronics Industries Alliance (ANSI/EIA) Standard-748, Earned Value Management Systems, and describe how EVM data will be used to monitor contractor performance. If the investment is not subject to HHS's acquisition guidance on or regulatory coverage of EVM, explain why, and describe the risks to program management and program objectives of not utilizing EVM.

Possible issues for inclusion in the AS are: establishing feasibility, assessing risks, identifying capable technology needs, capabilities of the industrial/industry base, availability of critical materials, and the transition from development to production.

Further issues include production processes, quality assurance procedures, personnel, and facilities.

Section 508 of the Rehabilitation Act, at <http://www.section508.gov>, significantly expanded and strengthened the requirement that Federal agencies make their electronic and information technology (EIT) products and services accessible to persons with disabilities. The AS should include a description of the EIT product or service to be developed, acquired, maintained, or used under the proposed acquisition(s). The AS should address whether the investment will be in compliance with Section 508 requirements or if an exception should be sought. The AS should communicate the risks of noncompliance and how such risks can be mitigated.

For acquisitions dealing with classified matters, The AS must address how adequate security will be established, maintained, and monitored. If a contractor will design, develop, maintain, use, or operate information systems subject to the Privacy Act, discuss how the requirements of that Act will be met. Discuss how agency information security requirements will be met under the Federal Information Security Management Act (FISMA). For acquisitions requiring routine contractor physical access to a federally controlled facility or access to a federally controlled information system, discuss how requirements for personal identity verification of contractors will be met under Homeland Security Presidential Directive 12 (HSPD-12). Consult with your Division Security Officer.

Determine whether the program will be in compliance with these security and privacy requirements. Discuss the risks of non-compliance and how such risks can be avoided or mitigated

### **2.2.8 Risk Management**

The Office of Management and Budget (OMB) Circular A-11 specifically directs that risk issues be addressed. However, risk is not always easy to assess, since determining a risk's probability and consequence or impact is often not an exact science. Oftentimes, measurable parameters must be estimated and other more subjective procedures used to assess risk. While formal risk analysis procedures deal with the "what is known" and "what is known to be unknowns," there is also the issue of the "not knowing what the unknowns are." Here, only qualitative assessments are usually possible. Yet, accepting this limitation, a well-reasoned risk assessment dealing with the "what is not known to be unknowns" provides a structure for selecting strategy alternatives and should be a major element in the decision making process.

As noted in Section 2.1.5, P/P risk is a measure of the probability and consequence of not achieving a defined project output or program outcome. Risk assessment is a critical discipline to include in AS development. When assessing risk, it is important to think of risk not only as a negative (losses), but also as a positive (gains). The latter types of risks relate to the strengths that could be enhanced and the opportunities achieved by the project or program. See Appendix C - Sample Risk Analysis Process for one method that can be used for risk analysis.

### **2.2.9 Program/Project Management**

The strategy describes the key aspects of the P/P management structure (*i.e.*, key events and related schedule) designed to reduce P/P risks, in sufficient detail to act as a strategic outline for the P/PM to develop a meaningful P/P management plan.

Example topics include joint program aspects, matrix support, IPTs, quality improvements/management, Division support, and planned changes to P/P office structure at specific points during the life of the P/P.

The strategy should include the planned delineation between government and contractor responsibilities, *e.g.*, Government furnished equipment, information, property; system integration; system testing, *etc.* When there are multiple P/Ps with some dependencies, there must be an Integrator the P/PM or contractor who can be responsible for this role.

Discuss, as appropriate, what management information system will be used by the Government to monitor the contractor's effort. Discuss the methodology the Government will employ to analyze and use: (a) all cost, schedule, and performance data, including any EVM data; and (b) various technical progress reports. Address the need to maintain records in accordance with appropriate retention schedules. (See the HHS-OCIO Policy for Records Management at: <http://www.hhs.gov/ocio/policy/2007-0004.001.html>).

Identify any Government-furnished property (including materials, facilities, and equipment) and Government-furnished Information (such as manuals, drawings, and test data) that must be provided to the contractor(s) to perform under the contract. What are the risks to the investment (schedule and cost) if required property or information is not made available to the contractor on a timely basis? Describe how these risks can be avoided or mitigated. Describe the optimum means of managing records that transfer property and information to contractors. See FAR Part 45 at: <http://www.acquisition.gov/far/current/html/FARTOCP45.html#wp233425>.

#### **2.2.10 Funding**

The AS should describe the principal source of funds for the services and/or systems supporting the P/P. Other potential topics include applicable joint funding agreements, highlights of the affordability study, and known funding or affordability constraints. The description should include the planned annual funding totals, by appropriation, for the prior year, current year, future year's program and cost to complete. Affordability analyses will run to the end of P/P.

#### **2.2.11 Structure and Schedule**

The structure and schedule portion of the AS must define the relationship among acquisition phases, decision milestones, solicitations, contract awards, systems engineering design reviews, contract deliveries, clinical trial periods, product releases, and operational deployment objectives. It must describe the phase transitions and the degree of concurrency entailed. It is a visual overview and picture presentation of the AS. The program schedule and structure must be depicted on an event-driven timeline diagram.

#### **2.2.12 Life-Cycle Cost**

The concept of CAIV must be used in establishing the AS. The AS shall address methodologies to acquire and operate affordable products/services and IT systems by setting aggressive, achievable cost objectives and managing achievement of these objectives. Cost objectives shall be set to balance mission needs with projected out-year resources, taking into account anticipated process improvements.

A strategy that considers the total cost to the Government over the entire cradle-to-grave life cycle is necessary to provide balance and perspective to the P/P in consideration of the performance and schedule requirements to avoid sub-optimization.

### **2.2.13 Intellectual Property Rights**

The AS should address the allocation of data rights between the Government and any contemplated providers of software and software-related services. Discuss how the Government will ensure that any modifications of commercial off-the-shelf (COTS) software will be addressed as to ownership and future access and use, including the impact of such modifications on the respective rights of the parties and the warranties and maintenance agreements associated with the underlying product(s).

## **2.3 Relationship to Other Documents**

As the HHS requirement for an AS and the Federal Acquisition Regulation (FAR)/HHSAR requirement for an AP both apply to P/P planning, questions often arise about how they differ and how they relate to each other.

The AS is required when the defined mission and business needs that will be augmented by contractor services/support are approved, triggering the need to develop plans for the P/P structure and other details summarizing success factors and expected outcomes/results. The AS covers the entire P/P and may reflect the efforts of multiple contractual actions. Furthermore, P/PMs cannot move forward with developing the AP until such time that the AS is complete and approved due to the fact that the AS provides the critical foundation necessary for determining plans for the acquisition. The next phase, Acquisition Planning, starts with executing the approved AS. The AP is execution-oriented and contract-focused—steps normally relating to a singular or multiple contractual actions.

## Chapter 3 - Acquisition Strategy Development and Documentation

### 3.0 Introduction

Development of the AS is a logical, systematic way of transforming a defined Mission/Business need into a comprehensive, top-level plan to direct the P/P management. Even though overarching strategies are required for all P/Ps, the AS is only required if the P/P will be augmented by contractor services/support. The development process involves a series of steps with much iteration that consist of identifying, analyzing, and resolving issues related to the essential elements (identified in Chapter 1) of an AS.

The AS is developed during the Concept Exploration (CE) phase of the acquisition cycle. The principles applicable to IPTs and the reengineered acquisition oversight and review process will be used where it makes sense. The development effort may take place prior to the formal establishment of a program office and assignment of a P/PM. Thus, the task may fall on either a special task force/group appointed, or the initial program office team assigned by the Division Head in advance of P/P initiation.

The initial strategy covers the P/P lifecycle, providing substantial and high level details on the events and/or phases of the P/P to include timelines and milestones. After the initial AS approach is approved, it is updated, as necessary, throughout the P/P lifecycle. The AS is part of the P/P documentation required at each milestone review. The AS is a stand-alone document developed by the P/PM.

The remainder of this chapter includes sections on the development process and the final AS, its documentation, approval, and flow down to other P/P plans; and analysis tools that can be used in an AS development.

### 3.1 Acquisition Strategy Development Process

Sections 3.1.1 and 3.1.2 below describe the general process and the detailed process for developing an AS.

