Strengthening Outcomes through the Alignment of Acquisition, Project, and Program Activities

Introduction

The effective integration of acquisition, project, and program activities lies at the heart of an agency’s ability to achieve desired cost, schedule, and performance outcomes from programs that rely significantly on contractors to provide supplies or services.

All agencies have internal processes for identifying and approving acquisition strategies and managing their acquisitions. These processes vary widely from agency to agency. Some agencies use highly structured processes supported by multi-disciplinary advisory panels and peer reviews while others rely on less structured and more informal processes. The effectiveness of these structures in establishing and managing cost, schedule, and performance shortcomings on acquisitions also varies as does the extent to which contract goals are integrated with goals that have been established at the project level, where investment decisions are typically made, or at the program level where goals for the agency’s Strategic Plan are made.

A 2008 report by OMB’s Office of Federal Procurement Policy found that progress in implementing performance-based management -- i.e., the establishment of cost, schedule, and performance goals and attainment of 90% of these goals -- for major projects has been limited in many civilian agencies.¹ Capital planning and investment control policies are generally not as well established for non-information technology (IT) projects, and performance-based management systems, such as earned value management, are not always being used to track cost, schedule, and performance. These weaknesses can significantly impair an agency’s ability to identify and take corrective action on contracts that are wasteful, inefficient, or not otherwise meeting the agency’s needs.

Agencies should strive to have well-defined processes to guide their investment decisions and the development, execution, and implementation of major acquisitions and other priority or high risk acquisitions, including those for services. Specifically, the agency should have:

• A clear process with defined phases, decision points, and an identified decision authority to evaluate whether an investment should proceed to the next phase in the investment life-cycle.

• A process for insuring that proper management and oversight capacity is in place for the next phase of the investment life-cycle before approval to proceed is given.

• A strong governance structure to inform and support the decision authority in making successful investment decisions; such structures generally will include one or more review

¹ The Federal Acquisition Streamlining Act of 1994, Title V, requires executive agencies to establish cost, schedule, and performance goals, for acquisitions, and states that agencies should achieve, on average 90 percent of those goals. Subtitle B of FASA V requires OFPP to provide Congress with an assessment of civilian agencies’ progress in implementing this mandate for major acquisitions. For a copy of 2008 OFPP’s report, go to http://www.whitehouse.gov/omb/assets/procurement/fasa_v_report_2008.pdf.
board, a project management office, integrated project teams, and peer reviews.

- The ability to measure performance achieved from investments and the resulting acquisitions, including business cases tied to mission statements, long-term goals and objectives and annual agency performance plans, the use of earned value management, and operational analysis.

**The purpose of this document**

This document is intended as a resource to assist agencies who are considering where opportunities may exist to improve agency performance through the strengthened relationship of acquisition, project, and program activities. The document provides a basic framework for analysis.

The discussion in this document is taken largely from OMB’s Capital Programming Guide and OMB Circular A-11, Part 7, Planning, Budgeting, Acquisition, and Management of Capital Assets. Agencies may also wish to review Guidelines for Assessing the Acquisition Function, issued by the Office of Federal Procurement Policy. The guidelines include a series of critical questions to help agencies identify factors that may contribute to weaknesses in the planning and execution of major projects. The template helps agencies assess if they are integrating organizational goals into the capital decision-making process, evaluating, selecting, and controlling capital assets using an investment approach, and balancing budgetary control and managerial flexibility when funding capital assets.

**Scope of review**

As a general matter, agencies that are reviewing the alignment of acquisition, project, and program activities should focus their reviews on major investments and major acquisitions. However, agencies should also give attention to non-major investments and acquisitions that involve high risk or other priority activities. Particular attention should be given to alignment efforts associated with programs that support high-priority performance goals identified by agencies pursuant to OMB Memorandum M-09-20, Planning for the President’s Fiscal year

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2 Agencies should align acquisition objectives (which may involve one or multiple contracts), project objectives, and program objectives. This document identifies projects separately from acquisitions and programs since investments are often made in connection to projects, which would be a component of a program.

