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Contracting for the 21st Century:
A Partnership Model

New Ways to Manage Series

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University of Central Florida

The PricewaterhouseCoopers Endowment for
The Business of Government

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FOREWORD

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On behalf of The PricewaterhouseCoopers Endowment for The Business of Government, we are pleased to present this report by Wendell C. Lawther, "Contracting for the 21st Century: A Partnership Model."

This report serves an excellent companion piece to the recently published Endowment report by Jacques S. Gansler, "A Vision of the Government as a World-Class Buyer: Major Procurement Issues for the Coming Decade." Both reports present a vision for an effective, modern procurement system for the 21st century. In his report, Professor Gansler presents an ambitious procurement reform agenda for the federal government to undertake over the next decade. Instead of examining only the traditional question of "how" government buys, Professor Gansler also considers three additional questions: *who* does the buying for the government, *what* do they buy, and from *whom* does government buy.

In this report, Professor Lawther presents an exciting new model for government contracting: a partnership model between the public and private sectors. Professor Lawther argues that as the service or product to be "contracted" becomes more complex and the degree of uncertainty about the best means for program delivery increases, government needs to move away from the traditional contractor-customer relationship and move toward public-private partnerships. When the service or product to be provided is routine, the traditional contractor-customer relationship is adequate. In coming years, it is likely the contracting of increasingly complex projects will become more frequent.

This report comes at an important time as government continues to experiment and develop new contracting models for the 21st century. We trust that this report will be stimulating and useful to the procurement community and to program managers as government at the federal, state, and local levels undertake more complex contracts in which it will be necessary for the public and private sectors to be equal partners.

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EXECUTIVE SUMMARY

Reforms in federal procurement policy promulgated during the 1990s have resulted in increased flexibility for contracting officers, program managers, and related procurement personnel. The impact of these reforms on the function of contract administration (CA), though, has not been fully recognized.

There is continued pressure on federal agencies—as evidenced by Office of Management and Budget (OMB) memoranda and by the Federal Activities Inventory Reform Act, or FAIR Act—to continue exploring ways to contract out or privatize existing commercial (not inherently governmental) functions. By implication, and especially relevant for civilian agencies, this pressure may result in a greater workload and more responsibility for the CA function.

Other current efforts, such as those represented by the work of the General Accounting Office Commercial Activities Panel, focus on potential reforms of the A-76 process that impact the CA function. Here there is a concern that agencies retain enough knowledge among in-house staff about the function contracted out to effectively monitor contractor quality and assess accountability.

In response to these various, sometimes conflicting trends, an agency decision regarding the appropriate, most effective CA approach will vary according to:

- The amount of time likely to be devoted to contract administration;
- The nature and extent of the interaction with contractors or private partners;
- The required knowledge and understanding of the CA staff; and
- The appropriateness of the training required for more specialized skills such as dispute resolution.

The most significant factor that determines how these approaches should vary is the nature of the service (or product) that is contracted out. This study presents a conceptual framework that assumes all services can be grouped into scenarios labeled low, mid, and high complexity. Eighteen key factors—categorized in terms of service complexity/uncertainty, knowledge, and contract management functions—are assessed in terms of optimal CA response to services of varying complexity. For those services of highest complexity, a public-private partnership must be created and maintained if agency goals are to be achieved. This partnership may require radical changes in the manner in which CA and other agency staff relate and interact with private partners.

The greater the complexity of the service, and the greater the uncertainty of service delivery means, the more the CA should understand these means. Although the contractor should be allowed complete discretion over the choice of routine service delivery means, with increased service complexity the CA must limit this discretion. Because the risk of failure is high with highly complex services, the CA must work closely with the contractor in a

more proactive fashion to ensure goals are met. If results can be validly measured, and all agree those results have a strong link to agency goals—the potential scenario involving Performance-Based Service Contracting (PBSC)—then the CA can play a lesser role. The greater the complexity/uncertainty, however, the less probable valid measures can be obtained.

