
Contents

Overview	2
Need to Change	3
The Solution	5
Dramatically streamlined process	6
Empowered project teams	10
New uses of technology	10
Redefined relationships with vendors	11
Functional Economic Analysis	13
Next Steps	18
Appendices	
A Concept of Operations	

1.0 Overview

The Federal acquisition process is too complex and takes too long. The inefficiencies in the process often cause program offices to experience delays in achieving mission critical results. Recent General Accounting Office (GAO) reports and the National Performance Review (NPR) further illustrate problems with the Federal acquisition and procurement processes.

In response to these observations and as part of an overall administrative strategic planning effort, the Department of Commerce (DOC) Office of Acquisition Management seeks to dramatically streamline the acquisition process. To this end, DOC initiated a project to reengineer the acquisition process. The timing and results of this business process reengineering (BPR) effort are particularly critical. The department is currently developing the Commerce Administrative Management System (CAMS). DoC Express is the procurement module of CAMS. The reengineering effort helps insure the problems of the existing system are not automated and that the system will provide the functionality required to enable a more effective, customer focused acquisition process.

The acquisition reengineering project focuses on the process to acquire goods and services valued at \$100,000 and above. The scope of this process includes need recognition to contract closeout. The project is designed to produce:

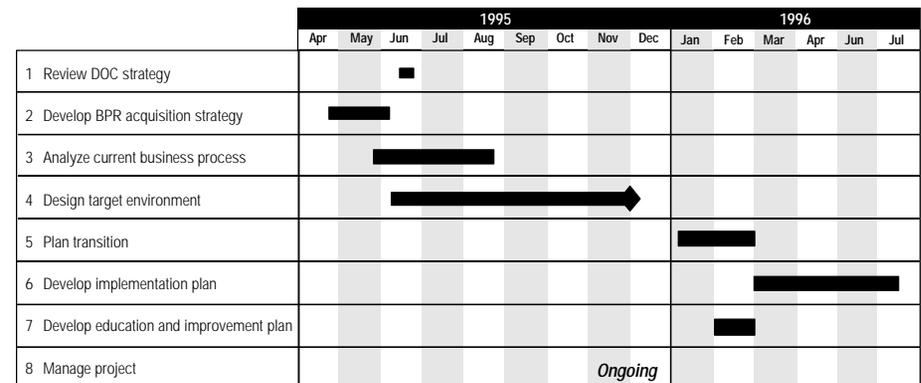
- reengineered acquisition process
- streamlined standard business practices to support the acquisition process
- functional requirements for the acquisition portion of CAMS
- performance measures and targets to monitor the effectiveness of the reengineered process
- cost reductions or significant performance improvements with marginal cost increases

As illustrated in Figure 1, the acquisition reengineering project consists of eight phases. The first four phases are complete. This report presents the output of Phase 4: Design Target Environment. The report is organized

into the following sections:

- **Need to Change** - presents the business issues and opportunities for improvement present in the current acquisition environment.
- **The Solution** - describes the proposed target environment—process, technology, culture, and organizational changes—and why it makes sense given the existing challenges.
- **Functional Economic Analysis** - provides a high level assessment of the risks, costs, cost savings, and benefits associated with the target environment.
- **Next Steps** - offers an overview of the activities necessary to move from the current to target environment.

Figure 1 - Project Plan



2.0 Need to Change

The need to change the acquisition process is supported by many issues and quantitative factors. Customers have offered their views on what is wrong with the process and what has to change to meet their needs. Issues and opportunities were collected in several focus sessions with customers, suppliers, and stakeholders. The issues were then summarized so that their root causes could be identified. The project team used comments from program managers and contract officers as input to the target environment design. Figure 2 shows a sample of business issues and probable causes.

Figure 2 - Summary of Business Issues and Primary Causes

Business Issue Summary	Causes
Program staff are not highly knowledgeable of the acquisition process	Lack of communication between program offices and procurement Program offices not trained in what procurement wants
Procurement is not viewed positively within the department	Organizational structure fosters rigidity/departmentalization, Lack of trust
Outside reviews and oversight create time delays	Statutory/regulatory requirement , Superiority complex
Procurement function is centralized	Risk avoidance, Limited resources
Bureaus do not follow standardized policies and procedures	Program and procurement offices not fully aware of how each other operates
Federal Acquisition Regulation and other regulations conflict and are not applied consistently	Lack of clarity, Regulations do not keep up with changing technologies
Program and procurement staff tend not to communicate effectively	Turf issues/battles, Fear
"Us versus Them" Mentality often exists between the DOC and vendors	Past experiences, Lack of trust
Lack of detailed planning	Inadequate lead time for good planning and analysis
Procurement is not involved early in the process	People involved up front want ownership, Some program staff have "throw it over the wall" mentality and expect procurement to pick up the pieces
Excessive documentation	Regulations require every change to be documented, Culture, Risk avoidance from contract officers
Bureaus have limited procurement authority	DOC policy, GSA regulations
Protests	Lack of consistency
Poor contract monitoring	No guidelines to monitor performance, No clear standards against which to accept/inspect goods and services, No infrastructure to support performance monitoring

These business issues contribute in many ways to the inefficiencies of the acquisition process. Lack of consistency, excessive regulations, and approval cycles all impact the amount of time it takes to perform the process.

The need for change is also supported by the results of the cycle time analysis performed during the Current Process Analysis. Figure 3 shows the value-added ratios, ranges of elapsed time (ET), and other metrics which indicate how the current process performs under the three scenarios. The figure also offers a point of comparison relative to desired performance targets for the To-Be environment. Elapsed time is the total time between the time an input is received and the output is produced. This also reflects the time a customer waits. The value added ratio is a

Figure 3 - Indicative Process Metrics

Scenario	COTS	Support Services	Systems Development
Current Elapsed time (definition to contract award)	48-75 weeks	47-95 weeks	180-386 weeks
Value Added Ratio	1.1%	2.5%	5.2%
Queue time	14 weeks	21 weeks	29 weeks
Number of reviews/approvals	14	14	17
Target Elapsed time (acquisition launch date to contract award)	15 days	30 days	90 days

ratio of the value added time spent doing the work over the elapsed time.

These numbers are obvious indications that the process takes too long, is plagued with numerous reviews, and laden with activities that may add no value to the customer.

So many approvals and review boards are necessary because no one individual or group is empowered to make decisions or encouraged to take risks in order to satisfy customers' needs. Relationships with vendors are not solid and can harm the process in several ways. Excessive queue times provide the possibility for technologies To-Be out of date or for vendors to lose sight of what the customer needs. There is also limited involvement from the vendors. These and many other factors are what drove the project team to change the current environment.

Opportunities for Improvement

During focus sessions, customers and stakeholders identified many ways to improve the acquisition process. In Figure 4, we present a summary of customer and stakeholder suggestions to improve the acquisition process and environment. Their suggestions are organized around the four themes that drive the redesign.

Figure 4 - Four Redesign Themes

Themes	Key Customer Comments
Dramatically streamlined process	<ul style="list-style-type: none"> ■ Reduce time from announcement to award ■ Reduce documentation ■ Simplify RFPs and what they require ■ Follow one process for all types of procurements (regardless of \$ amount) ■ Simplify FAR and procurement regulations ■ Improve communication between procurement and program office ■ Clear evaluation criteria
Empowered project teams	<ul style="list-style-type: none"> ■ Make program office staff knowledgeable about procurement process ■ Delegate authority to program staff ■ Reduce levels of approval ■ Empower contract officers
Redefined relationships with vendors	<ul style="list-style-type: none"> ■ Require vendors to supply annual reports and certs rather than with each proposal ■ Form partnerships with vendors ■ Create a more positive relationship between vendor and staff ■ Focus on customer, not process ■ Prequalify bidders
New uses of technology	<ul style="list-style-type: none"> ■ Automate the process ■ Advertise via other vehicles

3.0 The Solution

The To-Be acquisition environment is the product of the Acquisition BPR team's efforts to find creative, practical, and feasible solutions to issues and opportunities that plague the current acquisition process. The BPR team engaged in creative idea generation exercises, consulted with customers and stakeholders, and researched best practices and enabling technology.

Over a series of weeks the team used these inputs to develop a concept of operations, detailed process maps, and IDEF0 models for the To-Be acquisition environment. The team presented the draft concept of operations to the process owner, CAMS Steering Committee, and customers and stakeholders to learn their reaction and collect additional input. The result of these efforts is an acquisition process that:

- is significantly faster
- involves the relevant parties early in the process
- focuses on results not process
- empowers staff
- encourages internal and external partnerships
- leverages technology

The vision for the target environment is based on the four redesign themes. The new environment was designed to satisfy the themes, meet the performance targets the team set, and specify the organization, technology, processes, and people necessary to support it. The principles behind the themes are:

- **Dramatically streamlined process** - Significantly improve cycle time and value-added activities within the process by minimizing reviews and rework.

- **Empowered project teams** - Enable a cross-functional team to spend resources without requiring approval, and To-Be innovative with ways to achieve their mission objectives.
- **Redefined relationships with vendors** - Solicit vendor input early in the process so they can respond to what is needed and have incentives to do so.
- **New uses of technology** - Eliminate paper wherever possible and provide project teams with on-line guidance, management capabilities, and access to the Internet.

This section illustrates the key characteristics of each theme in more detail. The detailed concept of operations for the To-Be acquisition process is presented in Appendix A. This document explains in detail the key concepts described in this section.

This section of the report:

- Presents the streamlined acquisition process and demonstrates the resulting processing savings
- Describes the concept of the empowered project team
- Explains how technology will enable the reengineered process
- Introduces the concept of redefined relationships with vendors
- Demonstrates how the To-Be environment addresses existing business issues and customer and stakeholder concerns.