3 For the Capital Programming Guide, go to http://www.whitehouse.gov/omb/circulars/a11/current_year/part7.pdf. For Circular A-11, Part 7, go to http://www.whitehouse.gov/omb/assets/a11_current_year/s300.pdf. The discussion in this document is not intended to modify the policies in those documents. Agencies are encouraged to review these documents, as necessary.


5 As explained in Circular A-11, a major investment requires special management attention because, among other reasons, it: (1) is important to the agency’s mission or function; (2) is significant in terms of program or policy implications; (3) has high executive visibility; (4) has high development, operating or maintenance costs; (5) is funded through other than direct appropriations; or (6) is defined as major by the agency’s capital planning and investment control processes.
2011 Budget and Performance Plans.\textsuperscript{6}

In addition, agencies should address both IT and non-IT investments. For a number of years, the government has focused its use of performance-based management on IT investments and acquisitions. As a result, progress in implementing performance-based management for non-IT acquisition programs generally has been more limited, especially in civilian agencies.

**Issues for review**

In evaluating their current environment and areas for strengthening, agencies should review (i) processes, (ii) governance structures, and (iii) performance measurement tools.

I. **Review processes and practices used to guide major investment decisions and the relationship of these processes to the lifecycle of major acquisitions.**

Agencies should have internal guidelines to address how major investment decisions are made and measured. These same guidelines should address how major acquisitions funded with these investments are made and how cost, schedule, and performance of the acquisition is tied to the goals of the investment.

The agency guidelines should specifically identify each process phase in the investment lifecycle and the decision authority that will provide approval prior to an investment moving into the next phase in the cycle, also referred to as a critical decision point or milestone. Each process phase should have a specific purpose and establish a base of knowledge for the next phase. The decision points between phases should allow the decision authority to determine whether the necessary knowledge has been developed and to decide whether the investment is ready to proceed to the next phase or whether it should be modified or terminated.

Although terminology and the precise delineation of phases in the investment cycle may differ, there should be clearly defined phases for: planning, acquisition, and management in-use.\textsuperscript{7}

- In the planning phase, the agency should analyze alternatives, formulate an acquisition strategy, and develop a risk management plan.\textsuperscript{8} Before moving from the planning phase to

\textsuperscript{6}In addition to major acquisitions and acquisitions that support high-priority performance goals, other acquisitions deserving of management attention include those that: (1) are critical to the agency’s mission, (2) are designated as high risk by the agency’s policy; (3) are identified by the agency’s inspector general or the Government Accountability Office as having significant performance problems on previous contracts; (4) are identified in agency management reports as having performance problems; or (5) will be awarded or managed by organizations with an identified skills or capacity gaps, such as insufficient program management, uncertified contracting officers or contracting officers technical representatives, or lack of other support.

\textsuperscript{7}These are the major phases identified in OMB’s Capital Programming Guide.

\textsuperscript{8}Requirements development is a key activity in this phase. Program managers should work closely with internal agency users, contracting officials, and other personnel, as appropriate, to define needs with sufficient specificity such that offerors may make informed business decisions on whether to respond and perform the due diligence necessary to propose the best solutions possible when responding to a statement of work in the acquisition phase. To guard against “specification creep,” where requirements grow uncontrolled to meet future potential needs or to
the acquisition phase, the decision authority should have an acceptable project plan which may include one or multiple acquisitions and explains the chosen alternative, the acquisition strategy, the risk management plan, the performance measurement baseline (i.e., identifying the total projected costs, the anticipated completion date, and the associated level of functionality), and the performance measures. Project plans may be scaled in accordance with the size and complexity of the investment, but all topics must be addressed.

- In the acquisition phase, the agency will award contractual instruments to implement the investment decision, based on the results of market research and its strategy for making the most effective use possible of competition and financial incentives. Cost estimates and risk assumptions should be reviewed by systems engineers and cost estimators to ensure the government has a sound basis for making the award. Each major acquisition should include goals that recognize the amount and impact of risk on cost, schedule, and technical effort. These goals should tie to the project (investment) goals. The decision authority should be able to address whether the project and acquisitions that support it are meeting their respective cost, schedule, and performance goals.