Within the CA function, for low complexity or routine services, the contract officer or administrator and project manager have different responsibilities and knowledge. The contract officer monitors/reviews contractor organizational characteristics and has knowledge of agency policies and relevant regulations. The project manager reviews the resulting service and has knowledge of service/product content. As service complexity grows, both contract officer and project manager must share their knowledge, interacting to a greater extent, with growing interdependency occurring for services of highest complexity.

The overall contract management policies and procedures impact the CA function in many respects. In writing the Statement of Work (SOW), the degree of specificity required from the bidder depends upon factors such as the need for qualifications of contractor personnel, the range of (industrywide) acceptable practices, and confidence in the bidder to deliver the service. For services of highest complexity, there must be the expectation that specific practices will change and evolve during the life of the contract.

There is a natural progression of bid type, as sealed bids are most appropriate for services of low complexity, multi-step for services of mid complexity, and negotiated competition for highly complex services. With a public-private partnership, there is the expectation that continual exchange of information and solutions to problems will exist throughout the life of the partnership.

The importance of the timeline and the resulting CA attention and review depend upon factors such as the length of the contract, the expectation of on-time delivery, and the degree to which the deliverables are the same. Likewise, the expectation of a long-term commitment increases along with the greater the complexity of the service, as contractors can work with CA staff to solve problems and increase agency efficiency, even in ways beyond the scope of the contract.

The existence of potential competition from alternative contractors as well as the ease of transitioning from one contractor to another will influence contractor efforts and resulting CA dependency on a contractor. The choice and application of sanctions (or appropriate incentives) is always difficult, and should depend on the importance of contractor failure/success on overall agency goals and mission.

The creation of public-private partnerships (PPPs) is essential for services of highest complexity. Roles of public and private partners must change if the PPP is to be successful, with more emphasis on aspects such as:

- The expectation of a long-term commitment
- Genuine cost-sharing
- A high degree of trust
- A high degree of coordination
- A commitment to higher quality of service
- A commitment by the private partners to educate or train the public partners
- Flexibility/innovation in service delivery

If the PPP fails, it is likely that the partners have fallen back into the traditional vendor-customer relationship that is much more applicable to services of less complexity.

Current Trends and Challenges Influencing Contracting Out and Contract Administration

Introduction

Current administrative and legislative efforts, especially those that have occurred since the George W. Bush administration took office, have focused a great deal of attention on the practice of contracting out or privatizing services/products. Recognizing that the dollar amount of federal spending on service contracts has grown from $70 billion in fiscal year 1990 to $87 billion in fiscal year 2000 (USGAO, 2001), these efforts are directed at capturing the purported increased efficiency and lower cost that can occur from public-private competition of existing services. Although these competitions may result in improved in-house service provision, those competitions that result in outsourcing are expected to lead to greater savings. At the same time, there is an interest in ensuring that federal contracting personnel have the requisite resources, skills, and numbers to: 1) effectively compete with the private contractors, and 2) maintain and increase accountability whether a service is contracted out or kept in-house.

The changes in federal procurement policy during the 1990s have led to increased flexibility for contracting officers, program managers, and related procurement personnel. While many feel there are still barriers to overcome in acquisition processes, such as an increased use of Performance-Based Service Contracting (PBSC), there is increasing awareness that contract administration has not received the attention it needs or deserves. The most effective changes in the function of contract administration have yet to be completely identified. Conceptually, contract administrators need to alter their role, responsibilities, and behavior depending on a number of factors that primarily relate to the complexity of the services or products purchased. After reviewing present administrative and legislative trends and their impacts on federal contracting in this section, a conceptual framework is presented and discussed in the next section. A discussion of public-private partnerships (PPPs) follows. To be successful, PPPs may require radically different contract administration roles for services of highest complexity and/or uncertainty. Throughout, the focus is on achieving the most effective contract administration possible, given the nature of the service.