3.1 Dramatically streamlined acquisition process

The reengineered process is designed to minimize non-value added activities, reduce approvals, involve the right people early in the process, and reduce the amount of rework. Figure 5 compares the top map for the

To-Be and As-Is processes.

We provide an overview of the new process. Appendix B contains detailed narratives and process maps which describe each aspect of the process. Figure 6 illustrates the new process from an approved high level plan and budget to contract closeout. The remainder of this section provides an overview of the new process.

Map Section 1.0: Plan Acquisition

An integrated strategic plan and budget initiate the acquisition process. Strategic planning sets the stage for results-oriented management, a recurring theme for the new process. The strategic plan and budget offer a mechanism to obtain initial department and budgetary approvals. These documents also define and annually announce agency initiatives

Figure 5 - High Level Difference Between As-Is and To-Be

As Is Process Top Map		
1.0 Define need	2.0 Produce goods and services	3.0 Administer contract
<ul style="list-style-type: none"> ■ Write needs statement ■ Choose acquisition approach ■ Evaluate options ■ Analyze cost ■ Assemble requisition package 	<ul style="list-style-type: none"> ■ Plan procurement ■ Issue solicitation ■ Evaluate offers ■ Negotiate contract ■ Award contract 	<ul style="list-style-type: none"> ■ Monitor performance ■ Modify contract ■ Pay for goods and services ■ Process claims ■ Closeout contract
To Be Process Top Map		
1.0 Plan acquisition	2.0 Screen vendors and award contract	3.0 Manage for results
<ul style="list-style-type: none"> ■ Form project team ■ Develop project agreement 	<ul style="list-style-type: none"> ■ Publish project agreement ■ Identify viable alternatives ■ Purchase COB ■ Award system development contract ■ Issue task order/setup TO contract 	<ul style="list-style-type: none"> ■ Manage COB performance ■ Manage TO performance ■ Manage system development performance ■ Process claim ■ Modify contract ■ Evaluate and closeout contract

and program/project objectives.

- **Form Project Team** - Teams are created around mission objectives rather than specific acquisitions. One team may be responsible for several acquisitions. The need for acquisitions arises as a result of needs identified during the project team's project planning process. The project team is a matrix group of functional experts (contracting, program, budget, technical, legal, information technology, etc.), whose skills and participation are necessary to achieve program objectives.
- **Develop Project Agreement** - The project agreement is a high level document which is prepared by the project team and describes the overall project goals, milestones, budget and resources. It constitutes the basis for team empowerment and accountability, serves as the team's vision for mission accomplishment and is used to inform potential private sector participants of an emerging program.

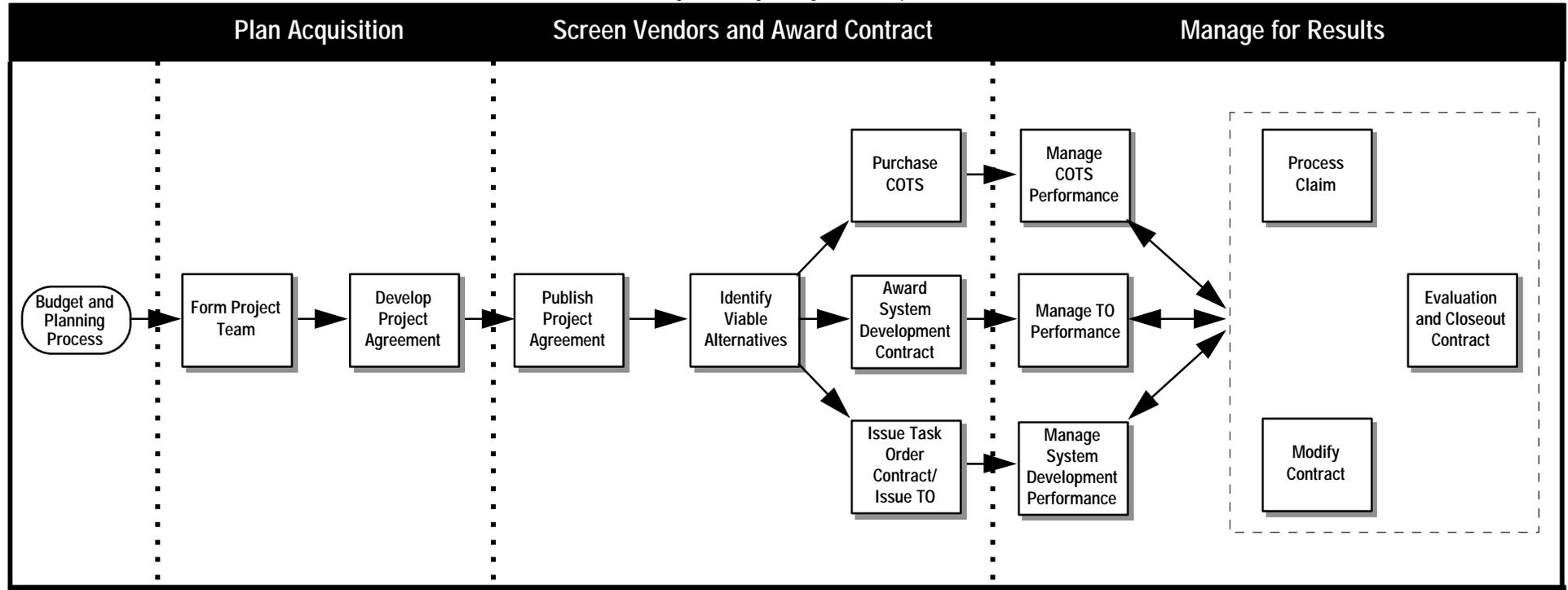
Map Section 2.0: Screen Vendors and Award Contract

The project agreement is the primary input to this stage of the acquisition process. Based on the objectives and promised results outlined in the project agreement, the team will determine the goods and services that it must acquire. The team intends for the publication of the strategic plan and project agreement to meet the statutory publication requirement. A key difference here is the use of a statement of need rather than a detailed statement of work. The structure of a statement of need ensures that vendors offer the most appropriate solution.

- **Publish Project Agreement - The team, by publicizing the project**

agreement objectives. The purpose will be to identify approaches and

Figure 6 - Target Design Level I Map



agreement on a vehicle, such as the Internet, seeks and encourages open communication with industry pertinent to achieving project goals. Ground rules such as procedures for conducting the dialogue with industry, evaluation factors, acquisition goals, and method to down-select vendors are published with the project agreement.

- **Identify Viable Approaches** - During this period a dialogue will occur between vendors and the government concerning proposed approaches and capabilities to meet the project

vendors with a high likelihood of meeting the project agreement objectives. At this time, discrete acquisitions will be determined and classified as COTS, Support Services, or System Development. The process then follows the path relevant to an acquisition.

- **Purchase COTS** - If the team determines the need to purchase COTS items, it publishes a description of the applications needed via the Internet. The statement of need indicates that the vendors have 48 hours in which to update the electronic catalog and pricing. After the 48 hour waiting period has passed, the team then "shops" via the Internet in the catalogs of eligible vendors.

At least three vendors are considered. The team considers all the

terms each vendor presents. The team considers past performance, price, and vendor ability to meet the required delivery schedule. Once the decision is made, an order for the items is placed electronically. No contract document is generated since standard "COTS" clauses are incorporated by reference into the order.

- **Award System Development Contract** - The statement of need is issued to all vendors who responded to the project agreement and met the specified screening criteria. Evaluation criteria for further down selection are contained in the statement of need. The statement of need includes limitations on length of response, instructions for response preparation/presentation, and an explanation of the incremental development process. Oral proposals are encouraged for vendor responses.

Vendors are asked to demonstrate capabilities/systems as necessary, within the time limits established. The information from the demonstration will be considered as part of the evaluation and down-selection process.

- **Issue Task Order/Setup Task Order Contract** - This process describes the activities involved both to award a master contract under which individual task orders can be issued and to issue individual task orders under existing task order contracts. The Department will encourage multiple awards to promote competition, greater flexibility, and more opportunities for teams to quickly and efficiently secure goods and services.

Because the task order contract(s) may not result in an immediate order for goods and services, awards(s) without discussion will be encouraged, depending on the amount and quality of information available. The award of a task order contract without discussion is acceptable, given that at the point of task order placement, the customer is able to ask more specific and relevant questions.

Map Section 3.0: Manage for Results

Once the contract is awarded, the project team stays in place to manage the contract. The team is responsible to not only ensure the terms and conditions are met, but also that the desired results are achieved. In the new environment, the payment process is paperless with no invoice required. The actual closeout is also included as part of the contract, so that the team and the vendor are both held responsible to complete it in a timely manner. Each of the three scenarios require the same basic steps to manage performance, but deviate in some areas, such as time involved.

- **Manage COTS Performance** - The vendor delivers the product, which automatically triggers payment and updates an inventory tracking database. COTS products are not tested. If there are any problems with the COTS product delivered, the team will work with the vendor to resolve the problem. The end users will use the product over a period of time to determine if their needs are met.

Each month, the project team will meet to evaluate the vendor's performance. Vendors are rated on quality, on-time delivery, defects, and consistency of costs with negotiated price. This information is shared with the vendor and is used to determine the vendor's rating in the DOC vendor past performance database.

- **Manage Task Order Performance** - This represents the period during which the actual work is being performed or the product delivered. The project team proactively manages the contract and gives the vendor feedback on its performance. It is also during this process that the next increment of work is planned.

To manage for results, it is necessary to have accurate and timely information about performance. Consequently, on an ongoing basis (perhaps monthly, but at least after each task order), the team will assess the vendor's performance.