- In the management in-use phase, the agency should perform periodic operational analyses to evaluate the technical and financial performance of the investment. During this phase, the agency should be continually evaluating whether the acquired asset (or service) is still needed and supports the agency mission, the average annual operating and maintenance costs for the investment and whether the agency is spending what it expected to spend on operations and maintenance. The agency should use this information in deciding whether it should continue, modify, or terminate the investment and associated acquisitions.

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incorporate emerging technology that would be “nice” to have, emphasis should be placed on core requirements needed to meet the mission needs. This result can be accomplished through modular or spiral development acquisition. Once a solution meets the core requirements, additional functionality can be added in a later stage of the project, if cost-beneficial.

9 See section I.5.5.2 of the Capital Programming Guide for a discussion on contract type.
Management of the Defense Acquisition System

The model depicted below is a simplified version of the acquisition management system used by the Department of Defense (DoD) to provide a flexible management framework for translating capability needs and technology opportunities into stable, affordable and well-managed acquisition programs.

<table>
<thead>
<tr>
<th>Capability Needs Determination</th>
<th>Materiel Solution Analysis</th>
<th>Technology Development</th>
<th>Engineering &amp; Manufacturing Development</th>
<th>Production &amp; Deployment</th>
<th>Operations and Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validate &amp; document agency capabilities</td>
<td>Assess potential solutions</td>
<td>Develop prototypes &amp; demonstrate critical technologies</td>
<td>Integrate systems &amp; develop mfg processes</td>
<td>Achieve operational capabilities</td>
<td>Sustain the system or service</td>
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<td></td>
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<td>***</td>
</tr>
<tr>
<td>Entrance criteria</td>
<td>Proposed materiel solution and full funding for planned technology development</td>
<td>Entrance criteria</td>
<td>Approved acquisition strategy &amp; program baseline; mature technology and full funding</td>
<td>Evaluation criteria</td>
<td>Evaluation criteria</td>
</tr>
<tr>
<td>Approved set of capability needs based on analysis of current mission performance</td>
<td></td>
<td></td>
<td></td>
<td>Acceptable performance in developmental test &amp; evaluation; mature software capability; no significant mfg risks &amp; mfg under control</td>
<td>Successfully full-rate production decision</td>
</tr>
</tbody>
</table>

Key characteristics:

- **Formal reviews are held at specified decision points.** Results are documented in a decision point memorandum within seven working days of the review.
- **Each phase has specific entrance criteria.** Example: before moving from the technology development phase to the engineering and manufacturing development phase, the decision authority must approve the acquisition strategy and the program baseline. If either item is unacceptable, the acquisition is not permitted to proceed to the next phase.
- **Decision points may occur within a phase.** Example: during the production & deployment phase, the decision authority will determine whether the program is ready to proceed into full scale production.
- **Decision points may be added to improve program control.** Example: A critical design review assessment could be required during engineering & manufacturing to identify key manufacturing processes and reliability targets.

General reference: DoD Instruction 5000.02 (December 8, 2008)
II. Review the governance structures the agency uses to (i) make decisions on its investments and acquisitions as they reach critical decision points and (ii) perform analyses to support its decisions.

- **Review boards.** Agencies, especially larger agencies, should make investment decisions through, or with the support of, one or more standing review boards. The review board should meet periodically at key decision points to decide whether to continue, modify, or terminate investments. Its members should be senior agency officials responsible for program, acquisition, budget/finance, information technology, and other functions. In smaller agencies, where the size and complexity of acquisitions do not warrant the formation of a board, the function may be vested in a smaller team or an individual.

In a larger agency, separate multi-disciplinary advisory panels may be convened. For example, the senior-most agency officials might be brought together to focus on whether a proposed program or project is aligned with the agency’s strategic plan and is compatible with expected resources and capabilities. Before resource expenditures are actually authorized for a major acquisition, another panel might be convened to review the acquisition strategy. A third interagency panel at the project or acquisition level might be brought together to hear a presentation by the acquisition office of the acquisition plan and engage with program, budget, and other stakeholders to address gaps and reach agreement on the formal blueprint to align acquisition and project decisions.