#### 3.1.1 General Process

This section presents a process that can be used to develop an AS. The process consists of logically and systematically completing a number of steps beginning with identifying and clarifying the mission need and ending with gaining approval of the selected AS. Completing each step involves identifying, analyzing, and resolving numerous issues related to the elements of an AS by using problem-solving and decision-making tools and techniques.

1. Define Mission/Business Need Statement – Mission Owner
2. Identify/Clarify the Mission Need – P/PM
3. Assess the Situational Realities – P/PM
4. Select Concept(s) for Development (Services/Systems) – P/PM
5. Assemble Strategy Development Resources – P/PM
6. Establish Strategy Goals, Risk Levels, and Priorities – P/PM

7. Establish Decision Criteria – P/PM
8. Identify Strategy Development Method – P/PM
9. Evaluate Strategy Methods – P/PM
10. Select Best Strategy Method – Mission Owner and P/PM
11. Develop and Refine Strategy – P/PM
12. Approve Strategy
  - Division Head or Designee (At least one level above the P/PM) – regardless of dollar value, and
  - Head of Contracting Activity (HCA) – If less than \$20M, and the
  - Senior Procurement Executive (SPE) – If \$20M or greater, and those below this level determined to be High Risk (See Chapter 3, paragraph 3.1.2.5) regardless of dollar value
13. Revise, Update, and Refine Strategy as needed – P/PM

Note that the above process flow displays the AS development and approval activities. Not shown are the iterative loops performed during the process due to specific issues addressed, and trade-off decisions made.

Of course, other valid methods of developing an AS can be used as long as they provide for comprehensive treatment from a systematic and logical perspective of how the mission/business need will be satisfied.

### **3.1.2 Detailed Process**

By using a logical, systematic process, the criteria of realism, stability, resource balance, flexibility, and managed risk can be integrated into the AS. The AS development process includes the steps outlined in the following subsections.

#### **3.1.2.1 Identify the Mission/Business Need**

By using this logical, systematic process, the criteria of realism, stability, resource balance, flexibility, and managed risk can be integrated into the AS. The AS development process includes the following steps:

- What is the requirement?
- What is the urgency?
- How are the services/systems to be used?

The primary goal in the development of an AS should be to minimize the time and cost of satisfying an identified, validated need consistent with common sense, sound business practices, and compliance with various regulatory guidance. The mission need is the consequence of a performance deficiency in current or projected capabilities, or of a technological opportunity to establish new or improved capabilities. It must be certified by validation and approval authorities. The Mission/Business Need is expressed in broad

operational terms as determined by the Mission Owner and shall identify and describe how this need meets goals in the Division and/or HHS Strategic Plan. The strategy developer must clearly understand the mission need and ensure that it is well articulated to all participants in the acquisition process.

The P/PM should also review and analyze other documents related to the defined need, such as the threat/risk analysis studies, and provide feedback to the Mission Owner or other stakeholders. The P/PM should also attempt to establish the approximate priority of the need, and later in the process, establish the approximate priority of the P/P, within the respective Division and the Department. This information establishes a decision framework that will enhance strategic trade-off.

### **3.1.2.2 Assess the Situational Realities**

- What is the gap being filled?
- What are the risk realities?
- What is the economic environment?
- What are the political realities?
- What is the P/P relationship to other P/Ps?
- What are the technological opportunities?
- What are the CAIV-driven cost and performance objectives along with resulting schedule realities?
- What are the review and documentation realities?

The situational realities faced by the P/P include the service/system related performance cost/schedule; the general review of the requirements roadmap; and compliance with various applicable laws and acquisition regulatory guidance. Other situational realities to consider are the impact of this P/P on other P/Ps and vice-versa; acquisition strategies; completed or pending studies of topics related to this AS; and the resources (time, money, and experienced people) available to complete the strategy development.

Each P/P's strategy development must proceed in its own particular acquisition environment. The P/PM must know where the P/P stands in that environment at any particular time. Some P/Ps may have strong documented support from the beginning, with relatively few disturbing influences to hinder them; however, there could be critics.

For example, existing contract relationships may be viewed in a negative context by others as opposed to the view by the sponsoring Division; or there may be a disagreement on compliance with a policy or rule by the Inspector General, Government Accountability Office or a single member of Congress. The P/PM, with a full understanding of how the P/P fits into the national objectives and HHS Mission/Strategic Plans (Department and Division); should work with the IPT to assure successful outcomes and results.

The development of an effective AS, that considers situational realities, is a key way to counter opposition and enhance the likelihood of achieving established P/P goals.

### **3.1.2.3 Select Service or System Concept(s)**

- What concepts are possible?
- What concepts are feasible?
- Which concept(s) will most likely result in satisfying the mission/business need?
- What modeling and simulation can be used to aid system concept identification and selection?
- What concepts are possible using commercially available services or systems?

Following the approval of an established mission/business need, appropriate consideration must be given to the selection of a concept using the conclusions flowing from an Analysis of Alternatives (AOA). These results must be subjected, in turn, to an affordability analysis. The end result provides top-level P/P requirements and the basis for the development of an event-driven AS.

### **3.1.2.4 Assemble Strategy Development Resources**

- What human resources are required?
- What funding resources are required?
- What information resources are required?
- What time commitment is required?

Strategy development will require resources — people, time, money, and information. Table 3-1 (on the following page) is a check list of resources that normally are required for effective strategy development. Strategy must be developed in a concurrent, interactive, and integrated manner, rather than as a collection of separate inputs that can lead to functional discord. While all the IPT members in the strategy development are important, a seasoned technical manager (P/PM) and a knowledgeable and experienced business manager (contracting) are key players, since the technical and business strategies often control critical accomplishments.

The IPT members will have the knowledge, experience, and capability to ensure adequate consideration and compliance with functional and operational concepts. The team is the P/PM's key link to the functional/operational communities, and therefore, they must have a thorough working understanding of the mission needs, conceptual application, and the acquisition process.

### **3.1.2.5 Establish Strategy Goals, Levels, Risks, and Priorities**

- How will this program be streamlined?
- How many sources will be used in each acquisition phase?
- What type of contracts will be used?
- How long will it take to award contracts?
- What are our cost goals?

- What type of testing or metrics, how much will be done and how long will it take?
- What logistics approach will be used to deliver the service or system?
- What software development approach will be taken?
- Based on the concept selected, what are the initial technical, cost, schedule, and support risks?
- What are the options for mitigating identified risk areas?

When the mission/business need is thoroughly understood, an assessment of the situational realities has been performed, and the resources for strategy development are available, the strategy development can actually begin. P/P specific strategy goals or objectives should be listed and prioritized (e.g., foster the use of performance specifications or seeking out solutions involving Non-Developmental Items (NDIs). The difficulty of achieving each goal should be broadly assessed, as should the consequences of not achieving the goals. This assessment, together with the prioritization, provides a basis for assigning initial risk levels pending the P/P's development of a full risk management plan. At this stage, risk levels may be mostly qualitative (e.g., critical, high, moderate, and low) without full quantitative analysis of consequences and probabilities.

A multi-step approach of logical thought and decision making is required, the P/PM and the IPT are responsible for conceptualizing and determining the magnitude of each P/P as it relates to several factors. Determining the degree to which various P/P management components are implemented requires an assessment of the following six factors:

- Cost
- Complexity
- Risk
- Criticality
- Reach
- Visibility

Using these six factors, the following descriptions are used to evaluate the P/P Lifecycle and assign Levels 1, 2, or 3 based on criteria in chart below.