- **Manage System Development Performance** - The major inputs are the program objective and the awarded systems development contract. The overall objectives and the contractor's proposed

approach will be converted into a project overview plan that will be the roadmap for development of the system.

The principle focus will be on the planning, negotiation and implementation of short-term (6-9 month) increments of work that result in useable deliverables. Operational user participation on the team will increase as each increment of work is defined, developed and tested. The project overview will be refined as each successive increment is defined.

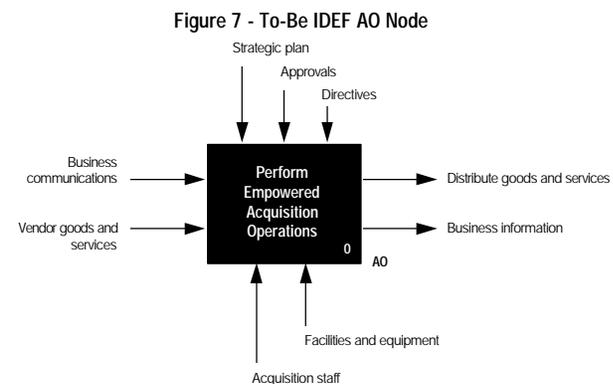
- **Process Claim** - This process is initiated when the vendor decides to file a claim against the government because the government has not met its terms and conditions or is withholding payment. In the target environment there should be fewer claims due to the more collegial and ongoing relationship between the Department and vendors. All efforts will be made to resolve potential and actual claims expeditiously.
- **Modify Contract** - A number of events may trigger the process to modify the contract. Changes to the contract during the period of performance may initiate a modification. Also, the results of a claim could result in the need to modify the contract. In the target environment, the process to modify the contract will be less time consuming since procurement staff will be part of the project team.
- **Evaluate and Closeout Contract** - Once the contract is completed, it is important that the team assess what it has learned, complete the necessary documentation, and resolve any outstanding issues. The vendor performs closeout as last deliverable for systems development and task order contracts.

IDEF Modeling

Integration Definition (IDEF) Function Modeling is a structured graphical modeling technique that captures information about functions, processes, activities and operations in an easy-to-understand series of diagrams. The team developed IDEF models for the As-is and To-Be processes to

show various levels of detail in a hierarchical manner. The combined set of symbols and text provide a blueprint description that is used to support understanding, analysis, and redesign of operations whether they be automated or manual. Figure 7 shows the IDEF A0 node for the redesigned acquisition process. Inputs (left arrows), outputs (right arrows), controls (top arrows), and mechanisms (bottom arrows) are the major elements which contribute to this process. Appendix C contains the detailed IDEF models and text glossaries.

The To-Be IDEF model defines activities and activity relationships in a structured context that can be used to scope systems, establish focus for data modeling and to support the definition of integration points that can aid in system design activities. It will also serve as a process configuration management tool to support the management of



automated system processes.

3.2 Empowered Project Team

The target environment includes a results-oriented empowered project team. The project team is a critical element of the target environment. This type of organization addresses the "us versus them" syndrome that exists between many program and contracting offices. Teams have the full range of authority and accountability needed to conduct acquisitions to support objectives.

Empowered project teams are formed around mission objectives. One of a team's responsibilities is to acquire goods and services required to achieve its mission objectives. Staff with requisite expertise are members of the teams from the beginning. Figure 8 shows that each team will be assigned staff with procurement, legal, financial, program, and any other relevant expertise. The ultimate user is also included.

Figure 8 - Empowered Team Concept



Management sign-off on the project agreement empowers the team to perform the activities necessary to achieve its objectives. The project agreement serves as a contract between executive management and the multidiscipline team. The project agreement identifies goals, milestones, a project manager, project budget, project plan, and incentives to promote a timely delivery.

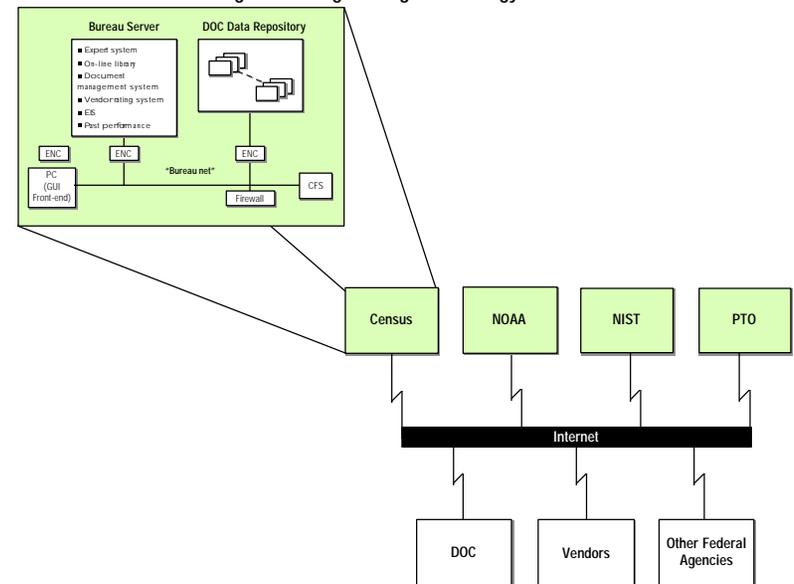
The teams are evaluated based on the extent to which they achieve their mission objectives, manage their resources, and meet specific performance objectives. At least one person on each team will have a contract warrant.

3.3 New Uses of Technology

Technology enables the reengineered process and plays a critical role when the project team determines the appropriate strategy and decides to buy goods and services. The Internet, web sites, and FacNet are critical enablers, and will link the bureaus as shown in Figure 9. Using powerful resources such as an expert system, on-line policy guidebook, templates, document management system, and an executive information system (EIS), the project team can plan and implement the solicitation more efficiently. Specific examples of how the technology is applied include:

- **Expert system** - to perform advisory functions, such as a guided

Figure 9 - Target Design Technology Enabler



decision tree in response to project parameters and projected dollar amounts of the acquisition. The expert system will suggest an appropriate contract vehicle, sources (vendors), market pricing, and other data important to the project.

- **On-line policy guide** - that contains statutes and policies pertaining to acquisitions. The project team uses this to query the system at each phase of the acquisition for guidance on event sequence, time frames and milestones, documentation requirements, etc.
- **Document management system** - that stores all documents the project team creates and receives. Text documents will be accessible by means of full text search capability. Forms, photographs, and technical drawings will be accessible by key word/index search capability.
- **Commerce-wide PC-based network** - that provides all project team members the ability to communicate easily with other team members, other bureaus, and vendors, access CAMS and the Internet, and access all relevant databases. It will have measures in place for bureaus that do not want to share certain information.

3.4 Redefined relationships with vendors

In the new environment, vendors play a critical role to help meet project objectives. They work closely with other team members to insure that the conditions of the contract are met. The fair and equal treatment of vendors will be encouraged in various ways:

- **Full Disclosure:** DOC conducts acquisitions so that there is open communication between the government and the vendor and full disclosure for proprietary and source selection information. Full disclosure during this part of the process is intended to foster trust and minimize the number of protests. Vendors also have access to the bureaus' strategic plans and project agreements.
- **Mutual benefit** with vendors so that the vendor and the customer both benefit from the acquisition. This represents a major cultural shift. From the beginning, the supplier and the customer work together to define the solution. Each party shares the responsibilities, risks, and results of the product development. By issuing the project agreement and draft RFP, the Department seeks opportunities to enlist vendors' input to determine the best

solution. The government and the vendor will benefit when products or services have wide commercial marketability.

- **Vendor partnerships are maximized** to ensure that the acquisition goals are met, customers are satisfied, and quality goods/ services are delivered as planned. Fair and equal treatment of vendors will be encouraged by rewarding vendors for cost avoidances and cost reductions, either in the course of a contract through monetary payments or through additional "points" for the vendor rating system. Incentives are in place to maintain quality and value throughout the life of the contract.

Justification

Once the target environment design was complete, project team members measured the viability of the design according to how it addressed several factors presented during the current business analysis. To do this, the team reviewed the major factors that were driving the case for change:

- **Customer and stakeholder** - concerns and suggestions were addressed by changing the process and culture of acquisitions. The new process operates with reduced documentation, simplified regulations, and better communication. Concerns about number of approvals, waiting periods, and knowledge of staff were addressed by implementing the empowered project teams which work together from the beginning.
- **Business issues** - identified by the project team and stakeholders were also addressed and revisited. The team had identified many issues which are keeping the process from achieving its critical success factors, and periodically checked to make sure they were addressed. Appendix D shows how the target environment addresses business issues. A vendor rating system and enhanced vendor relationships provides for a less burdensome evaluation process and reduces the large number of protests which occur now. The inclusionary nature of the project team reduces redundancies and rework.

- Performance targets** - concerning costs, customer satisfaction, and cycle time were all addressed. Customers are actually part of the team and benefit further from incremental development process. Money spent to procure goods and services decreases as a result of the streamlined process, input from vendors, and market research. Figure 10 shows the radical change in a few of the performance measures. Almost every improvement helps to meet the goal of reduced cycle time for all three scenarios. Most queues are eliminated and information is more readily available from vendors.

Figure 10 - Improvement of Key Performance Measures

Type of Acquisition	As-Is	To-Be
COTS		
■ Cycle time (weeks)	66-223	20-27
■ Value-added	1.1%	7.4%
■ Labor costs	\$30K	\$12K
Support Services		
■ Cycle time (weeks)	74-247	20-27
■ Value-added	2.5%	7.5%
■ Labor costs	\$64K	\$27K
System Development		
■ Cycle time (weeks)	243-638	28-40
■ Value-added	5.2%	5.6%
■ Labor costs	\$604K	\$69K

4.0 Functional Economic Analysis

To support the case for change, the acquisition BPR team conducted a functional economic analysis (FEA) to estimate the financial viability of the To-Be environment. This analysis is designed to provide a high level order of magnitude estimate of the cost savings that may result from the target design. Actual costs and cost savings cannot be determined until the Department estimates the resources required for implementation and receives price quotes from vendors.