The number of times an investment is reviewed by senior management should be based on associated levels of risk involved in the acquisition. The size of an investment and its importance to achieving the agency mission should be taken into consideration when defining criteria for executive review.

- **Project management office(s) (PMO).** Agencies should have one or more PMOs to provide technical support to management executives, program and project managers, contracting officials, and others. PMOs also manage policies and practices for project management (i.e., the structured planning, execution, and evaluation of a project) and performance measurement (i.e., the tools that enable agencies to identify cost, schedule, and performance goals and continually evaluate project and contract performance).

The scope of a PMO’s authority may cover one function (e.g., information technology) or multiple functions. Irrespective of the number of PMOs, technical support should generally be provided to all functional areas whenever possible. The nature of a PMO’s authority may vary but it should review various aspects of project (and program) management, including: adequacy of technical approach, schedule, estimated costs and risk management. The PMO may also make recommendations to improve performance.

- **Integrated Project Teams (IPTs).** IPTs should be used to analyze the performance and capability of the portfolio of assets used by the program. Each IPT should include experts in project management, resource management, procurement, and other disciplines, as necessary, to evaluate all aspects of the project. The IPT should (1) establish or review a baseline inventory of existing assets, (2) analyze and recommend alternative solutions, (3) manage or review the acquisition, if approved, and (4) oversee the asset (or service) once in use. The
IPT should ensure that the proposals and in-house estimates clearly recognize the amount of impact of risk on cost, schedule, and technical effort. When possible, senior members of the IPT should be encouraged to remain with the project from baseline assessment into management -in-use or at least until the phase that is underway is completed or a milestone during the phase is completed where accountability for success or failure to achieve goals may be assessed.

The head of the IPT should be provided with a written charter defining the team's responsibilities, budget constraints, and the extent of authority and accountability for accomplishing project objectives. The charter should be updated as necessary based on decisions of the Review Board. Management layers between the head of the IPT and senior management should be limited to ensure accountability for the IPT and timely decisions from senior officials.

- Peer reviews. Agencies should conduct strategic or tactical peer reviews with subject matter experts that bring to bear the agency's best expertise to ensure effective execution of acquisition, project, or program responsibilities. Peer reviews can be conducted in a variety of ways, but typically evaluate if an acquisition for carrying out the investment is being planned or managed effectively and offer constructive ideas and alternatives for achieving desired outcomes.

Ideally, a peer review should operate in an advisory manner so that its inputs and recommendations facilitate frank and candid discussions regarding the soundness of the business and contracting approaches employed in the particular acquisitions and the results of these discussions may be shared with acquisition organizations across the Department. Members of the peer review team should have previous acquisition or source selection experience in order to provide sound, impartial perspective which in turn produces an improved acquisition validation. Members should be independent of the source selection team.
Peer Reviews at DoD

In September 2008, DoD instituted a peer review program for its largest acquisitions for supplies and services to support continuous improvement in the quality of its contracting processes, ensure consistent implementation of acquisition policies and regulations by its contracting officials, and facilitate cross-sharing of best practices and lessons learned across the Department.

Key characteristics:

- **The team offers practical advice based on prior experience.** Peer review teams are comprised of senior contracting leaders from across DOD with relevant background. The teams also include members of the Office of General Counsel and may include other officials, such as program managers and systems engineers.

- **Reviews are conducted at critical junctures where the value of advice is greatest.** Pre-award peer reviews are conducted prior to (a) issuance of solicitation, (b) request for final proposal revisions, and (c) contract award. The same review team performs all three reviews, whenever possible. Post-award peer reviews occur prior to every option period and focus on: (1) adequacy of competition, (2) an assessment of actual contract performance, and (3) the adequacy of government surveillance of contractor performance.

- **Key documents are reviewed to determine if sound practices are being followed.** Pre-award reviews will commonly consider: requirements documents, acquisition strategy or plan, source selection plan, request for proposal, source selection evaluation board analysis and findings, award/incentive fee arrangements, documentation of pre-negotiation objectives, cost/price negotiation, and the assessment of contractor risk in determining profit or fee. Post-award reviews may include analysis of contractor surveillance documentation, the contract, and modifications.