Table 3-1 Resources for Acquisition Strategic Development

Factor	Level 1	Level 2	Level 3
Cost	Lifecycle cost will be less than \$5M.	Lifecycle cost will be over \$5M but less than \$20M.	Lifecycle cost will be \$20M or over.
Complexity	P/P is simple in terms of implementation requirements and has no internal or external interfaces or integration impacts. Proven commercial or non-developmental products (Technology included) and business practices will be used.	P/P is simple in terms of implementation requirements, has only a limited number of internal and/or external interfaces or integration impacts. All interfaces and integration impacts are internal to the hosting Division and can be managed without impacting any external mission. Proven commercial or non-developmental products and business practices will be used. Well known commercially proven technologies will be used. Some engineering development may be required. For example, new combinations of existing technologies may be used that will require a limited amount of engineering development and technology demonstration.	P/P involves a complex implementation process and/or has external interfaces and integration impacts across several Operating and Staff Divisions or outside the Department of HHS. Proven commercial or non-developmental products and business practices will be used. Well known commercially proven technologies will be used. Some engineering development may be required. For example, new combinations of existing technologies may be used that will require a limited amount of engineering development and technology demonstration. Determinations to use technologies requiring extensive development

Factor	Level 1	Level 2	Level 3
			and demonstration must be in writing, reviewed, and approved at the appropriate level depending on risk and other factors.
Risks	Overall P/P risk is low.	P/P has moderate overall risk.	P/P has high or critical overall risk or serves an extensive public customer base.
Criticality	P/P is critical only to the Division secondary or non-mission related functions.	P/P is critical to one of the Department's core missions. Failure of the P/P or poor quality may affect core mission objectives, capabilities and/or system safety.	P/P is a highly complex and may envelope a portfolio of core mission objectives, capabilities, systems, or applications with impact on more than one mission critical area. Failure of the P/P or poor quality may affect core mission objectives, capabilities, or may affect multiple users across the Department of HHS or outside of the Department, including the public. P/P is or will be designated as part of the Nationally Critical Infrastructure
Reach	The P/P will result in a confined, Division -based system or capability such as: <ul style="list-style-type: none"> <li>• A Division level knowledge portal</li> <li>• An internal Division level specific budget system implementing Department standards</li> </ul>	A large, complex P/P that will have impact outside the host Division, but still within the Department of HHS.	A large, complex P/P that will have impact outside the Department of HHS and may be used by the public.
Visibility	Visibility of the P/P is restricted to a single business area within the hosting Division.	P/P has visibility at the Division and requires interface and/or integrations at other Divisions or the Department management levels.	P/P has visibility outside the hosting Division, other Divisions, at the Department and/or other level.

After evaluating a P/P in terms of the six factors described above, the P/P is assigned a level in accordance with the highest level defined for any particular factor. That is, if a P/P is evaluated as Level 3 in any single factor, the entire P/P is a Level 3. If the highest level assigned to any of the six factors is Level 2, the entire P/P is a Level 2, and if none of the factors is evaluated as either Level 2 or 3, the P/P is a Level 1. The number of factors evaluated as Level 1, 2, or 3 has no bearing on the P/P's characterization, but should be taken into consideration when tailoring the "recommended" P/P management methodology components to be adopted. These evaluated levels are also Decision Gate enablers driving effective and efficient P/P lifecycle phase reviews and a guide to best practices, not a rigid set of rules to be followed without exception.

### 3.1.2.6 3.1.2.5.1 Risk Categorization

An important part of defining a P/P as Level 1, 2, or 3 is characterizing the associated risk(s). In the context of P/P, risk can be thought of in two ways; (1) individual (and often independent) risks to various elements of the P/P, and (2) overall risk to the P/P itself.

### 3.1.2.7 3.1.2.5.2 Categorizing Individual Risks

Individual risks are characterized by estimating in qualitative or quantitative terms, the probability of a risk event occurring and the resultant consequence of that risk event. A particular risk is defined as Critical, High, Moderate, or Low, based on the impact of the risk's probability and consequence. A risk matrix, similar to the one below, is a useful tool for depicting this scoring system. Note that the matrix depicted is a 5X5 matrix. While other matrix

configurations may be used (3X3 or 4X4 for example), it should be noted that the more granular the matrix is, the easier it will be to discriminate between closely-scored individual risks. Additionally, the 5X5 format of risk matrix is more widely used—adoption of a 5X5 format will increase consistency across the Department.

### Risk Matrix

Probability of Occurrence	Consequence of Occurrence				
	Negligible	Minor	Significant	Severe	Catastrophic
Very Likely (Chance of Occurrence > 70%)	Moderate	High	Critical	Critical	Critical
Probable (Chance of Occurrence 50-70%)	Low	Moderate	High	Critical	Critical
Possible (Chance of Occurrence 30-50%)	Low	Moderate	High	High	Critical
Very Unlikely (Chance of Occurrence 10-30%)	Low	Low	Moderate	Moderate	High
Extremely Unlikely (Chance of Occurrence < 10%)	Low	Low	Low	Low	Moderate

### 3.1.2.8 3.1.2.5.3 Categorizing Overall P/P Risk

When all risks have been identified, analyzed, and ranked the IPT should then translate the risks into an overall, or summary, P/P risk ranking.

One common method of determining overall P/P risk is to assess and rank all of the P/P’s identified individual risks, and simply sum those risk scores into an overall P/P risk ranking. Often, on larger projects, a quantitative analysis such as a Monte Carlo simulation will be performed to determine the overall P/P cost and schedule risk. The Monte Carlo simulation utilizes inputs of expected cost and schedule risk consequence, stated in terms of impact and probability of occurrence. The simulation uses randomly generated outcomes for each risk based on the probabilities and consequences input by the IPT. By repeating the process for many trials, a frequency distribution is generated which approximates a probability distribution for the risks’ actual occurrence, and based on an accepted confidence level, returns an expected total P/P cost and schedule risk.

A second, more strategic method for determining overall P/P risk is to conduct a top-down risk assessment, focusing on areas of risk that would impact the entire P/P, rather than individual discrete risks. These risks, often referred to as strategic risks, relate more to the operational environment of the P/P than the technical aspects of P/P implementation. Examples of strategic risks are:

- User requirements will not be fully defined
- The higher-level Program which this individual P/P interface or integrates with will be abandoned
- The Division's governance structure will fail to provide executive level support for the P/P
- P/P Management processes will not mature at the pace required to support the planned P/P

The initial risk levels then provide direction for developing strategy alternatives that can concentrate resources effectively.

### **3.1.2.9 Establish Decision Criteria**

- What factors will be used?
- What weights, if any, will be assigned to each factor?
- What other considerations such as commercial items, open systems, etc., will be used in selecting the best candidate strategy?

Given that the program requirements have been established and priorities and initial risk levels assigned, decision criteria should be established for application to a specific category of strategies as they are being developed. The strategy development process can then be considered to be a classical decision problem—that is, one of resource allocation with multiple objectives.

Such problems are not easily solved, especially when so many potential future impacts are unknown or not fully understood. It is here that the strategy criteria discussed in paragraph 2.1 become important for guiding the decision-making process, *i.e.*, realism, stability, resource balance, flexibility, and managed risk. Based on these criteria, an assessment is made of how well the stated objectives/requirements can be met.

### **3.1.2.10 Identify Specific Category of Strategies**

- What are some specific categories of strategies?
- Do these specific categories of strategies satisfy the need?
- Do these specific categories of strategies help to develop requirements definition?
- What are the schedule and documentation impacts of combining milestones or phases?
- What are reasonable time estimates for conducting capability, developmental and operational testing and/or metrics as applicable?
- Are the categories of strategies affordable using CAIV?
- Do the categories of strategies adequately consider service or systems life cycle cost (LCC) or Total Ownership Cost (TOC)?

The strategy developer must identify approaches for each category of strategies to ensure that each P/P objective and requirement is met. The selection of strategy alternatives should be

driven by the mission need with consideration of the situational factors, goals, priorities, and risk.

**3.1.2.11 Evaluate Approaches to Address Categories of Strategies**

- Does each strategy satisfy the mission requirement and decision criteria?
- What are the advantages and disadvantages of each strategy?

The decision criteria and decision model are applied to the identified categories of strategies. Such an evaluation cannot be performed in a mechanical fashion—the problems are complex, the uncertainties are substantial, and the criticality is high. While there are a number of mathematical, statistical, and economic tools available for such evaluation, judgment and experience must still play major roles. Equally important are information and data. These evaluations suggest facts necessary for complete assessment of alternative strategies are available. Sometimes relevant information is unobtainable. If information crucial to evaluating alternative strategies cannot be documented, then it must be replaced by a valid assumption and labeled as such. If an outcome will be unaffected regardless of whether or not an assumption turns out to be factually accurate then that assumption is not considered “valid.” A limited discussion of analysis tools is addressed later in this chapter.