The analysis is based on estimated process time savings and cost estimates for enabling technology. Once the functional requirements for the target environment are complete and the Department has analyzed the overlap between the proposed acquisition To-Be functionality and that planned for CAMS and DoC Express Contracts, more precise technology cost estimates should be obtained. The Department will have a copy of the model, so that it can be updated as more precise technology and implementation costs become available.

In this section of the report, we:

- describe the methodology used for the FEA
- assess the risk of the target environment
- review key assumptions underlying the analysis
- present the findings in terms of net cost savings and break-even point

Detailed spreadsheets that support the analysis are presented in Appendix E.

4.1 FEA Methodology

We applied the Department of Commerce, Patent and Trademark Office's FEA methodology. The methodology provides broad guidelines for performing a FEA, net present value analysis, and break-even analysis. The analysis consisted of the following activities:

- **Define Analysis Objectives** - The Acquisition BPR Team agreed that

the objectives would be to: assess the risk of the target environment design, determine the net present value and break-even point, and identify potential qualitative benefits.

- **Develop Assumptions and Constraints of the Analysis** - The acquisition BPR team in conjunction with the BDM Integration Team developed assumptions that serve as the basis for the analysis. These assumptions include the development period, system life, discount rate for the present value analysis, and the functionality To-Be developed by other Commerce initiatives.
- **Assess Risk** - The BDM Integration Team developed a risk assessment tool in consultation with the OBPR. Members of the Acquisition BPR team completed this tool to assess the risk associated with various elements of the target environment. Additionally, the team identified other factors which may pose some level of risk to the To-Be.
- **Estimate Cost** - Costs are additional expenditures, cash outlays, or losses that arise as a result of changing the current process or program. Costs include both one-time and recurring expenditures. To develop the cost estimates for the model, the team consulted with DOC information resources staff, reviewed available vendor COTS price lists, and used generally accepted government assumptions to estimate maintenance costs.
- **Estimate Cost Savings** - Cost savings are reductions in expenditures, cash outlays or losses that result from changing a current process or program. Current processing costs are included in this category because they will no longer be incurred if the current process is terminated. The legacy systems costs were collected from the Department. Process savings are based on the BPR team's estimates of the time required to complete each activity in the As-is and To-Be processes. The Office of the Secretary supplied archiving costs. Legal fees are based on estimates developed with assistance from the Office of the

General Counsel.

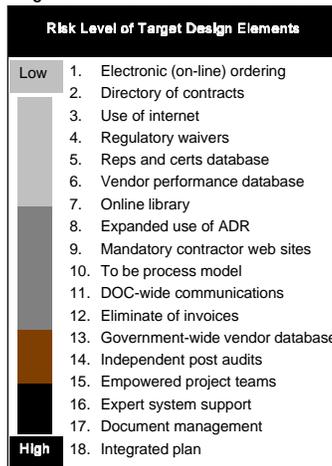
- **Prepare Functional Economic Analysis** - The BDM Integration Team developed an automated spreadsheet model to analyze the quantifiable costs and cost savings. This model is based on assumptions that can be varied and computes only Commerce's portion of the costs and cost savings. Vendor costs and cost savings estimates have not been included in the analysis.

To clearly present the burden and cost savings expected from the target environment, we conducted two analyses. The first analysis compares the As-Is to the To-Be to show the magnitude of expenses necessary in these two environments.

The second analysis is a traditional comparison of costs and cost savings and includes a Net Present Value (NPV) Analysis. In the second analysis, costs represent the additional investment necessary to implement the To-Be. The cost savings represent the reduction or elimination of current costs.

4.2 Risk Assessment

Figure 11 - Risk Assessment Results



To assess the risk associated with the target design for the DOC acquisition process, the Acquisition BPR Team

- assessed the benefit to the target design of various design elements
- considered the feasibility to implement each element
- identified other variables that may pose risk

The findings of our risk assessment, indicate that there will be potential challenges to implement the target design, but that none of the risks are significant enough to warrant changes to the target design. Figure 11 summarizes the results of the risk assessment. The items are presented in rank order from low to high risk. With careful planning and management, the various risks and implementation challenges can be mitigated.

4.2.1 Risks Associated with Elements of the Target Environment

For the key elements of the target environment, we determined the risk by adding each target design element's score for benefit to target design and feasibility to implement. The higher the aggregate score, the less risk. The lower the score, the more risk associated with an element.

To estimate the benefit to the target design of each element, the elements were evaluated against three criteria:

- potential to reduce costs
- potential to streamline the process
- potential to improve customer service

For each criterion, an element was assigned a level of likelihood on a nine-point scale from 1 (low) to 9 (high) as shown in Figure 11.

To estimate the feasibility to implement each element of the target design, the elements were evaluated against three additional criteria:

- **Simplicity of implementation** - the ease, in terms of time and level of effort, with which the element could be developed and

incorporated into operations.

- **Likelihood of funding approval** - the probability of securing the resources required to develop, implement, and support a specific element of the target design.
- **Likelihood of user acceptance** - the extent to which affected users—program staff, vendors, and procurement personnel—will embrace the concept or technology.

For each of the feasibility criterion, every element was assigned a level of likelihood using the point scale as described above.

The results of the analysis suggest that none of the items in the target environment pose significant risk to the Department. The detailed results are in Appendix F. The BPR team estimates that the integrated plan (strategy and budget) is the concept posing the most risk (low benefit and difficult to implement). Much of the team's concern about this concept stems from the fact that within the Department, there is some resistance to strategic planning. However, given that GPRA mandates agencies develop strategic plans and performance measures, the feasibility to implement the integrated plan should increase over time.

The team determined that the most beneficial elements of the target environment are:

- regulatory waivers
- electronic ordering
- empowered project teams
- directory of contracts
- paperless invoicing

The Acquisition BPR Team estimates that five elements of the target environment will be somewhat more complicated to implement. They include:

- empowered project teams
- paperless invoicing

- integrated plan
- document management system
- expert support system

We believe culture and costs drive concerns about the feasibility to implement these elements of the target design. Paperless invoicing, the document management system, and the expert support system are items that are perceived as being more difficult to implement. The concern around these items stems from the fact that they are related to technology and have significant cost implications.

The empowered project team and integrated plan necessitate a major shift in thinking. Many program offices and procurement staff are not used to working in multi-disciplinary teams. We anticipate that there will be some resistance. While the program offices may welcome the opportunity to exert more control over the procurement process, procurement staff may view the teams as shifting power away from them. However, this is not the intent. The team concept will involve procurement earlier in the process. The procurement staff on a team will be looked to for expertise and consultation.

4.2.2 Other Risk Factors

Technological security and internal politics are other factors that pose risk to the target environment. Many of the benefits expected from the To-Be environment require that all Department staff

- have access to consolidated Department-wide data
- are able to communicate electronically between bureaus
- are able to access Internet data for research

In the past, Departmental communications were segregated at the bureau-level. Adding connectivity raises security and political issues that must be properly managed. Although many recent developments have improved security on the Internet, the system is still not foolproof. To mitigate potential risks, the bureaus will need to maintain firewalls and encrypt sensitive data.

Internal politics is the other factor that may pose some risk to the successful implementation of the enabling technology. There appears to be some resistance within the Department to share servers and bureau networks. Some bureaus also have limited available Internet addresses.

The politics of DOC-wide communication and exchange of information must be handled sensitively in order to maximize the effectiveness of the To-Be environment. With the Internet as a gateway for communications, bureaus will not need to change their communications protocols or their networks. However, bureaus will need to ensure that staff involved in acquisitions have access to the Internet and are authorized to download relevant data from the data repository.

4.3 Assumptions

To build the FEA, the team developed a series of assumptions. Many of these assumptions are based on the best currently available information. Others are based on the team's best estimate of the timing and extent of process savings and cost reductions. Key assumptions are presented in Figure 12.

We assume that fully configured hardware will have a three year useful life. The COTS software will be purchased once during the life of this analysis.

The analysis applies the principles of OMB Circular A-94. Specifically, we assume constant dollars and apply a 7% discount rate.

We developed labor cost savings using an activity based costing (ABC) analysis. The savings presented in the FEA represent a reduction in activities rather than a percentage fall in FTEs. We conducted an ABC analysis for the As-is process and compared the findings to a similar analysis for the To-Be process. Given that labor cost savings are based on the difference between the costs in the two ABC analyses, overhead is not included.