The Changing Environment

The environment for contracting out services and products for federal agencies continues to change, offering increased flexibility and concurrent challenges to agency officials in charge of choosing, awarding, and administering contracts. Agencies are beginning to feel the impact of the Federal Acquisition Streamlining Act (FASA) of 1994. FASA encouraged agencies to use indefinite-delivery, indefinite-quantity (IDIQ) contracts, and then to issue task and delivery orders when they needed more products or services. Governmentwide Acquisition Contracts (GWACs) are the preferred vehicle, creating competition among private contractors.[1]

There are signs, however, that federal agencies are not adequately prepared to deal with the increasing

Glossary of Key Terms

Acceptable Quality Level (AQL)—Usually identified as part of Performance-Based Service Contracting (PBSC), an AQL identifies the maximum allowable percentage or number of service units or products that are deemed defective. If a contractor does not meet the AQL, services/products will have to be corrected. Violations of the AQL may lead to sanctions against the contractor.

Competitive Negotiation—A formal request by the government soliciting bids that contain technical proposals and price quotations. Specific project goals and objectives are identified with only a very general scope of work, but bidders are requested to identify how these goals will be achieved. Extended negotiation is expected prior to contract award.

Contract Administration (CA)—The governmental or agency processes that occur after a contract with a private contractor has been signed. These include activities such as contract monitoring and review, inspection of delivered services or products, assessment and evaluation of the deliverables, amending the contract as needed, resolution of delivery problems, and application of sanctions and penalties as needed.

Contract Management—An overall concept that includes all activities performed by the government or agency that are relevant to contracts with private or nonprofit organizations. These include activities such as writing or creating the Invitation to Bid or Request for Proposal, devising a rating system for bid responses, rating the bid responses, awarding the contract, additional negotiations leading to a signed contract, and contract administration.

Contracting Officer—A person representing a federal agency who has the authority to award, administer, and/or terminate contracts. Contracting officers can also be described as a Contracting Officer's Representative (COR), Contracting Officer's Technical Representative (COTR), Government Technical Representative (GTR), or a Government Technical Evaluator (GTE).

Contractor-Customer Relationship (CCR)—The relationship between government agencies and private or nonprofit contractors that is generally found in the case of services or products of low to mid complexity.

Invitation to Bid (ITB)—A formal request by the government soliciting price quotations or bids from potential private contractors. Specifications and a scope of work are included. Awards are generally made to the lowest bidder without additional discussions or negotiations.

Project Manager—A person who represents the program or agency receiving the services or products delivered by a contractor.

Public-Private Partnerships (PPPs)—Relationships among government agencies and private or nonprofit contractors that should be formed when dealing with services or products of highest complexity. In comparison to traditional contractor-customer relationships, they require radical changes in the roles played by all partners.

Request for Proposal (RFP)—A formal request by the government soliciting bids that contain technical proposals and price quotations. Specific project goals and objectives are identified, and a general scope of work is usually included. Bidders are requested to provide greater detail concerning the means by which these goals will be attained. A limited degree of negotiation is expected.

flexibility and complexity offered by this changing environment. Many of the changes allow for greater speed in obtaining services/products, but they have not provided much guidance for agency personnel involved in contract administration.

There are current pressures to implement the Federal Activities Inventory Reform (FAIR) Act, implying an increased emphasis on contracting out. Concurrently, the increased use of PBSC is touted as a realistic way to achieve greater efficiencies and savings when agencies do contract out.

A somewhat more cautionary message is sent by those who, as part of the General Accounting Office (GAO) Commercial Panel hearings, are concerned that there are sufficient skills and knowledge among agency personnel to effectively administer existing and future contracts. Similarly, others suggest that changes in overall contract administration functions and roles are necessary.

FAIR Act Implementation and Impact on Outsourcing

Currently there are various legislative and executive pressures on federal agencies to outsource or privatize existing positions. The FAIR Act requires all federal agencies to identify those functions that are "commercial in nature" and could be performed by

private sector contractors. A March 9, 2001 memo from the Office of Management and Budget requires federal agencies to compete or directly convert at least 5 percent of their commercial activities by the end of fiscal 2002 (O'Keefe, 2001). This memo echoes the President's Management Agenda (USOMB, 2001), in which recent public-private competitions, as guided by the A-76 process, have

> resulted in savings of more than 20 percent for work that stays in-house and more than 30 percent for work outsourced to the private sector (p. 18).