**3.1.2.12 Select Best Approach to Strategy**

The best approach to a strategy will have many facets, each representing an aspect of the P/P that has been determined to be important in light of the functional/operational requirements and the development, testing, production, and service/support capabilities needed. A multi-attribute utility decision test, using a matrix such as the example shown in Table 3-2, can serve as a useful tool in the process of selecting the best approach.

- Which strategy alternative best satisfy the requirement and decision criteria?
- Which strategy is chosen?

**Table 3-2 Strategy Decision Test**

Criteria	Rating		Strategies					
	Initial (1)	Normalized (1)	A		B		C	
			Prob (3)	Weighted score (2)*(3)	Prob (4)	Weighted score (2)*(5)	Prob (5)	Weighted score (2)*(5)
I	8	40	.60	24	.95	38	.5	20
II	5	25	.90	22.5	.50	12.5	.95	23.75
III	5	25	.80	20	.90	22.5	.60	15
IV	2	10	.50	5	.90	9	.60	6

Criteria	Rating		Strategies					
	Initial (1)	Normalized (1)	A		B		C	
			Prob (3)	Weighted score (2)*(3)	Prob (4)	Weighted score (2)*(5)	Prob (5)	Weighted score (2)*(5)
Total	20	100		71.5		82.0		64.75

### 3.1.2.13 Refine Selected Approaches to Strategy

When the evaluation is completed, and the preferred approach is selected, it is further developed and refined. The refinement activity includes a review and reassessment of all elements as they apply to the defined need, and requirement definition, as well as the aforementioned criteria of realism, stability, balance, flexibility, and managed risk. Other factors are considered, as appropriate, and the selected strategy is further tailored.

### 3.2 Product (The Completed Acquisition Strategy)

When the evaluation is completed, and the preferred approach to the strategy is selected, it is further developed and refined. The refinement activity includes a review and reassessment of all elements as they apply to the requirement, as well as the aforementioned criteria of realism, stability, balance, flexibility, and managed risk. Other factors are considered, as appropriate, and the selected strategy is further tailored.

The documented AS is the major product of the AS development process and the IPT. It is a living document. It consists of the program structure, acquisition approach, and major tradeoffs. The product must be more than a report of actions already taken and decisions already made in the P/P. It should not dwell on a detailed description of the services/system/program under development except as the description pertains to the AS.

- It should summarize and/or discuss prior tradeoffs among cost, schedule, and performance that were made to bring the P/P to its current state, including a description of strategy changes that have taken place since initial approval.
- It should describe the risk reduction tools used in the past, and those preferred or planned for future use.
- Of equal or greater importance, it must provide the broad program strategy for future tradeoffs and P/P plans and actions, with special emphasis on the phase following the next major milestone review.

Likewise, the product must be more than a description or plan of contract types and contract actions past, present, and future.

- It must communicate the strategy to be followed in the technical development stage, in the testing of capabilities or systems, and metrics used to evaluate performance,

expected outcomes/results as they relate to the overall management of the P/P and other P/Ps depending on the success of this P/P (integration/integrator is important).

Following approval, the AS should be widely disseminated, so that it may act as a key coordination tool, assisting the P/PM and ensuring control functions are viable. The P/PM should also be cognizant of any security related issues that may need to be protected if they are included in the approved AS.

### **3.2.1 Documentation and Approval**

The level of detail described below should be included in all AS documents to ensure that the Final Decision Authority (depending on the final approver based on dollar value and risk) may make well-informed assessments of the efficiency and effectiveness of the business arrangements that are planned. If this information is not provided, P/P strategy approval will be delayed until it is made available. The required content of the strategy must include the below details but must not be limited to the below requirements as all other details described in this directive must be provided whenever applicable:

- 1. Mission/Business Strategy:** Address the Mission/Business needs, identify the internal and external resources required. Also address requirements definition to include a Requirements Roadmap depicting approaches to acquisition forecasting and strategies to include risks. For example, include:
  - a. Define Mission/Business needs.
  - b. Document leadership involvement and support. Be specific with titles and/or names of the leaders.
  - c. Document P/PM to include FAC Level.
  - d. Consider required resources, budget, and document gaps.
  - e. Document government augmentation requirements.
  - f. Identify and document functional expertise required to form the members of the IPT along with their roles and responsibilities.
  - g. Assess the impact of this P/P on existing or planned P/Ps to include analysis to determine if integration is required for the various P/Ps.
  - h. If integration is required, determine who will be the integrator or if the integration functions will be augmented by contractor support.
  - i. Assess P/P life cycle and risks.
  - j. Draft requirements roadmap.
  - k. Document business strategy for the P/PM to include acquisition forecasting.
  - l. Document in detail the investment's compatibility with HHS' Enterprise Architecture, information security standards and the EPLC
- 2. Contracting Strategy:** Explain the strategies for augmenting the P/P with contractor support. Document the analysis and rationale for this decision.

- a. **Major Contract(s):** Identify the number and type of contracts anticipated. See Risk Levels on page 18. Risk levels combined with complexity of the acquisition will help to determine if contract awarded to support a specific P/P is considered major.
- b. For each major contract planned – all commodities except supplies and equipment – consider the risk levels associated with the P/P. Document the following:
  - i. Integration requirements for other active or planned P/Ps.
  - ii. The requirement—major deliverable(s).
  - iii. Terms of the anticipated contract.
  - iv. Options and prerequisites for exercising them, if any.
  - v. Events established in the contract to support appropriate exit criteria depending on updates to the P/P and contractor performance.
- c. Document intent to procure using Full and Open or Limited Competition methods. Indicate whether single or multiple awards will be considered. Address SB considerations and describe how the strategy changes from core (initial) to subsequent increments.
- d. Identify any special contracting considerations, for instance unique provisions, metrics, testing and evaluation, or other unique requirements.
- e. Identify any other pertinent information that may ensure understanding of the contracting strategy to include, but not limited to, projected use of Government Furnished Property, plans to re-use hardware and software, environmental issues, statutes and legislation, *etc.*
- f. If a cost-type contract is to be used, provide information (an explanation of technical risk and the steps required to remediate the risk) with supporting documentation to support the Milestone Decision Authority's mandatory assessment that:
  - i. The P/P is complex and technically challenging that it would not be practicable to reduce risks to a level that would permit the use of a fixed price contract.
  - ii. The complexity and technical challenge of the P/P is not the result of failure to:
    - Ensure the P/P is being executed by an entity with a relevant function.
    - Ensure the P/P fulfills an approved capability/mission need.
    - Ensure, if the P/P duplicates a capability already provided by an existing P/P, such duplication is necessary and appropriate.

- Ensure that an analysis of alternatives has been performed consistent with cost assessment and P/P evaluation studies.
  - Ensure that a cost estimate for the P/P has been submitted and approved and that the level of resources required to develop, procure, and sustain the P/P is consistent with the priority level assigned by the Division Head.
- g.* If a warranty has been considered, summarize the reasoning. If a product warranty option is being considered, explain the results of the Cost Benefit Analysis to determine if the warranty will be cost beneficial; apply this requirement as applicable.
- 3. Incentives:** If incentives are anticipated, describe the rationale for including and details of the specific incentives being planned. State how contract incentives are going to be employed to achieve required cost, schedule, and performance outcomes. If more than one incentive is planned for a contract, the AS should explain how the incentives complement each other and do not interfere with one another.
  - 4. Technical Data Management for Systems:** The strategy shall assess the long-term technical data needs and reflect that assessment in the Technical Data Rights Strategy that should be included in the AS. (See the FAR and HHSAR for acquisition guidance.) Consider system design, development, operation and maintenance, and P/P lifecycle. The AS should also address the merits of a price-based option for the future delivery of technical data and intellectual property rights not acquired upon initial contract award and consider the contractor's responsibility to verify any assertion of restricted use and release of data.
  - 5. Sustainment:** The AS should provide an overview of the sustainment-related contract(s) and performance-based agreements with Government and industry providers describing how the integrated product/service support package will be acquired for the P/P being supported. The discussion should include the contract/agreement and length along with major terms and conditions; performance measures being used; and with respect to systems, the portion of the system covered with the associated sustainment-related functions, plus hardware and data covered in each contract/agreement.

P/PMs are encouraged to tailor their AS documentation. A documented AS, when properly tailored and streamlined to reflect the key elements of a specific P/P, will prove useful in conveying a broad master plan for the successful accomplishment during the acquisition phase.