Figure 12 - Key Assumptions

Category	Assumptions
Users of the acquisition process/system	<ul style="list-style-type: none"> 30% of Commerce staff (10,800 people) Assuming no increase in the number of acquisitions, there will be approximately 55 project teams
Implementation	<ul style="list-style-type: none"> DOC Express Purchasing functionality will exist, including EC/EDI gateway and FACNet mailbox Only 20% of the process labor savings will be realized in year 1 because only pilot sites will be fully operational and some bureaus may begin to implement the new process without the enabling technology The new system will be based on a client server application Direct and indirect transition costs for communications training, CAMS integration, and software support were estimated by the BPR team
Software costs	<ul style="list-style-type: none"> FEA estimates are based on available COTS prices from vendors Commerce will need to license network software for 10,800 employees at \$14.95 per copy DOC will have 7 Internet gateways
Hardware costs	<ul style="list-style-type: none"> Hardware will be replaced every three years Assume bureaus currently have a security gateway to Internet Assume bureaus currently have plans and funds to update infrastructure, such as fiber optics, cabling, and file servers Bureaus will maintain their existing servers; internal web technology will facilitate DOC-wide communication
Legacy systems	<ul style="list-style-type: none"> Document Generation System, Contract Tracking System, and FAR-Masters will be eliminated C PDS will be phased out; the resources required to support it will support DOC Express Contracts so cost is included CBD-Masters will not be eliminated
Maintenance and Support	<ul style="list-style-type: none"> Development costs will be 10% of initial investment in software and hardware Software and hardware upgrades will be 15% of initial investment Internet support is estimated at 1 support staff per 50 system users for 6 months 7 GS-12 and 7 GS-13s will be needed for overall system maintenance
Miscellaneous	<ul style="list-style-type: none"> The team expects DOC will not realize all cost savings at once Dial-in transmission costs will rise while mail and reproduction costs will fall; the net should be no cost savings and no additional costs Given the variance in size among the 13 bureaus, analysis assumes a factor of 7 to extrapolate any costs provided for only 1 segment of DOC DOC Express Purchasing assumes the cost of EDI mailbox and ramp Based on OMB Circular A94 we are assuming constant costs and a 7% discount rate Year 1 cost and cost savings not discounted in NPV analysis since CAMS and DOC Express development and implementation is underway

4.4 FEA Results

Figure 13 shows the 10 year on-going cost for the As-Is and To-Be. Over the 10 years, the To-Be will result in a cost savings of \$165.897 Million. Figure 14 illustrates the one time investment or transition cost to move from the As-Is to the To-Be. The one time investment cost will be shared by CAMS and the Bureaus. Smaller bureaus are expected to partner with medium-sized bureaus to shoulder this expense. The NPV Analysis shows the Department will incur \$30.494 Million over 10

Figure 13 - 10 Year Cost Estimate for the As-Is and To-Be

	As Is (millions)	To Be (millions)	Change (millions)
Technology	\$.358	\$ 9.276	\$ 8.918
Training	—	—	—
Archiving	5.597	.951	(4.645)
Late payments	2.683	.268	(2.414)
Pre-award protests	3.065	2.452	(.613)
Audits/closeouts	6.643	2.157	(4.486)
Acquisition labor/ personnel costs	228.250	62.860	(165.390)
Other	—	2.753	2.753
Total	\$ 246.596	\$ 80.717	\$ (165.879)

years. This includes one-time and on-going expenses. Process changes and legacy systems elimination will result in a \$168.218 Million cost savings. For the NPV Analysis, we computed the Net Cost Savings and discounted this estimate to account for the opportunity cost or time value of money. The NPV of Savings is \$96.488 Million.

Using the discounted cost and cost savings, a break-even analysis can be conducted to determine when the Department can recoup its investment. Our break-even analysis estimates that the Department will break even in Year 2.

To ensure that the analysis is not too dependent on any of the

assumptions, we analyzed the impact of changes in various assumptions. The assumptions altered in the sensitivity analysis include:

- implementation schedule
- total number of contracts per year
- percent of Department staff related to acquisition

Our findings include:

Figure 14 - One Time Investment

	Investment needed (millions)	= CAMS (millions)	+ Bureaus (millions)
Technology	\$ 5.749	\$ 4.352	\$ 1.397
Training	1.200	.180	1.020
Labor	2.116	1.830	.286
Other	1.774	—	1.774
Total	\$ 10.839	\$ 6.362	\$ 4.477
Per Bureau	\$ 1.548	—	\$.640

- **Implementation Schedule** - The implementation schedule for the COTS software system does not significantly affect cost. It can affect the break-even analysis only if the Department attempts to implement the entire system in one year.
- **Total Number of Contracts per Year** - Even if the number of contracts per year doubled in Year 1, there would be no significant change in the findings of the analysis.
- **Percent of Commerce Related to Acquisition** - If up to 60% of Department staff needed access to the new system, the Department would not break-even until Year 3.

The sensitivity analysis suggests that none of the tested variables has a significant impact on the results.

5.0 Next Steps

To successfully implement the reengineered acquisition process and target environment, DOC must carefully plan for implementation and commit adequate resources. OBPR and the BDM Integration Team have methodologies to assist the team to prepare for implementation.

Some of the activities that must be completed fall within the purview of the Acquisition BPR Team. Others are broader in scope and will require input and/or leadership from the CAMS Steering Committee and/or workgroup responsible for DoC Express Contracts implementation.

Among the activities the BPR Team must complete are the following:

- secure process owner and CAMS Steering Committee buy-in
- complete functional requirements
- develop data models (once an acquisition strategy is established)
- formulate a detailed implementation plan and schedule with resource estimates
- create a communications and marketing strategy
- coordinate with the procurement policy organization
- reconcile the To-Be with recent FAR changes
- identify pilot sites and develop strategy to initiate and monitor pilot performance

Among the other activities that must be completed and that are beyond the jurisdiction of the Acquisition BPR Team are:

- determine acquisition strategy for DoC Express Contracts
- identify overlap between Acquisition To-Be proposed technological functionality and that of CAMS and the core financial system
- demonstrate management commitment to the acquisition To-Be
- commit resources for enabling technology and training

Appendix A

Concept of Operations

Overview

The To-Be environment for the reengineered Department of Commerce (DOC) acquisition process is designed to be timely, efficient, and responsive to customer needs. This Concept of Operations (CONOPS) defines the vision for the To-Be environment.

The Acquisition Business Process Reengineering (BPR) Team is comprised of both customers of the acquisition process and functional experts (e.g., contract officers). The BPR Team developed the CONOPS using extensive input from customers, stakeholders and studies of best practices in government and private industry. This vision is based on the following themes:

- Dramatically streamlined process
- Empowered project teams
- Redefined relationships with vendors
- New uses of technology

Figure 1 presents the key features of the new process as they relate to each of these themes.

In the reengineered environment, the acquisition process spans from need recognition through contract closeout. Need recognition is defined as the point at which the program office has a funded strategic planning document that suggests goods and services may need to be acquired to achieve program objectives. The concept of operations is organized around the three major activities that comprise the acquisition process:

- Plan acquisition
- Screen vendors and award contract
- Manage for results

Each section describes the activities involved in that part of the process. The sections also illustrate how various practices, relationships, technology, and innovations will enable the process.

Figure 1 - Summary of Themes and Key Features of the Target Environment

Themes	Key Features of the Target Environment
Dramatically streamlined process	<ul style="list-style-type: none"> ■ Upfront approval ■ Fewer hand-offs ■ Reduced rework because staff are better trained ■ Fewer forms to complete ■ Non-value added activities reduced ■ Incremental development of large systems ■ Purchase COTS with simplified acquisition procedures

<p>Empowered project teams</p>	<ul style="list-style-type: none"> ■ Formed around mission and project objectives rather than the acquisition process ■ Cross-functional project teams focused on results ■ Management approval of a project agreement empowers team to spend resources ■ Teams evaluated on results achieved, resource management, and specific performance objectives ■ Staff are rewarded and encouraged to be innovative
<p>Redefined relationships with vendors</p>	<ul style="list-style-type: none"> ■ Solicit vendor input to develop statement of need/involve vendors earlier in the process ■ Vendors respond to statements of need, rather than highly specific statements of work ■ Incentives in place to create mutual benefit for vendor and government ■ Incentives for high performance ■ Vendor rating system ■ DOC provides vendors feedback to improve performance ■ Use of vendor past performance data ■ Open process
<p>New uses of technology</p>	<ul style="list-style-type: none"> ■ Expert system technology that supports staff throughout the acquisition process ■ Document management ■ Easy access to the Internet ■ Representations and certifications data base ■ On-line policy guidebook ■ Paperless invoicing/automatic payment upon receipt of goods ■ Project/acquisition management capabilities and tools

1.0 Plan Acquisition

An integrated high level plan and budget initiate the acquisition process. The reengineered acquisition process uses the Government Performance and Results Act (GPRA) as its springboard to launch new projects and subsequently, new acquisitions. In their report on implementation of GPRA, the Chief Financial Officer's Council states:

[GPRA] places new management expectations and requirements on federal agencies by creating a framework for more effective planning, budgeting, program evaluation and fiscal accountability for federal programs. The intent of the Act is to improve public confidence in federal agency performance, by holding agencies accountable for achieving program

results and to improve congressional decision making, by clarifying and stating program performance goals, measures and costs "up front."¹

The integrated strategic plan and performance based budget are central to the target acquisition environment. A prioritized plan of funded initiatives will eliminate the need for subsequent approvals. Under this approach, projects identified in the strategic plan and funded will have automatic authorization to proceed. Specifically, approval of the strategic plan and budget will grant the bureaus delegated procurement authority and obligate funds. Strategic plans will be published, providing vendors a preliminary indication of the needs of each bureau.