Although the FAIR Act does not require federal agencies to outsource those jobs listed as commercial in nature, there are many who would support a Bush administration push to use FAIR Act inventories as guides for outsourcing goals (Peckinpaugh, 2001). To the extent that public-private competitions result in increased outsourcing of "commercial in nature" services, the need for effective contract administration will rise.

Performance-Based Service Contracting (PBSC)

Performance-Based Service Contracting is another key element in the President's Management Agenda and in the March 9, 2001 memo from OMB. Agencies are mandated to use performance-based techniques for at least 20 percent of all service contracts worth more than $25,000.

PBSC provides an attractive alternative that potentially can facilitate bid processes and ease contract administration. Originally proposed in the early 1990s, there has been increasing opportunity and encouragement for federal agencies to use PBSC. In 1994, for example, the Department of Energy (DOE) began a process to change 18 of its 22 contracts with private companies and educational institutions to manage its laboratories. The change has been from cost-reimbursement contracts, with broad statements of work, to fixed-price contracts that are performance based (USGAO, 1999). Most of the use of PBSC, however, has been by Defense agencies.

Studies performed by the Office of Federal Procurement Policy (OFPP) indicate significant cost savings and increased customer satisfaction for both civilian and defense services. In 1994, 27 agencies pledged to participate in a pilot project; 15 of them changed 26 contracts to PBSC. The result was a savings of 15 percent, with a customer satisfaction increase of 18 percent (USOFPP, 1998a).

The savings can come from a variety of sources, all of which have an impact on the roles and effectiveness of the contract administration. First, PBSC requires the agency to perform a job or work process analysis to identify performance indicators or standards that can be used as goals and/or incentives for the contractor. Where appropriate, historical data can be used. This analysis may lead to greater awareness of efficiencies that were not previously known. These indicators reflect both output and outcome measures.

Second, this analysis serves as the basis for the creation of Acceptable Quality Levels (AQLs). An AQL identifies the maximum percent or number of defective service units or products allowable. If the service/product does not exceed this percentage, then the service will not be rejected. It is assumed that the contractor will not intentionally deliver a defective service. It is also assumed that the contractor will correct the defective service whenever possible.

The existence of AQLs serves several purposes that can lead to savings. It can serve as a deterrent or incentive. The contractor knows that violations of the AQL may result in penalties. It sets a standard of performance. The contractor can use the AQL to determine the necessary work processes that will produce an output that meets the AQL. It thus serves as one basis by which the contractor determines the bid or cost of the project.

Another major result of the job or work analysis is the creation of a surveillance or quality assurance plan. This identifies the means and methods by which information concerning the extent to which the contractor is meeting the contract goals is identified. Periodic sampling, inspection, and other forms of review may comprise this plan (see USOFFP, 1980).

The role of CA staff in PBSC may include the following:

- **Job/work analysis performance:** The same individuals that participate in CA can assist with the studies necessary to establish performance standards and AQL.
- **Contract negotiation:** If the final contract is likely to contain different performance standards/AQLs than those found in the Project Work Statement, the CA should participate in these discussions.
- **Quality Assurance (QA) evaluation:** The CA creates the QA plan and carries out the evaluation/inspection of all services or products, determining whether they meet the AQL (USOFPP, 1980).

Ultimately, the more that acceptable levels of performance cannot be clearly and validly identified, the less viable PBSC becomes as an agency option. Although its use seems logical in light of interest in reducing contracting and procurement staff (e.g., USDOD, 2001), as well as reducing the costs of performing audits necessitated by cost reimbursement contracts, greater risks are possible if in-house CA knowledge is significantly lessened.