- **Services acquisitions are reviewed against well-established tenets for achieving desired program outcomes.** Pre-award tenets include clearly defined requirements; performance periods that are consistent with technological dependence, industry standards and sufficient time to reclaim program ownership such that fair competition can occur; use of appropriate contract type; the extent of reliance on the contractor to perform functions that are closely associated with inherently governmental functions; use of objective criteria to measure performance; documentation of efforts to reduce and eliminate potential conflicts of interest; and assigned contracting officer representatives that use tailored quality assurance surveillance plans to monitor contractor performance. Post-award tenets include periodic contractor performance assessments, and appropriate staffing of government contract management and oversight functions; and the extent of reliance on the contractor to perform functions that are closely associated with inherently governmental functions.

- **Recommendations are advisory in nature.** This approach preserves the authority, judgment, and discretion of the contracting officer and senior officials of the acquiring organization.

For additional information, go to [http://www.acq.osd.mil/dpap/cpic/cp/peer_reviews.html](http://www.acq.osd.mil/dpap/cpic/cp/peer_reviews.html)
III. Review how the agency measures performance.

- Business cases and acquisition planning. Business cases and acquisition plans provide agencies with the opportunity to demonstrate the alignment between acquisition, project, and program (agency mission) objectives. Agencies should justify funding for all major investments with a business case. The business case should also demonstrate how the overall investment is aligned with mission statements, long-term goals and objectives, and annual agency performance plans developed pursuant to the Government Performance and Results Act (GPRA).

The primary format for agency submission of business case information is Exhibit 300, Capital Asset Plan and Business Case Summary, prescribed by A-11, Part 7. The Exhibit 300 requires agencies to provide specific information on acquisition strategies and project management, performance goals and measures, and results achieved against goals.

- Earned value management (EVM). The Federal Acquisition Regulation requires agencies to use EVM for all major acquisitions with development effort. EVM, a performance-based management tool for monitoring progress, provides agency management with an early warning system that detects potential overruns and delays. It integrates the scope of work with cost, schedule, and performance elements (e.g., EVM enables a comparison of planned spending with actual spending). EVM can be used to monitor progress of both the investment and individual acquisitions. Using EVM at both levels can help the agency better isolate the source of performance problems.

In order to implement an EVM system effectively, the agency should have a process for collecting actual costs, generating an EVM report, and delivering the report to an executive with appropriate understanding of EVM terminology to make an informed management decision regarding the strength of the project and/or acquisition. The EVM report would typically include a cost variance and schedule variance that are calculated using the performance measurement baseline developed during the planning phase. If the variance for cost and schedule was significant, for example, the executive might initiate a peer review of project management processes.

- Operational analysis. Once an acquisition enters into an operations and maintenance phase, agencies should periodically conduct operational analyses to evaluate the technical and financial performance of the purchased asset or service. Performance measures should be tailored to the specific asset (e.g., the acquisition of a new office might have performance measures for energy efficiency). In general, investments that are not providing value or are no longer needed should be terminated.

- Review boards and peer reviews. Review boards and peer reviews can serve as important mechanisms for measuring performance where they are used to assess performance and ensure that the investment is managed effectively.
Governance at the National Aeronautics and Space Administration (NASA)

NASA uses a variety of review bodies and processes to align its acquisition, project, and program activities. Key features of NASA’s governance model include:

- **Program Management Council (PMC).** The PMC is composed of senior executives and meets monthly to review performance and mission alignment, approve entry into subsequent lifecycle phases, and ensure compliance with agency policy. Reviews may be at the contract, project or program level.

- **Baseline Performance Review (BPR).** On a monthly basis, senior managers monitor the agency’s largest and most complex contracts through an examination of project and program performance. Current value is compared to original value, progress toward milestones is tracked, and any other significant procurement actions are evaluated. The BPR facilitates the generation of data that can be used to evaluate performance against a baseline and perform root cause analysis.

- **Standing Review Boards (SRB).** The boards perform independent lifecycle reviews of major projects and programs. The SRB has an advisory role as opposed to formal authority. Board members are selected based on their expertise and independence. The members provide expert assessments of technical issues, risk and progress.