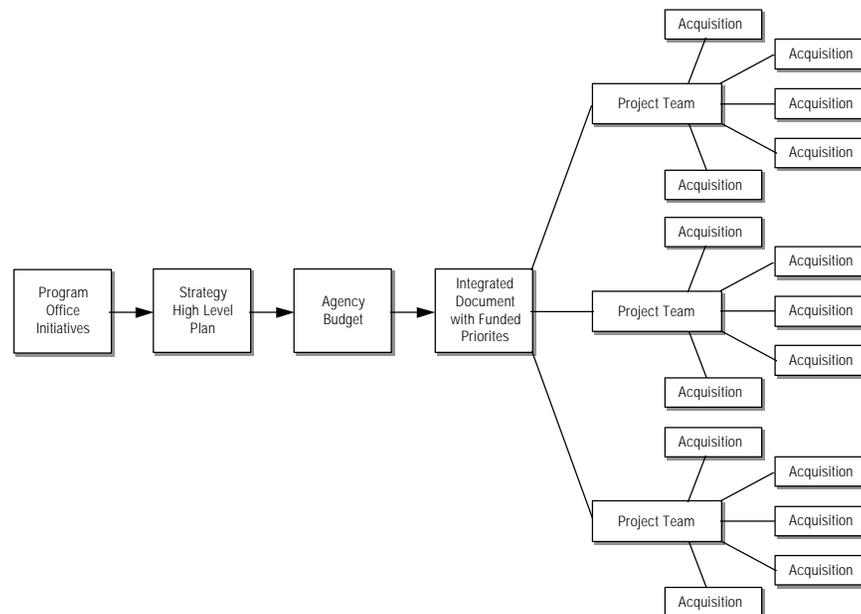
Once strategic plan initiatives have been approved and funded, the program areas identify the various projects that

will be required to meet the strategic objectives and appoint project managers for each project.

Multi-disciplined project teams (typically made up of functional experts, an information technology analyst, a procurement/contract specialist, legal advisors, customers/users, and other appropriate staff) are formed to carry out these projects and deliver the pre-agreed, measurable results for achieving strategic objectives. The project team is flexible in its avenues of approach to the project, accountable for its actions and empowered to deliver results. Figure 2 offers an overview of the planning function.

After formation, a project team conducts research to determine the most appropriate ways to achieve its objectives, including assessments of emerging technologies

Figure 2



and market data gathering. Once a project team has a basic understanding of the activities required to achieve its objective, the team creates a project agreement.

A project agreement is negotiated with the appropriate executive/management staff, with all parties agreeing to the project objectives, resources (including dollars), major milestones and a timeframe for completion. Only major directional changes will require subsequent executive level approval.

As a part of determining project objectives and methods, the project team will determine the specific acquisitions required to support the team as it works to achieve its objectives. Acquisitions are managed by the team for the duration of the project: from project agreement through contract closeout.

The new acquisition environment will maximize the amount and quality of information available to the team. Tools such as on-line databases, the information highway, Commerce-specific data, and expert system technology will facilitate the information available to the team.

With the publication of the strategic plan, a partnering with industry can commence (the strategic plan will be available on the Internet). The team will use commodity experts, vendor information and independent research to develop innovative strategies to accomplish project objectives and understand shifts in technology.

Project information will be available on-line throughout Commerce to aid in coordination and general information dissemination.

Another element of the planning process will be strategic

buying. In the target environment, the strategic buying process will save the department money and minimize the time and resources to coordinate such purchases. Program managers will be encouraged to leverage strategic acquisition partnering not only among DOC bureaus, but also across government. In the context of strategic buying, project teams will be encouraged to develop new acquisitions that provide:

- Excess capacity for other project teams
- Opportunities for centrally negotiated contracts available to all of Commerce
- Cumulative volume discounts

The DoD Defense Enterprise and Integration Systems (DEIS) contract and NASA's Scientific and Engineering Workstation Procurement (SWEP) are two recent examples of contracts that provide government wide access to fully competed contracts.

Assumptions for the planning portion of the process include:

- There will be integrated bureau strategic plans and budgets clearly describing funded priorities and initiatives
- Acquisition needs are consistent with organizations' missions and strategic directions
- The integrated strategic plan and budget will be consistent with the GPRA and the Chief Financial Officer (CFO) Act requirements so they are results driven and measurable. Specifically, bureau's will

submit performance measures when plans and budgets are prepared. At the end of the fiscal year, the bureaus report how they did relative to the measures.

- A customer-driven process (i.e., program area managed teams) results in quicker and easier acquisition of goods and services
- The redesigned acquisition process and basic operating and policy guidelines are outlined in a "pocket" policy book of approximately 25 pages or less and are electronically accessible
- The Department follows federal procurement guidelines; DOC and the bureaus do not create additional rules
- The Department is granted necessary non-statutory exemptions from the Federal Acquisition Regulations (FAR) and the Federal Information Resources Management Regulations (FIRMR)
- The strategic plan is published prior to the formation of the project team

The remainder of this section describes the practices and resources required to plan an acquisition. They include:

- Integrated strategic plan and performance based budget
- Empowered project team
- Project agreement
- New uses of technology
- Training

1.1 Empowered Project Team

Project teams are formed to carry out projects that support approved, funded strategic goals and objectives. Teams are fully empowered and accountable. Teams performing project work are most productive when they are self-directing. This is consistent with the concept of teams presented by Hammer and Champy. "Within the boundaries of their obligations to the organization, such as agreed upon deadlines, productivity goals, quality standards, etc., the team decides how and when work is going to be done." (Hammer and Champy, 1993)

An additional responsibility of all teams will be to acquire goods and services required to achieve project objectives. Staff with the requisite skills and qualifications will be members of the team and will serve throughout the project's duration. Specifically, each team will be assigned customers and staff with the following expertise:

- Program knowledge
- Procurement
- Legal
- Information technology
- Other relevant expertise

Many alternatives exist for the operation of project teams, and each bureau decides the team's structure and operation. Appropriate configuration decisions can be made based on the nature, scope and project time sensitivity. Team working arrangements should be innovative and tied to project specific requirements. Some teams may require dedicated full-time staff. Other teams will only require part-time commitment. Through more effective use of technology, some staff will participate in virtual teams that meet

electronically.

To enhance the likelihood of project success and reduce risk, dedicated project teams are recommended. With staff assigned full-time, dedicated teams can achieve the significant cycle time reductions of the reengineered process.

The empowered project team will:

- Replace the "us versus them" syndrome that exists between many program and contracting offices
- Focus staff on project objectives rather than process
- Replace numerous documents requiring approvals with a single comprehensive project agreement
- Provide the programs with the full range of authority and accountability needed to conduct acquisitions in support of their program objectives

Executive management's sign-off on the project agreement (described below) will empower the team to perform the activities necessary to achieve its objectives. The teams will be evaluated based on the extent to which they achieve their objectives, manage their resources, and meet specific performance measures.

By working on the project teams, staff will learn more about each others' responsibilities. To help staff teams, schedules may be available indicating staff members' skills, expertise and availability.

1.2 Project Agreement

The project agreement will set the terms for a results-focused project. The project agreement will serve as a contract between executive/management staff and the multi-discipline project team. Executive management will grant authority and funding to the team by signing-off on the project agreement. Members of the team will sign the project agreement to demonstrate their accountability and commitment to achieve the specified objectives. The project agreement will clearly identify:

- Project objectives, goals, and expected outcomes and results
- High level milestones
- Project manager and team members
- Project budget (will not necessarily indicate specific amounts available for individual acquisitions)
- Incentives to promote the team's delivery of the desired results

To arrive at budget figures for projects, the project manager, working with commodity and technology experts, market/industry data, and on-line databases (internal historical data, Internet accessible information, etc.) will develop a total project budget. The Commerce Administrative Management System (CAMS) will support the budget process.

Once the project agreement is in place, only major directional changes require subsequent executive approval.

The team will be empowered to make necessary changes within the agreed upon parameters.

Also, the project agreement will be published along with ground rules for market research, down-selection, and award. This document will provide potential vendors with more specific information about upcoming initiatives. In most cases and to the extent specified in the ground rules, to remain eligible for specific acquisitions, vendors will need to respond to the project agreements.

The ground rules will describe the scope of the project for which vendor responses are requested. For example, state-of-the-art technology, turn-key systems, or unique solutions to meeting the broadly stated project objectives might be requested, while other market capabilities such as ancillary off-the-shelf computer equipment might not be requested at this time. Vendors may be advised in the ground rules that if they fail to respond to a request for market information they will not be issued the statement of need or considered for award. The ground rules will include the following information:

- Time frames, page limitations, etc., for submission of industry approaches and capabilities relevant to the project objectives and tasks.
- Government requirements for submission of trading partner (vendor) data, past performance information, updating of representations and certifications, agreements to use alternate dispute resolution (ADR) procedures, etc.
- Information regarding the government's overall approach and procedures to conduct a dialogue with vendors, identify the approaches and vendors to be

considered further, and the process for final selection and award (preselection criteria). The team indicates that only technically viable approaches will be considered further.

- Procedures and criteria used to select vendors and approaches for further consideration and involvement in responding to the government's statement of need and subsequent contractor selection and award.
- Instructions to commercial-off-the-shelf (COTS) vendors on how to respond with their website, and the rights of the government to shop these and other COTS websites which do not respond to this publishing but are otherwise qualified to do business with the Department (performance rating, reps and certs).