Other reasons may contribute to the current lack of adoption of PBSC among federal civilian agencies. First, contract officials lack training and familiarity with performance standards. Second, even though bidders specify how they will achieve the results identified in the Request for Proposal (RFP), those agency personnel charged with evaluating bidder responses must have sufficient knowledge about these processes and the appropriate private sector marketplace. This is a different kind of knowledge than has been required in the past (Drabkin, 2001).

GAO Commercial Activities Panel

The creation of the GAO Commercial Activities Panel (Federal Register, 2001) represents another major impetus that will most likely lead to reform of the A-76 process. Testimony held during the summer of 2001 indicates dissatisfaction from both those that favor greater outsourcing and those that oppose it. The lack of civilian agency usage of the A-76 process, for example, has led many to call for additional reforms, including suggestions of creating processes that replace or provide greater use of alternatives to the public-private competition presently supported by A-76.[2]

There are common themes running throughout the testimony presented to the GAO Panel that are relevant to the role of CA. Perhaps most important is that there is a concern that agencies have enough skills and knowledge among in-house staff to adequately hold contractors accountable (e.g., Birkhofer, 2001). As stated by David Walker, United States Comptroller General and head of the panel:

> … if you are going to contract out something, you've got to maintain an adequate number of public employees to manage cost, quality, and performance. That is absolutely essential. The failure to do that has put a number of programs and functions at high risk (Walker, 2001).

This comment echoes similar concerns found in the General Accounting Office Performance and Accountability studies of all major United States federal agencies (USGAO, 2001a). Agencies such as the Department of Energy, the National Aeronautics and Space Administration, and the National Parks Service were cited for weaknesses in contract management and administration.[3]

Changes in Contract Administration Roles

All of these past and present trends point to a need to change the role of contract administration. The Office of Federal Procurement Policy's *Guide to Best Practices for Contract Administration* (1994) identifies various weaknesses in civilian agency CA practices. Included in these are the "undefined Contracting Officer's Technical Representative (COTR) roles and responsibilities." This report calls for a wide variety of changes among those performing CA, including:

1. Updated training for COTRs and contracting officers;
2. Creation of a partnership between COTRs and contracting officers;
3. Greater sense of teamwork between program personnel and procurement staff; and

4. Greater understanding of agency missions and relevant goals.

In addition, other voices have called for changes. Martin (1995), for example, advocates that more flexible, broader responsibility and greater accountability be assigned to both the contracting officer and the program manager, encouraging greater teamwork in carrying out the contract administration function. More recently, Kelman (2001) has stated that "contract administration doesn't receive the emphasis it deserves." He calls for greater leadership in contract administration by: 1) giving more responsibility for performance measurement to those overseeing contracts, and 2) increasing contract management skills among top agency managers.

A Conceptual Framework: Service/Product Complexity and Uncertainty

The most effective contract administration function is one in which the results of the service (or product) delivery by the contractor are characterized by high service quality, timeliness of delivery, under or at budget with a minimum of change orders, a lack of complaints, and a willingness to interact cooperatively with a variety of officials in the public sector. In other words, the goals of the service delivery are met to the satisfaction of public officials and the citizenry. The capability of contract administration to achieve this effectiveness depends in large part on the agency response to the nature of the service/product delivered by the contractor.

Basic Definitions

For the purposes of this study, it is assumed that the agency is the buyer of either services or products, and that the contractor is the private sector organization that contracts with the agency to deliver these services or products. The contract management process is assumed to include the entire process of collecting information about agency needs, deciding to outsource or privatize (if there is an already existing publicly provided service), writing an RFP, evaluating bids, and negotiating with the winning bidder. Contract administration is assumed to constitute those duties and responsibilities that occur after the contract has been awarded.

Depending on the size and nature of the contract, the agency may have several different personnel involved. The agency may create a team or steering committee consisting of a contracting officer and/or contract administrator, and technical and managerial personnel from the agency that will be using the service or product. A contracting officer's representative (COR)[4] and various purchasing agents may be involved. As part of the contract management and administration process, this team may continue to exist and act to oversee and manage the contract.