The final approval of the AS varies based on dollar value and risks.

### **3.2.2 Flow Down**

The level of detail included in the initial AS should be sufficient to serve as a roadmap for the entire P/P throughout the life cycle and when approved for execution, serves as a basis for development of the AP. This concept is discussed in more detail in Chapter 4.

### 3.3 Analysis Tools Applicable to AS Development

This section addresses some of the analytical processes and tools and techniques that are useful for P/P management personnel in structuring ASs to support and feed into informed tradeoff decisions, given affordability constraints and the user's validated needs. Tradeoff decisions are, of course, made in the context of cost, schedule, and performance.

#### 3.3.1 Risk Analysis

Risk analysis, as a continuing function, is required for all HHS P/Ps. The risks associated with a P/P as it approaches a milestone, and the adequacy of risk management planning, must be explicitly managed. A risk management program must be developed and executed by the P/PM. The reference listed in Section 2.1.5 contains information on risk analysis.

#### 3.3.2 Cost Analysis

Cost analysis is performed to assess the resource implications associated with the various P/P alternatives. Such resource implications are used and further developed in performing the AOA.

In order to perform a proper analysis of cost for planned acquisitions, it is necessary to understand the various types of costs and the relationships existing among those different costs. In this regard, the concept of life-cycle costs is extremely important. Life-cycle cost includes all work breakdown structure (WBS) elements; all affected appropriations; and encompasses the cost, contractor, and in-house effort, as well as existing assets to be used, for all categories. It is the total cost to the Government for a P/P over its full life, and includes the cost of research and development, investment in mission and support equipment (hardware and software), initial inventories, training, data, facilities, *etc.*, and the operating, support, and, where applicable, detoxification, or long-term waste storage.

There are a number of cost analysis and estimation procedures. A key element applicable to all procedures is the availability of comprehensive, relevant, and accurate data. Such data should include detailed descriptions of the system P/P, or process under evaluation; associated economic, situational, and environmental factors; and costs and associated information on similar systems P/Ps.

There are four generic types of cost analysis/estimation procedures, all of which are addressed in a variety of Government, industry, commercial and professional association publications.

- **Bottom-Up:** Estimates are made at the lowest possible level of the system or process, and the engineering expertise of applicable organizations is used. These lower-level estimates are then aggregated and adjusted to account for such factors as integration, overhead, and administrative expenses. This technique requires fairly complete information at lower levels.
- **Analogy:** Current cost information on similar systems or processes is collected and modified as appropriate to account for variations from the system or process under evaluation.
- **Extrapolation:** Estimates are made by extrapolating from actual costs.

- **Parametric Analysis:** A broad base of applicable cost data is analyzed to develop relationships between cost elements and system or process characteristics. These are often called Cost Estimating Relationships (CERs).

All four methods can be used within a single P/P. When it can be applied, the bottom-up approach is usually the most accurate but also the most time-consuming and labor intensive.

The comparison methods (analogy and extrapolation) are often used to establish an initial baseline and to calibrate the other methods. The accuracy of parametric analysis depends on the data quality, the degree to which the CERs represent the instant case, and the strength of the derived relationships. This method is usually applied in the early stages of the P/P.

Tools and techniques useful for cost analysis/estimation are available in the Federal Government cost analysis community. In the area of software and software cost estimating, a wide range of useful online tools exist.

### 3.3.3 Schedule Analysis

In many respects, the analysis of schedules has many of the characteristics of cost analysis. Data completeness, accuracy, relevancy, and quantity are important elements. Bottom-up, comparison, and parametric techniques are also applicable. For schedule analysis, there are a number of unique tools and techniques, including the following:

- Gantt and milestone charts
- Line-of-balance (LOB) technique
- Network scheduling
- Time management techniques
- P/P management software applications

### 3.3.4 Decision Analysis

Decision analysis is the process by which choices are made. Much theoretical work has been performed in developing methods to provide quantifiable measures for evaluating choices.

With regard to AS, the more sophisticated methods are usually limited because of the complex interactions (which make quantification difficult) and the data limitations that usually prevail. Nevertheless, the concepts of decision theory should be used in AS development and execution to the maximum extent possible. A detailed description of the various decision analysis tools is beyond the scope of this directive.

The following is a listing of widely employed methods of analysis that have proven to be useful in a broad range of situations, and are generally understood by many in the HHS acquisition community:

- **Statistical Analysis:** The most frequently used technique in this category is regression analysis which is employed for forecasting the expected value of a dependent variable, given the values of the independent variables. This method is used extensively in the

area of cost and performance forecasting. Other statistical methods are probability theory, exponential smoothing, statistical sampling, and tests of hypotheses.

- **Modeling and Simulation (M&S):** This method is likely to involve the construction of a model that is largely mathematical in nature with individual elements whose behavior can be predicted, in terms of probability distributions, for each of the various possible states of the system and its inputs. The model is then activated by using random numbers to generate simulated events over time according to the appropriate probability distribution. The result is simulation of actual operations; and in the end, are nothing more or less than a relatively affordable technique of performing *sampling experiments* on a model of the system.
- **Mathematical Programming:** Linear Programming (not to be confused with computer programming) is the most widely used method within this group. A common application involves the general problem of allocating limited resources among competing activities in the best possible or optimal way. All the mathematical functions in the model are linear. The most important area of application is production management (product mix, allocation of resources, plant and machine scheduling, and work scheduling) followed by capital budgeting. Mathematical programming also includes a number of other methods. The most widely used are nonlinear programming and dynamic programming. Other examples include network analysis, game theory, and integer programming.

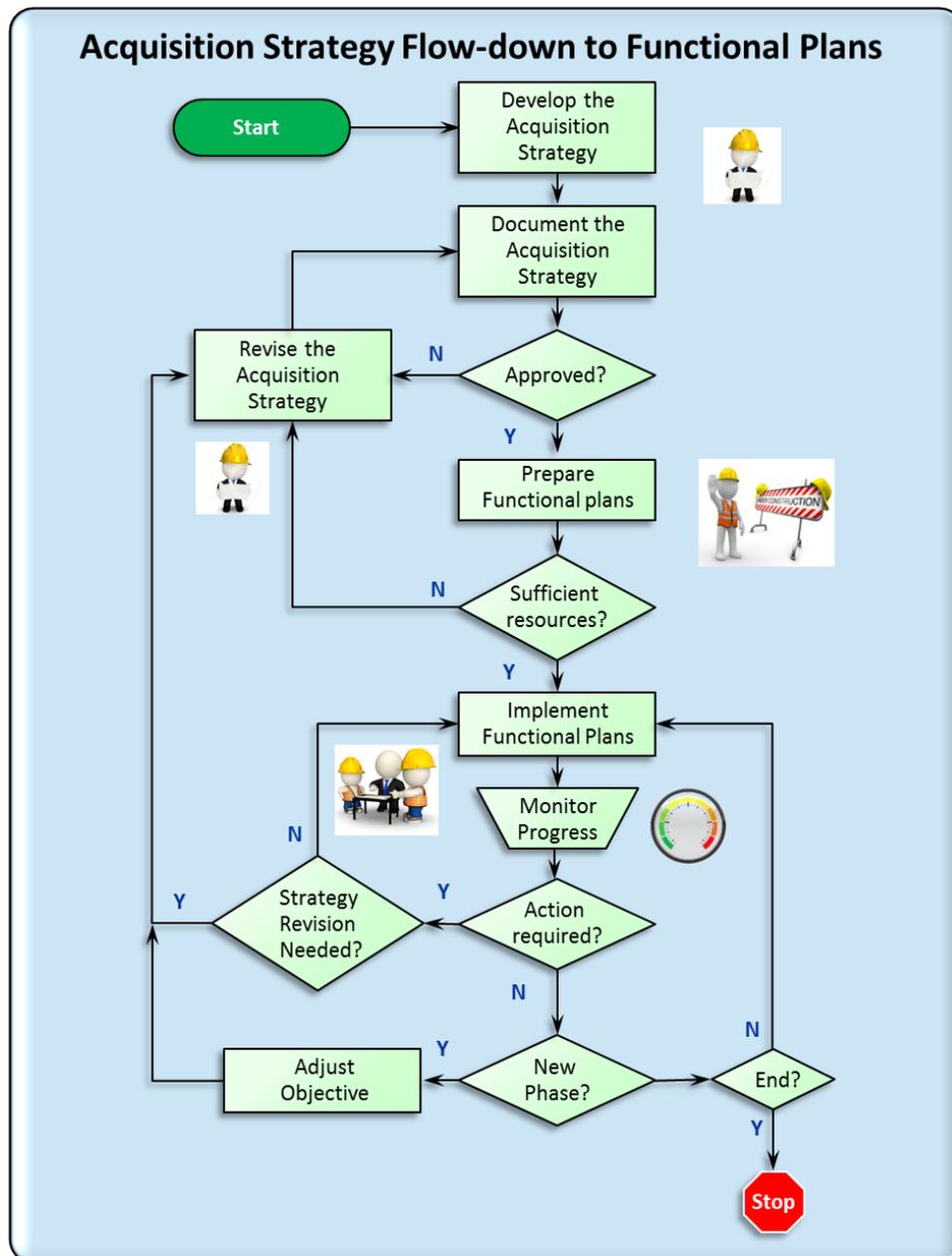
Other lesser-used methods that tend to have specialized applications in areas indirectly supporting the P/P can generally be grouped under the category of Probabilistic Models. These methods would include the stochastic processes, queuing theory, inventory theory, and the Markova decision process.