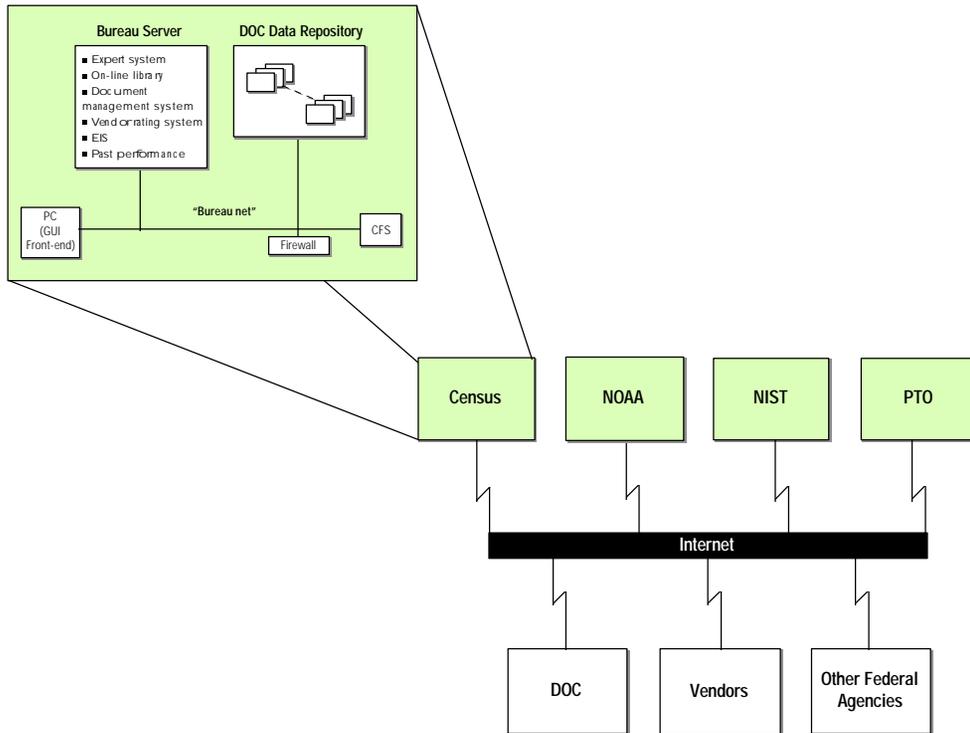
1.3 New Uses of Technology

New and more effective uses of technology will enable the target acquisition process. Key uses of technology during acquisition planning include:

- Electronic libraries and databases
- Access to and integration with CAMS, the core financial system (CFS), and DOC Express
- On-line policy guidance that describes the redesigned process, reflects the waivers granted, and basic operating guidelines
- Electronic communications, both within Commerce and through the "information highway", with extensive use of "web" technologies
- Rule-based/expert system capabilities
- Electronic document management system with full text and word/index search capability

- Electronic mail
- Electronic statement of need broadcast

Figure 3



- On-line shopping and catalogue; electronic ordering
- On-line price data for select commodities, services, and labor rates
- Vendor past performance and current ratings accessible on-line

Figure 3 depicts at a high level the functionality desired.

1.4 Training

The success of the teams to manage acquisitions will depend largely on adequate education and training. All team members will receive a variety of training as necessary. Specific training will include:

- Project management
- Finance
- Team building
- Acquisition policy and processes
- Acquisition information technology systems

Educational materials will be available on-line for all team members. One resource will be a 25-page guidebook that is a high level, easy-to-use overview of procurement policy and the reengineered acquisition process. It will provide broad guiding principles to assist team members as they acquire goods and services to support their project. This guidebook will reflect any approved exemptions from non-statutory requirements of the Federal Acquisition Requirements (FAR) and the Federal Information Resources Management Regulations (FIRMR).

2.0 Screen Vendors and Award Contract

The project agreement will be the primary input to this phase of the acquisition process. Based on the objectives and promised results outlined in the project agreement, the team will determine the goods and services that it must acquire. To decide what to buy, the project team will establish a dialogue with vendors in the market. The publication of the strategic plan and project agreement will facilitate these discussions.

Publicizing the strategic plan and budget and project agreement are intended to meet the statutory publication requirement (i.e., Commerce Business Daily (CBD) announcement).

Awards will be based on the concept of best value rather than lowest price. Once the contract has been awarded, debriefings will be held if requested. Debriefings will be conducted in accordance with the guidelines outlined in the Federal Acquisition Streamlining Act (FASA).

To minimize the number of formal protests, the Department will encourage vendors to discuss any concerns informally with the government prior to filing a protest. To potentially reduce the number of pre-award protests, both parties will encourage the use of ADR. Pending agreement from the Secretary of Commerce, in the target environment, DOC will be bound by the outcome of an ADR.

Assumptions for this portion of the acquisition process include:

- The project agreement includes a project plan that indicates objectives, time frames, available funding, and interim milestones
- No requirements initiative (RI) will be necessary (the appropriate justification and accountability are incorporated into the project agreement)
- Funds are set aside in the budget to acquire items; no additional approvals are required
- The project agreement grants all authority required to proceed (including delegated procurement authority

(DPA) and Small Business Administration (SBA) approvals); no additional approvals are required

- The new acquisition process will be described in a 25-page guidebook
- Vendors will be provided with instructions to access the Internet web site
- Staff who signed off on the project agreement are accountable for performance
- Contract work will begin as soon as possible after award

Underlying the target process to screen vendors and award contracts are a number of practices and concepts. They include:

- Broadly stated statement of need
- Full disclosure competition
- Vendor ratings and past performance
- Mutual benefit/partnerships with vendors on large system development projects
- Incremental development of large system development acquisitions
- On-line shopping
- Oral proposals
- New uses of technology

After describing these concepts, an explanation of how they are applied to three representative processes is described in Section 2.9.

2.1 Statement of Need

Once the industry dialogue and other market research activities have concluded, the need is refined, the costs are estimated for each discrete acquisition, and the acquisition approach is selected. In selecting an acquisition approach, the team will consider innovative incentives based on performance, price and/or schedule. A statement of need rather than a detailed statement of work will be issued. Specifications and detailed functional requirements are eliminated and replaced by a broad statement of need. Industry standards and COTS should be incorporated whenever possible. The statement of need will help ensure vendors offer appropriate innovative, cost-effective and results-focused solutions.

2.2 Full Disclosure Competition

The Department of Commerce will conduct acquisitions in which there is open communication between the government and the vendor and full disclosure, except when required due to proprietary and source selection information. Full disclosure during this part of the process will foster trust and minimize the number of protests. Vendors will have access to the bureaus' strategic plans and project agreements. The government will encourage an effective exchange of information throughout the process.

In exchange for full information, vendors will be asked to accept provisions that limit the scope of items that can be protested and agree to ADR.

2.3 Vendor Rating System and Past Performance

Enhanced vendor performance is a goal of the target environment. Two methods are envisioned for achieving this goal. First, using data available from various government-wide sources on vendor past performance, the Department will establish and maintain an on-line system available to all project teams. A vendor's past performance will be a critical selection criteria in contract award.

The second approach will entail the creation of a monthly vendor rating system within Commerce. Based on a quantitative analysis of price, quality, and on-time delivery, each project team will rate vendors involved in active contracts. A three-tiered rating structure will classify vendor performance. Such a structure might include:

- Strong performers
- Average performers and new vendors with less than one year of contract experience
- Poor performers who are not eligible for future contract awards

New vendors who do not yet have a rating in the past performance database will be given an intermediate rating for one year. Vendors who are strong performers will have valuable marketing material to use with other clients. Additionally, if a vendor is rated as a strong performer, delivery of goods will automatically trigger payment, given conditions for electronic receipt (e.g., bar coding of products) are met.

Under the Commerce rating system, vendors will be supplied with a monthly report on their performance. An offer for assistance will be extended to poor performers to try to improve areas of weakness and avoid contract termination.

2.4 Mutual Benefit/Partnerships with Vendors

Whenever possible, partnerships will be established so that the vendor and the customer will benefit from the acquisition. This represents a major cultural shift. From the beginning, the supplier and the customer will work together to define the solution. Where appropriate, each party can negotiate shared responsibilities, risks, and results of the product development. By issuing the project agreement the Department will seek opportunities to enlist vendors' input to determine the best solution.

Commercial marketability will be a key element of the concept of mutual benefit. The government and the vendor will benefit when products or services have wide commercial marketability. Both parties will face reduced risk through mutual benefit. The government's risk is lower because they know the vendor wants to succeed and have a marketable product. The Department will benefit from upgrades and improvements made for other clients.

2.5 Incremental Development Process

An incremental development process (IDP) will be used to acquire large systems. Long term, mutually beneficial goals will be established. These long-term goals will guide incremental objectives, pricing, and delivery. The user and the vendor will establish specifications on a post-award basis which dictate that delivered increments should be usable products. Systems will be developed as an evolutionary process. Each increment will reflect evolving user priorities and changes in technology

IDP provides an easy mechanism, called an off-ramp, for either party to terminate the relationship at designated

intervals. Time-and-material and fixed price contracts will be monitored per six to eight month deliverable/increment. Performance incentives will be in place to encourage faster development, high quality, and cost savings, such as finishing deliverables with fewer labor hours than were estimated.

2.6 On-line Shopping and Ordering

On-line shopping and ordering for COTS and some services will simplify the acquisition process. For this mechanism to work for large purchases, the simplified purchase threshold must be raised. The on-line shopping system will allow the user to page through an electronic catalog and select needed goods and services. Electronic placement of orders, receipt, acceptance and payment occurs in the new environment.

COTS items can be purchased on-line via the General Services Administration (GSA) Schedule, GSA Advantage, and other government agencies' schedules. Services can be purchased from catalogs on the Internet. Purchases made from the GSA or other government schedules will not require contracts.

2.7 Oral Proposals

In the target environment, oral proposals will be encouraged. Proposals will be given orally and videotaped for review. Vendor staff proposed as key personnel proposed must present the oral proposal. At the presentation, the vendor will be asked to respond to questions. The department will instruct vendors to submit only price information, resumes, and briefing slides on paper.