For clarity of understanding, much of the following focuses on the agency contract administration, or CA, function, assuming that it is furnished by one individual. In some cases, one contract administrator will handle all CA functions. More likely, a government project manager will interact with the contractor on a daily basis, overseeing service delivery or system deployment activities. If a steering committee or team exists, it will provide more general oversight and monitoring functions. This analysis assumes that all personnel involved in the CA function fully cooperate, representing the agency with one voice. Realistically, this may not be accurate. Further analysis will be developed as appropriate to identify the areas of greatest impact for cooperation among all personnel that comprise the CA function.

The service or product described below can be both one that is delivered to customers or clients of an agency or to agency personnel. In many cases, consideration of both agency needs and client needs are appropriate, as a contractor may deliver hardware and software, for example, that will enable the agency to better serve its clients.

Factors Common to Contract Administration Effectiveness

The structure, roles, daily management activities, and needed resources of the CA function—as well

as the likelihood of reaching contract goals—depend on a wide variety of factors. All of these factors are faced by both CAs as well as by the private sector contractors who have agreed to the terms of the contract.

These factors include:

Complexity/Uncertainty

1. Complexity of the service/product
2. Uncertainty inherent in choosing the best means to deliver the service or create the product
3. Degree of certainty of goal or outcome achievement
4. Degree of certainty that a specific service delivery means will result in the desired goal or outcome achievement
5. The amount of discretion given to the private contractor in choosing the means to provide the desired result
6. The degree of risk for both public officials and private managers that the service/product will not reach its goals

Knowledge and understanding

7. Knowledge about the service/product by the CA and contractors
8. Knowledge by the CA of federal rules and regulations, performance contracting, and other related laws and procedures
9. Knowledge by the CA of the contractor's organizational characteristics
10. Degree to which there is confidence that the contractor will not file for bankruptcy

Contract management process that occurs before contract award

11. Extent to which government officials have obtained appropriate information and knowledge prior to the completion of the RFP
12. The specificity and limitations imposed by the RFP, especially in the Statement of Work
13. Uncertainty and variation in volume of the demand or need for the service
14. Choice of bid type and process
15. Degree of competition from alternative private contractors
16. The timeline required to complete service delivery or project
17. The expectation of a long-term commitment
18. Nature of potential sanctions, default contingency plans, and potential incentives

Many of these factors are not mutually exclusive and overlap each other in the degree to which they influence each other in a causal fashion. In most cases, each factor can be placed on a continuum that ranges from "low to high." These factors will be analyzed in more detail, primarily focusing on the impact of service/product complexity or uncertainty.

The importance of different factors, in combination with each other, will determine the appropriate CA approach. Approaches will consist of efforts from incumbent CAs that will vary in terms of:

- The amount of time likely to be devoted to contract administration
- The nature and extent of the interaction with contractors or private partners
- The required knowledge and understanding of the CA
- The appropriateness of the training required for more specialized skills such as dispute resolution

These approaches will be grouped together in terms of three scenarios that relate primarily to the nature of the service or product. Simplistically, these are labeled Low Complexity, Mid Complexity, and High Complexity. These can be best viewed as falling along a continuum that runs from low to high complexity.

Additionally, it will be argued that in order to achieve maximum efficiency and effectiveness, traditional contractor-customer relationships (CCRs) are appropriate for Low and Mid Complexity scenarios, while public-private partnerships are required for High Complexity scenarios.

Specific Factors: Complexity/ Uncertainty

Complexity of Service and Uncertainty about Service Delivery

The complexity of the service/product and the uncertainty about how to best deliver that service/ product are two factors that are closely related. They are causally related, as the greater the complexity of the service, the greater the uncertainty about how to deliver it. The reverse statement is true as well, as uncertainty about means of delivery contributes to complexity.