## Chapter 4 - Execution of the Acquisition Strategy

### 4.0 Characteristics/Criteria

This chapter focuses on the elements to be considered in AS execution, the flow down from the strategy to the “functional strategies” to the functional plans, revisions to the strategy, and deviations from the strategy. Figure 4-1 is an event sequence chart of the execution process. It represents the iterative process associated with implementing and modifying a continuously evolving AS, which is the subject of Section 4.2. Conversely, the actions associated with deviation from an approved AS are addressed in Section 4.3.

Figure 4-1 Acquisition Strategy Development and Execution Process



#### 4.1 The Execution Process and Flow Down

The AS is managed through execution and control of the functional *plans*. The three functions of control—direction, detection, and correction—describe the activities that are included in strategy management.

- **Direction** is the process of using resources (*e.g.*, people, dollars, time) to implement plans.
- **Detection** is accomplished through the use of tools (briefly addressed in Chapter 3) to compare actual with planned results.
- **Correction** follows detection in those instances where action is required, and plans are changed as appropriate.

Detection, the link between direction and correction, should include among its tools a management information system to provide systematic verification of internal (Government) and external (contractor or other Government agency) performance in implementing functional plans. Areas to be considered include cost control, schedule control, technical management, managed risk, and contract management.

P/PMs should ensure that their management system is implemented early, and that it satisfies P/P office needs, the needs of other HHS offices with acquisition responsibilities, the needs of their contractors, and that it complies with statutory/FAR imposed reporting requirements.

Of the three general types of P/P documentation—requirements, decision, and functional—the AS serves as requirements and decision documentation. It states what the P/PM believes must be accomplished to meet the stated objectives of the P/P, and it provides overall P/P direction. The AS also serves as the source of objectives for functional implementation plans. **It should not contain planning details but rather, should provide a clear understanding of the issues to be addressed throughout the life of the program.**

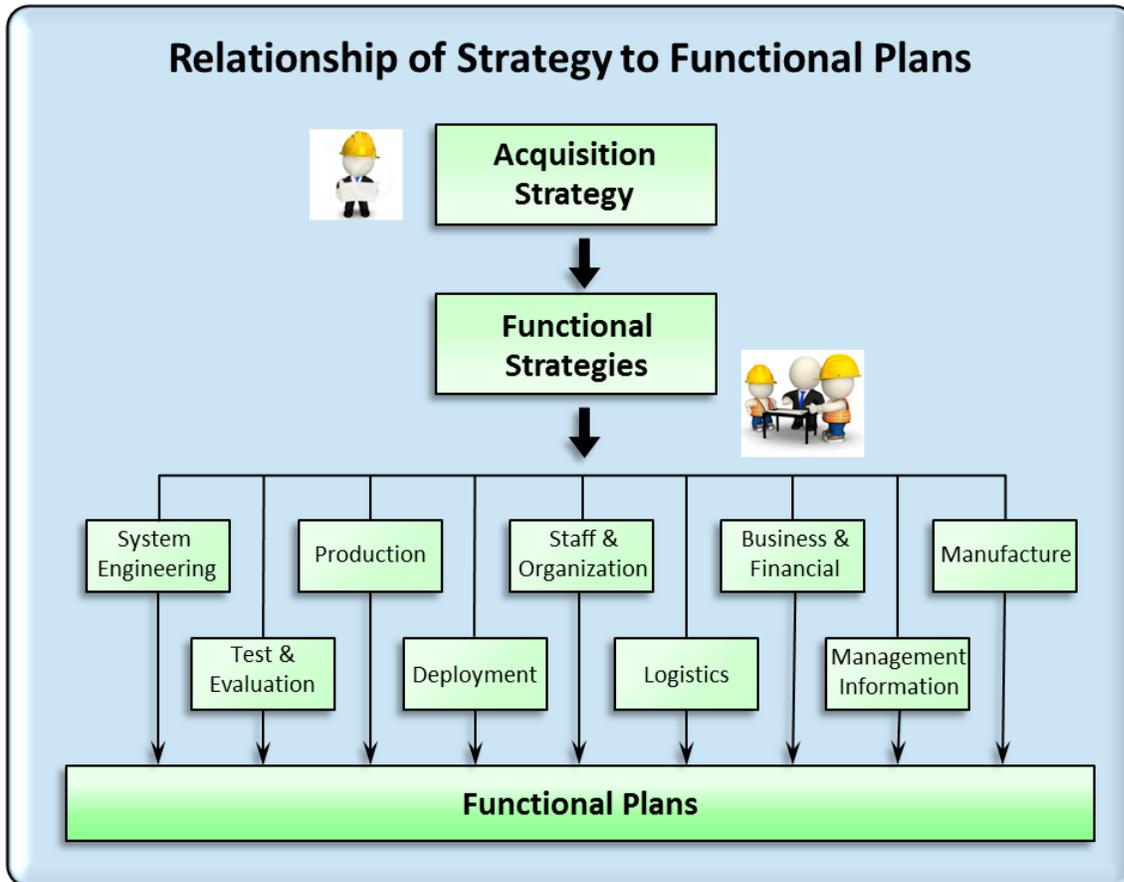
Thus, it can be characterized as a roadmap or “plan for planning.”

Just as there is a flow down from the threat assessment, mission need statement and operational requirements document to the AS, there is a very real flow down from the AS to functional strategies and documented functional plans.

Figure 4-1 shows “functional strategies” linking the AS and the functional plans. These required documents are divided into two categories, Milestone Documents and Periodic Reports. Included among the latter category is the AP. The AP is required by the FAR. The P/PM is also responsible for documenting details within the plans and working closely with the IPT members, which should include a business advisory from the supporting Division Contracting Office. The AP must be approved before significant contractual actions are executed – approval levels are documented in FAR and HHSAR Part 7.

Although the AP is similar in some respects to the AS, there is a fundamental difference; the AS is broad and considers the main areas of the P/P life cycle, while the AP primarily addresses the requirements for augmenting the P/P with contractor support.

Figure 4-2 Example of Flow-Down of Acquisition Strategy to Functional Strategies and Plans



The experienced P/PM will recognize that one of the advantages of an up-to-date AS is that this information readily serves as the framework for the acquisition plan and the other functional plans.

## 4.2 Final Acquisition Strategy and Approvals

In general, the primary goal in developing an AS is to minimize the time and cost of satisfying an identified, validated need consistent with common sense, sound business practices, and basic policies. Now that this process is finished the final AS must be prepared for various approvals.

### 4.2.1 Required Final Documents

The following documents are required before the review and approval process can begin:

- a. Final Acquisition Strategy which meets the criteria in this directive
- b. Presentation for review and approval—Include the following:
  - i. Project Information – Statement of Need, Background, Organizations, P/P Description (Mission, Objectives, Requirement), Current Acquisition Approach (if applicable), Other P/P Integration Efforts, Risk, Cost/Budget/Funding, Resources, and Schedule

- ii. Proposed Acquisition Approach – Competition, Contract Type, Commercial Availability, Source Selection, Regulatory/Statutory Considerations, and Milestones
- iii. Options/Recommendations

#### **4.2.2 Review and Approval of Final Acquisition Strategy**

The review and approval process below the SPE can be determined by the Operating/Staff Division. All AS reviews and approvals requiring a decision by the SPE must include the documents in 4.2.1 above, and a meeting must be scheduled to brief the SPE and other Departmental Senior Staff. See Chapter 3, paragraph 3.1.1 #12.