2.8 New Uses of Technology

Technology will play a critical role when the project team determines the appropriate strategy and decides to buy goods and services. The Internet, home pages, and FacNet will be critical enablers of this component of the acquisition process. The expert system, on-line policy guidebook, templates (e.g., construction of contracts, best value language, and evaluation criteria), and document management system will be powerful resources for the project team as they plan and implement the solicitation. Specific examples of how the technology will be applied include:

- **Expert system** that will use typical combinations of knowledge in an induction or rules-based system to perform advisory functions. One example is to use a structured subset of rules in a decision tree format to respond to project parameters and projected dollar amounts of the acquisition. The expert system will suggest an appropriate contract vehicle, sources (vendors), market pricing, and other data important to the project. The system will use statements, rules, and chaining control to give recommendations according to the commands of the user.
- **On-line policy guide** that will contain statutes and policies pertaining to acquisitions. The project team will be able to query the system at each phase of the acquisition for guidance on event sequence, time frames and milestones, documentation requirements, audit requirements, etc.
- **Document management system** that will store all documents the project team creates and receives. Text documents will be accessible by means of full text search capability. Forms, photographs, and technical drawings will be accessible by key word/index search capability. All related documents will be cross-referenced. All project team members will be able to access all relevant documents.
- **Commerce-wide PC-based network** will be in place that provides all project team members the ability to:
 - Communicate easily and seamlessly with other team members, other bureaus, and vendors
 - Access Internet for upload and download
 - Access CAMS to update and/or check status of a project budget, contract deliverables, etc.
 - Access the on-line database of commodity availability, and current prices on-line
 - Access the on-line expert system (advisor) to prepare the project agreement and project plan.
 - Access the representations and certifications database.

2.9 Application of Concepts to Processes

How the previous concepts are used to apply the appropriate strategy to buy goods and services will depend on the type of goods or services to be acquired. For illustrative purposes, three representative acquisition scenarios are provided.

- **Scenario 1: Commercial Off-the-Shelf Systems (COTS)** - The teams will use simplified acquisition processes to conduct

COTS buys. There will be no dollar limit for a COTS purchase. A team will announce its intent to purchase COTS software in the CBD and/or on the FACNET. The announcement will provide instructions where to find the statement of need and indicate that the simplified acquisition process will be used.

The statement of need and evaluation criteria will be published on the Internet. The vendor will then have a specified amount of time in which to notify the Department where the vendor's on-line catalog information is located and/or to submit price information. Vendors, concerned about the security of the on-line catalogs may fax their prices to the Department.

- **Scenario 2: Task Order Contracts** - In the target environment, task order contracts will be used more extensively. Project teams will be able to quickly and easily set-up task order contracts and issue task orders. Project teams will be encouraged not only to establish their own task order contracts, but also to make greater use of those available in other bureaus, the General Services Administration (GSA), and other federal agencies. Easier, more extensive use of task order contracts that provide a broad range of services will enable program offices to secure services in a timely fashion.

A simplified process will be in place to set-up task order contracts within the DOC. The need, selection criteria, ground rules (including prequalification criteria), and contractual terms and conditions will be published. Interested vendors will reply via a web site on the Internet. In the home page the vendor will be

expected to describe its capabilities, experience, and compliance with the indicated contractual terms and conditions. The project team will peruse the home pages and select a group of vendors to make oral proposals. A multi-year contract will be awarded to the top three to five offerors.

The selected vendors will then establish and maintain a home page that outlines the available services and prices and includes a comprehensive directory of task order services available. This directory includes task order contracts available within DOC and at other federal agencies.

To issue a task order, the project team will identify potential sources in the comprehensive directory of available vendors and services. The team will review vendors' qualifications and past experience as shown on the web site. If the team selects one viable candidate based on the information in the web site, the team may issue a task order. If there are a number of viable vendors or the contracting officer deems it appropriate, the team may invite vendors to make oral proposals. At the oral proposals, vendors will be expected to respond to a sample task, include key personnel in the presentation, and provide their rates.

- **Scenario 3: System Development** - Once the project agreement has been published, the private sector will respond with information describing their capabilities, approaches and past performance information. The team will conduct a dialogue with the respondees, as necessary to understand the various approaches and capabilities available. This dialogue will include discussion and consideration of the potential for mutual

benefits of the proposed system to the government and the vendor. The team will then down-select to the approaches and vendors that are candidates with the greatest likelihood of meeting the project agreement objectives. These will be sent a statement of need, evaluation criteria, and information that describe the proposed contract. Further discussions, including oral presentations, demonstrations and negotiations, as appropriate, will be conducted leading to final selection and award.

After award, the contractor and the project team will then jointly develop the project plan and initial increments of performance based on user priorities, achievability, cost and building block considerations. Upon award, the details of each increment will be worked out between the contractor and the users. Increments will be designed to be delivered within 6 to 8 months of award and to have immediate operational utility upon delivery and acceptance.

The acquisition team will compare rates to those in the marketplace using an on-line database with commercial labor rates. Rates will be evaluated only for those vendors in the competitive range (no more than five). Pre-award audits will not be necessary for competitive awards since reasonable prices will be ensured through competition and commercial market rate checks.

In each scenario, awards will be based on the concept of best value rather than lowest price. Once the contract has been awarded, debriefings will be held if requested. Debriefings will be conducted in accordance with the guidelines outlined in the Federal Acquisition Streamlining Act (FASA).

3.0 Manage for Results

Once the contract is awarded, the project team remains in place to manage the contract and further the partnership between the vendor and the government. The team will focus on working with the vendor to produce results. The expert system technology will be used to support the team as it monitors and manages the contract. The project team will consult frequently with the vendor to make sure all parties are clear about delivery dates, quality, and end results. The team will provide vendors with ongoing feedback. The results, in the form of monthly ratings, will be shared with the vendor.

Acceptance of goods, services, and reports will trigger payment. Once delivery is made and the results are determined to be satisfactory, the team will indicate its acceptance in the system. If a vendor is rated a strong performer on COTS buys, delivery will automatically trigger payment. The payment process will be paperless to the extent possible with no invoice required for payment. For service contracts, an invoice relayed via electronic data interchange (EDI), fax or other means may trigger the payment process.

To facilitate faster contract closeout, closeout will be included as a task in all contracts. The vendor will be offered incentives for timely completion of closeout. The team will be evaluated on the timeliness of contract closeout as well. Once the contract is complete, the team will meet and evaluate the contract and conduct debriefing sessions. These sessions will identify lessons learned, provide feedback on data going into the performance data base and determine rewards/incentives, if any.

Assumptions for this portion of the process include:

- Team manages for results, not simply process and compliance
- The goal of mutual benefit continues through the closeout phase
- The same project team is responsible to manage and administer the contract

A number of practices and resources are required to manage the contract for results. They include:

- Vendor partnerships
- Open communication system
- New uses of technology
- Team and individual evaluations
- Price agreements and audits

Each is described below.

3.1 Vendor Partnerships

Throughout the contract, the project team will strive to "partner" with the vendor. Once the contract order is placed, the team will work closely with the vendor to ensure goals are met, customers are satisfied, and quality goods/services are delivered. The team also will work with the vendor to improve quality and timeliness. The fair and equal treatment of vendors will be encouraged in various ways:

- The Department will reward vendors for cost avoidances and cost reductions. The rewards will take the form of monetary payments or additional "points" for consideration during future acquisitions (as part of a formal vendor rating system).

- The team will offer to work with the vendor to address any deficiencies. The Department will only issue written notices of deficiency if the vendor does not correct the deficiency immediately.
- The teams will survey vendors to gain their thoughts and insights on how to improve the delivery, performance and costs of goods and services. Vendors will also be asked for their ideas on how to improve the acquisition process itself.
- The Department will use incentives to encourage vendors to maintain quality and value throughout the life of a contract.

3.2 Open Communications System

Open, honest, clear, and cordial communications will be encouraged between all parties, including team members, program officials, and vendors. To the extent possible, voice, written and electronic communications will be informal. This open communication process will include regular information updates to vendors throughout the process.

On an ongoing basis, the team will review goals and goal attainment with program office staff, end users, and vendors. The result of this review will be a further refinement of the customer's goals, and plans to best meet these goals. The expectation is that effective partnerships and communications with vendors will minimize the number of terminations for default.

Direct electronic communication will exist between all the bureaus and contractors. The Internet will play a key role. Adequate security provisions for communications must be an integral part of the system to prevent tampering/sabotage,

such as false orders or interception of government communications. Such a system is also conducive to telecommuting, but will require regular upgrading of the desktop equipment, in accordance with new technology.

3.3 New Uses of Technology

Technology provides an important tool to the project team as it manages the contract for results. The new system will support contract management in a number of ways. For example, it provides:

- Tools to forecast and track progress and expenditures
- Document management system
- On-line policy guidance
- Executive information system (EIS) for report capability
- On-line list of contract vehicles currently in place to issue task orders and delivery orders
- Easy access to the Internet
- Paperless invoicing

3.4 Team and Individual Performance Evaluations

The team is self managing. In some cases, teams may choose to use 360 degree performance evaluations in which team members evaluate the contributions of their colleagues.

Performance evaluations are critical to staff development and continuous improvement. The responsible project manager will evaluate collective and individual performance. The evaluations will be based on the extent to which the team and its members achieved the intended objectives. Vendors also will provide input. The Department will offer individual and team awards and incentives to encourage strong performance.

3.5 Price Agreements and Audits

In the target environment, because there will be fewer cost type contracts there will be less need for audits. Fixed-price and time and materials contract vehicles will be used to the fullest extent possible. The project teams will have access to a wage rate database to verify contractor rates. Vendors will certify the date of their most recent audit in the representations and certifications they submit. For contracts requiring audits, a representative sample of the audits will be reviewed rather than the entire universe.

Teams will be encouraged to avoid cost-reimbursable agreements since they are costly and burdensome to administer, and require audits. Vendors with cost-reimbursable contracts will be required to provide an independent audit as a part of performance. A competent audit firm familiar with government contracts must conduct the audit. The vendor will pay for the audit which will be used for the final adjustment of payments. Since the audit is a requirement of the contract, no special request or clearances for an audit will be required. All non-proprietary audit results will be available to interested officials and the general public.

¹ Chief Financial Officers Council, GPRA Implementation Committee, "Implementation of the Government Performance and Results Act," May, 1995, p.1