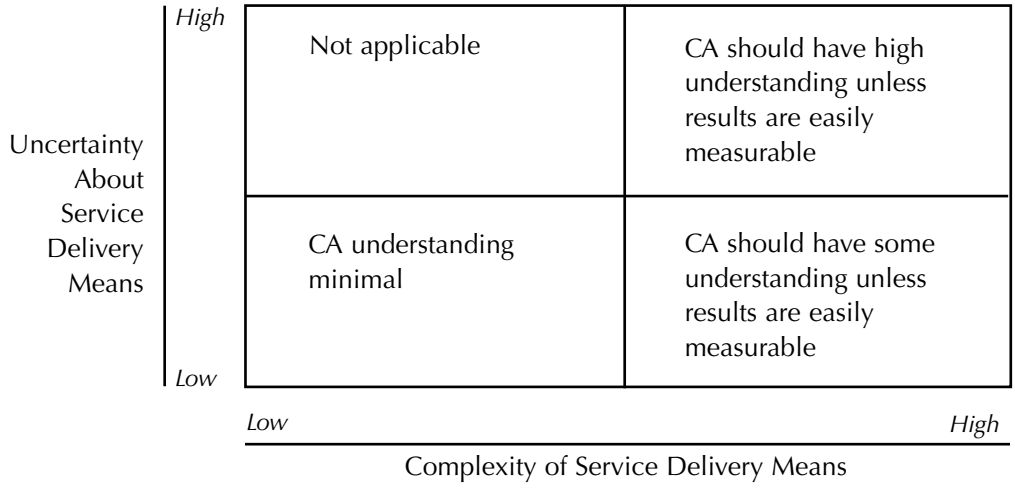
A number of service delivery aspects can contribute to complexity. The amount and degree of technical expertise required to deliver the service, including the amount of training and/or education needed for those employees directly involved in service delivery, impacts complexity in a number of ways. The CA must review the extent to which private contractor service deliverers have the requisite knowledge, training, and education. This review occurs at a number of points in time: 1) prior to the approval of the contract, as part of the rating of responses to RFPs; 2) during the negotiation phase, especially if there are changes in those individuals identified as delivering the service; 3) after the contract is signed whenever there are changes in key personnel.

The CA must ensure that requisite expertise is continually provided. The contractor should not be allowed to hire technical personnel with much less expertise than that stated in the response to the RFP, using the contracted service as "on the job training" and then removing these personnel from the project (Kelman, 1990). If the contractor proposes to replace a financial manager with 10 years of experience making $80,000 per year with someone with only a few years of experience who will be paid $40,000, the CA should approve this change in personnel only after a review of the qualifications and knowledge of the proposed replacement.

This approval of personnel replacements may be necessary only for those service delivery processes of high complexity and/or uncertainty. If the desired outcome or output is not complex, such as janitorial services, then review of service delivery means and key personnel qualifications may not be necessary.

Also, if the service is routine—and the results of the service delivery, either in terms of outputs or outcomes, are clear, easily visible, and understood—then the CA can rely upon the contractor to provide appropriate means. These means could be outlined in the bidders' response or clarified in the negotiations phase prior to contract finalization. If viable competition[5] exists, and this fact provides enough of an incentive for the contractor to solve service delivery problems, then CA understanding of those means does not have to be thorough (see Figure 1).

Figure 1: CA Understanding of Service Delivery Means



The more complex the service delivery means, the more necessary it is for the CA to have an understanding of these means. This understanding does not have to be extensive or detailed, but it needs to be sufficient enough so that the CA can adequately perform the appropriate duties of review, monitoring, and evaluation.[6]

This understanding is needed for several reasons. First, the CA must have assurances that the contractor understands the service delivery process, both in terms of the technical expertise required and the management expertise required to deliver the service in the most efficient manner. Second, if problems occur in the service delivery process, with sufficient understanding the CA may be able to assist in the resolution of these problems. Third, if there are changes to the contract after implementation occurs, the CA will be in a better position to accurately assess the need for these changes and the appropriate amount paid to the contractor.