#### **4.3 Deviations from the Acquisition Strategy**

Even a good AS, one which meets the criteria of realism, stability, resource balance, flexibility, and managed risk, is subject to changing circumstances beyond the scope of the plans laid out in the strategy.

One of the consequences of preparing a comprehensive, useful AS is the near-certainty that future events will require a modification to the strategy. When the need is urgent, and P/P risks can be better managed through deviations from the strategy, such deviations are appropriate.

Deviations invariably **introduce new risk** into the P/P, and thus, the P/P risk analysis should be updated and documented in light of the new circumstances.

##### **4.3.1 Examples**

A few of the more significant events which may require deviations from the AS are:

- Significant change in quantity/size or scope of requirement.
- Significant change in top-level political support.

##### **4.3.2 Actions When Deviation Becomes Necessary**

Deviations should be treated as interim actions dictated by pressing circumstances, and must be accompanied by actions to attain approval for an updated AS from the SPE without delay.

The series of P/P actions which are necessary to execute a deviation can be summarized as follows:

- Conduct a risk analysis to justify deviation.
- Obtain concurrence for the deviation from the Division Head or Designee (one level above P/PM).
- Execute the changes/deviation in order to manage risk.
- Communicate the deviation to appropriate Government and contractor team members.
- Prepare proposed change to the AS, and other appropriate P/P plans.
- Submit proposed change for approval to the SPE.

- Upon approval, promulgate (circulate) the updated AS and other plans to appropriate stakeholders.
- Advise all functional leads to update any remaining functional plans in accordance with the new AS. These plans may include but are not limited to the following:
  - ♦ Acquisition Plan
  - ♦ Risk Management Plans
  - ♦ Operational Support Plans
  - ♦ Other Plans, as appropriate

Timely execution of this action sequence will ensure that all P/P team members and members of appropriate IPTs are aware of the need to redirect their efforts to conform to the new AS.

## Appendix A

### A.1 Definitions and Acronyms

**Project:** A temporary endeavor undertaken to accomplish a unique product or service with a defined start and end point and specific objectives that, when attained, signify completion. Projects are undertaken for development, modernization, enhancement, disposal, or maintenance. Projects are composed of activities. A planned acquisition undertaking with a definite beginning and clear termination point which produces a defined capability. A project is an individually planned, approved and managed basic building block related to a program.

**Program:** A group of assets that are planned and managed together to achieve an overall set of related outcomes directed and funded acquisitions that provide new, improved, or continuing systems or services in response to an approved need. Programs are divided into levels established to facilitate decision-making, execution, and compliance with statutory and regulatory requirements and may be composed of multiple projects, services contracts, interagency agreements, and other types of acquisitions. With a systems or services capability focus, programs usually tie together an agency's higher-level programming and budgeting process with the agency strategic plan. (IT Investment is frequently used as a synonym for IT program).

**Project Manager:** The acquisition workforce member assigned responsibility for accomplishing a specifically designated work effort or group of closely related efforts established to achieve stated or designated objectives, defined tasks, or other units of related effort on a schedule, within cost constraints and in support of the program mission or objective. The project manager is responsible for the planning, controlling, and reporting of the project, and for the management of required functions, including acquisition strategy and planning, defining requirements, business case development, performance of the schedule, and formulation, justification, and execution of the budget. The project manager is responsible for effectively managing project risks to insure effective systems and services are delivered through a total life-cycle approach to the end user on schedule, within budget and at the required levels of performance. A program manager may also serve as project manager for projects within the scope of the program.

**Program Manager:** The acquisition workforce member with the responsibility, and relevant discretionary authority, who is uniquely empowered to make final scope-of-work, capital-investment, and performance acceptability decisions on assigned acquisition programs. The program manager is also responsible for meeting program objectives or production requirements through the acquisition of any mix of in-house, contract, or reimbursable support resources. Program managers are responsible to stakeholders for management and oversight of subordinate projects within the scope of the overall program, as well IPTs. The program manager is ultimately responsible for effectively managing all business and technical risks of the program to insure effective systems and services are delivered to the end user on schedule, within budget and at the required levels of performance. A program manager may also serve

as a project manager and in this capacity will perform the responsibilities of the project manager.

## Appendix B

### Acquisition Strategy Template

#### 1 Introduction and Background

See Chapter 3 (Review Chapters 1 & 2) -- Summarize work completed to date which initiated the concept of the P/P being considered (for example Mission, Executive Order, Acts, other legislation, etc.) This Initial Phase should include:

1. Background information about the overarching Program/Project (for example implementing the Affordable Care Act, which includes many other P/P such as the Federally Facilitated Marketplace (FFM)).
2. Add Dates
3. Add Responsible Organizations, Offices, etc. (Lead office within Operating/Staff Division where P/PM is assigned)
4. Identify the lead Program Manager for – Describe roles and responsibilities to include IPT and integration required for various other P/PMs
5. Portfolio (List Programs/Projects) and Portfolio Groups (Organizations and/or Offices)
6. Total Projected Cost

#### 2 Requirement -- Define Mission/Business Need and Strategy

See Chapter 3 (Review Chapter 2) – Identify and clarify the mission need and gain leadership approval, see Section 3.1 and 3.2. Define the need (history, challenges that drives mission or implications for acquisition approach.

#### 3 Management Approach

See Chapter 1, paragraphs 1.2 thru 1.3 and Chapter 2 -- Give a high-level summary of P/P methodology. Discuss program management strategies that support the mission and function along with an organized and consistent approach. Consider and apply various characteristics to the AS from Chapter 2. Discuss metrics, key P/P management staff functions and senior leaders including the use of matrix management and Integrated Project Team approaches. Define requirements roadmap and desired outcome. Provide high-level summary of the requirements analysis. Include training requirements. Define and prioritize strategic performance based objectives.

#### 4 Business Strategy

See Chapters 1 and 2, and specifically Chapter 3, paragraph 3.2.1 thru 3.3.4. Identify the number and type of contracts anticipated. Address the contracting approach to include contract types, how competition will be sought, promoted and sustained, source selection

procedures, and sources. Explain and provide the analysis and rationale for the contracting strategy. Other areas to consider, high level details:

1. Consideration of Statutes (SB, ACA, Competition in Contracting Act (CICA), etc.)
2. How will the acquisition be funded
3. Type of business arrangements anticipated
4. Estimated dollar value
5. Type of funds
6. Notional discussion Contract Type
7. Length of Contract
8. Commercial Services - Justification if not used
9. Source Selection Process
10. Contract Management – Role of P/PM, Contracting Officer Representative and Contracting Officer

## 5 Risks Management

See Chapters 1, 2 (paragraphs 2.1.5 and 2.2.7), and 3 (paragraphs 3.1.2.5 and 3.3.1). Address risks and how they will impact the acquisition strategy. Address risk mitigation strategies. Risks include, but are not limited to, changes to the requirement, funding assumptions, contractor’s ability to function, political environment, technology, cost, technical information, performance, and schedule. Address mitigation plans and controls for each identified risk to assess remaining risks. Based upon the complexity of the acquisition, monitor and report to management on these as appropriate.

## 6 Technology

See Chapter 2, paragraphs 2.2.3, 2.2.4, 2.2.8, 2.2.10, and 2.2.11. Where appropriate, discuss how this program will support HHS’s enterprise architecture. Address interoperability with other systems, the use of COTS licensed software products, or open systems. Address Information Assurance and privacy considerations. Include information in the OMB guidance for Capital Investment where appropriate for inclusion in the AS.

## 7 Stability and Resources

See Chapter 2 paragraphs 2.1.2 thru, 2.1.2.2, 2.1.3, and 2.1.4 and also Chapter 3, paragraph 3.1.2.2 and 3.1.2.4

Using this table to summarize costs:

		<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>

		<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>

Describe principle sources of funding and/or funding agreements. Address any known funding constraints. Discuss human resources and information management resources needs. Address strategies to balance and achieve cost, schedule, and performance objectives with limited resources.

## 8 Procurement Forecasting

See Chapter 1, paragraph 1.1. Using Acquisition Alert 2014-01 HHS Procurement Forecast Directive, provide a summary list of all procurement opportunities associated with this program/project. Discuss the level and type of opportunities that may be available for small business involvement.

## 9 Testing

See Chapter 2 paragraph 2.1.3, 2.2.6, 2.8 and Chapter 3 paragraph 3.1.2.5, 3.1.2.7, and 3.2. Discuss the approach to testing, scheduling, initial operating capability, full operating capability, evaluation of results, approval process and what success looks like.

## 10 Milestone Schedules

See Chapter 1, paragraph 1.1; Chapter 2, paragraphs 2.1.1, 2.1.2, 2.2.1 and 2.2.10; Chapter 3, paragraph 3.0, 3.1.2.7, 3.2, 3.2.1 and 3.3.1. Considering the information in each chapter provide a high-level milestone schedule which details dates for major events such as: Timelines for tasks related to P/P management, Industry Day, issuance of an RFI/draft RFP, approved Acquisition Plan, issuance of the RFP, receipt of proposals, completion of evaluations and contract award.

## 11 AS Execution Phases

See Chapter 4 follow the criteria and provide the required documents.



## Appendix C

### Sample Risk Analysis Process

The probability and impact of occurrence for each identified risk is assessed by the P/PM, with input from the Project Team using the following approach:

- Probability - is the likelihood that a risk will occur.
- Impact - is the consequence the risk will have on the project when it does occur.

Risks are evaluated against a standard impact/probability scale using a clearly defined range, as identified in the table below, to decrease the ambiguity between different definitions of High, Moderate, and Low impact and results in a clearer picture of the High priority risks. Risks with High impacts and probabilities are those that need to be addressed first.

#### Risk Exposure Rating

Risk Exposure Rating	Description	Color Code
<b>HIGH (H)</b>	Unacceptable. Major disruption likely; different approach required; priority management attention required.	<b>Red</b>
<b>MODERATE (M)</b>	Some disruption; different approach may be required; additional management attention may be needed.	<b>Yellow</b>
<b>LOW (L)</b>	Minimum impact; minimum oversight needed to ensure risk remains low.	<b>Green</b>

#### Probability

The Probability of Occurrence Rating for each root cause uses the specified criteria shown in the table below. The P/PM must validate these definitions or modify them as necessary for their project.

#### Probability of Occurrence Rating

Rating	Value Assigned	Probability of Occurrence
<b>Near Certainty</b>	<b>0.90</b>	~90%
<b>Highly Likely</b>	<b>0.70</b>	~70%
<b>Likely</b>	<b>0.50</b>	~50%
<b>Low Likelihood</b>	<b>0.30</b>	~30%
<b>Not Likely</b>	<b>0.10</b>	~10%

## Impact

Impact of each risk is broken out into cost, schedule and performance (i.e., Program and Technical - requirements/quality) consequences. The ratings and types of Impact for each risk are established using criteria described in the table below. This Impact scale may not be appropriate for all projects, and may need to be modified based on the situation.

**Rating and Types of Impact Criteria**

Rating	Value Assigned	Program Impact	Technical Impact	Cost Impact	Schedule Impact
<b>Marginal</b>	<b>0.05</b>	Remedy will cause program disruption	Performance goals met, no impact on program success	Program budget not dependent on issue; no impact on program success; development or production cost goals not exceeded or dependent on this issue	Schedule not dependent on this issue; no impact on program success; development schedule goals not exceeded or not dependent on the issue
<b>Significant</b>	<b>0.10</b>	Shorts a significant mission need	Performance below goal, but within acceptable limits. No changes required, acceptable alternatives exist, minor impact on program success	Program budget impacted by < 1%; minor impact on program success; development or production cost goals exceeded by 1 - 5%; program management resources do not need to be used to implement workarounds	Non-critical path activities late; workarounds would avoid impact on key and non-key program milestones; minor impact on program success, development schedule goals exceeded by 1-5%
<b>Serious</b>	<b>0.20</b>	Shorts a critical mission need	Performance below goal, moderate changes required,	Program budget impacted by 1 - 5%; limited impact on program success; development or	Critical path activities one month late; workarounds would not meet program milestones;

Rating	Value Assigned	Program Impact	Technical Impact	Cost Impact	Schedule Impact
			alternative would provide acceptable system performance, limited impact on program success	production cost goals exceeded by 5 - 15%; program management reserves do not need to be used to implement workarounds	program success in doubt; development schedule goals exceeded by 5-10%
<b>Very Serious</b>	<b>0.40</b>	Potentially fails key performance parameter	Performance unacceptable; significant changes required; possible alternatives may exist; program success in doubt	Program budget impacted by 5-10%; program success in doubt; development or production cost goals exceeded by 15-20%; program management reserves must be used to implement workarounds	Critical path activities one month late; workarounds would not meet program milestones; program success in doubt; development schedule goals exceed by 10 -15%
<b>Catastrophic</b>	<b>0.80</b>	Jeopardizes an exit criterion of current acquisition phase	Performance unacceptable; no viable alternatives exist; program success jeopardized	Program budget impacted by 10%; program success jeopardized; development or production cost goals exceeded by 20 - 25%	Key program milestones would be late by more than 2 months; program success jeopardized; development schedule goals exceeded by 20%

Project root cause identification and analysis integrates the technical performance assessment, schedule assessment, and cost estimates using established risk evaluation techniques. Each of these risk categories (cost, schedule, and performance) has activities of primary responsibility, but is provided inputs and support from the other two risk categories. This helps to keep the process integrated and ensures the consistency of the final product.

The Risk Matrix table below identifies the distribution of High (H) (red cells), Moderate (M) (yellow cells) and Low (L) (green cells) Risk Exposure Rating (smaller number corresponds to lower Risk Exposure Rating) to be used when analyzing a risk. Projects shall use this Risk Matrix or tailor it to better fit the size and scope of specific projects or management practices of the organization.

**Risk Matrix**

		Impact				
		Marginal (0.05)	Significant (0.1)	Serious (0.2)	Very Serious (0.4)	Catastrophic (0.8)
Probability	Near Certainty (0.9)	0.045 (M)	0.09 (H)	0.18 (H)	0.36 (H)	0.72 (H)
	Highly Likely (0.7)	0.035 (M)	0.07 (M)	0.14 (M)	0.28 (H)	0.56 (H)
	Likely (0.5)	0.025 (L)	0.05 (L)	0.1 (M)	0.2 (M)	0.4 (H)
	Low Likelihood (0.3)	0.015 (L)	0.03 (L)	0.06 (L)	0.12 (M)	0.24 (H)
	Not Likely (0.1)	0.005 (L)	0.01 (L)	0.02 (L)	0.04 (M)	0.08 (M)

Risks that fall within the HIGH (H) and MODERATE (M) zones will have risk response plan which may include both a risk response strategy and a risk contingency plan.

**Appendix D**  
**Acquisition Strategy Signature Page**

**Program Manager - Recommend Approval**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**Division Chief Information Officer (IT Goods/Services Required) - Concur with Recommendation**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**Division Head or Designee - Approve Recommendation**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**Division Office of Small and Disadvantaged Business Utilization Representative – Concur with Recommendation**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**Head of Contracting Activity - \_\_\_\_\_ Concur with Recommendation (>= \$20M or High Risk)**  
**\_\_\_\_\_ Approve Acquisition Strategy (< to \$20M)**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**When Required a Department Level Review and Approvals Specific to Areas of Responsibility –For example if the pending acquisition is not to procure IT then the CIO does not need to approve the Acquisition Strategy – Indicating “Not Applicable” in the Name Block is acceptable.**

**Chief Information Officer (IT Goods/Services Required) – Approve Acquisition Strategy HHS Implementation of FITARA May Provide Additional Guidance**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**Additional Approvals are Required if the Total Estimated Value Including Base and All Options is Over \$20M**

**Director, Office of Small and Disadvantaged Business Utilization Representative – Approve Acquisition Strategy**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

**Senior Procurement Executive – Approve Acquisition Strategy**

NAME: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_