Clearly the more complex the service, the knowledge of the CA of the best means to deliver the service will be less than if the service is routine. To overcome this "shortfall," several options are possible. As part of the contract, during the initial stages of implementation, the contractor could educate or train the CA in the service delivery means, bringing the CA's knowledge up to date as much as possible. A different relationship needs to be established as more interaction and communication are required between the CA and the contractor during the service delivery process. More trust is required, with more flexibility in enforcing contract deadlines.

If agency institutional memory has been lost, and the contractor knows much more about the service delivery means than the federal CA, then the nature of the CA process must change to be effective. Additional CA personnel may be required to counterbalance the greater degree of dependency held by the federal government. Greater training in CA skills must be present.

Contractor Discretion to Choose Service Delivery Means

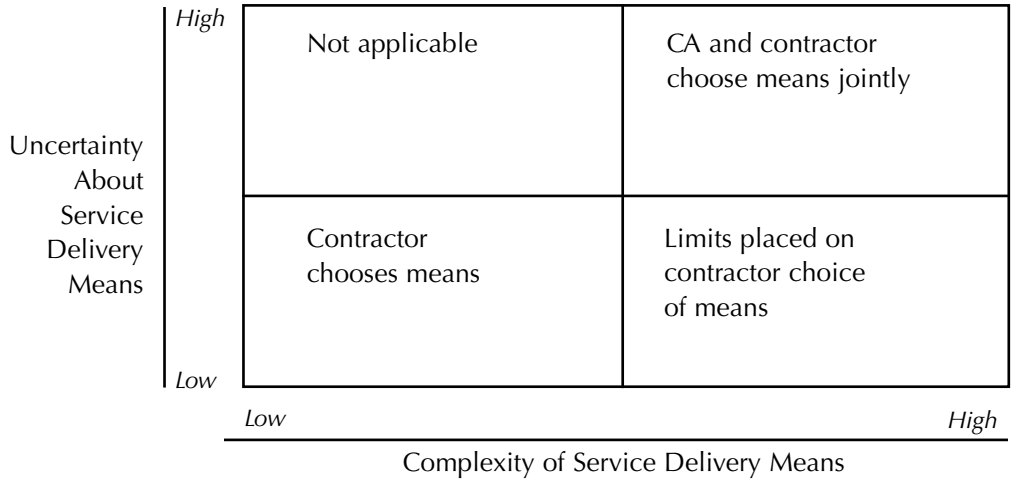
The extent to which the contractor should be given control over which service delivery means (or product creation means) to choose impacts the CA role in terms of the amount of time and effort—as well as knowledge—that must be spent. If the contractor can be given complete discretion over this choice, then review, monitoring, and problem-solving efforts by the CA could be much less than if the contractor's choice of means is constrained or limited. This degree of discretion or choice depends on:

- The complexity of those means
- The certainty that those means will produce the desired output/outcome
- The degree to which the output/outcome can be validly and reliably measured, e.g., the use of PBSC
- The confidence that a specific acceptable quality level or error rate will not significantly degrade service levels

The most significant of these factors is the degree of valid measurement that is possible. In one sense, if measurement is highly valid, the agency does not have to be concerned with the means by which outputs are obtained. Furthermore, if a PBSC is used, then it is assumed that there is sufficient incentive to ensure that the contractor will maintain service levels and quickly correct any errors for fear of losing a portion or all of the agency payment.

In reality, however, the first two factors must be considered, as they are likely to contribute to the validity of output/outcome measurement. If the service is of low complexity or routine, then high validity is likely (see Figure 2). For example, a contract for janitorial services could state that carpets in 100 percent of rooms in the building must be cleaned each night (output measure), with an AQL based upon a visible inspection by the CA of at least 10 percent of the rooms, at least once per week, resulting in a grade of at least a "9" out of a possible "10" points on a qualitative measurement scale (outcome measure). In this example, since the measures used to evaluate performance are highly valid, and the service delivery means are routine (low complexity), the contractor can be given the discretion regarding equipment to be used, scheduling the order in which rooms are to be cleaned, etc. Problems with service delivery are assumed to be unlikely since they can be easily and quickly noticed. Correcting these problems is also assumed to be easy.

Figure 2: Amount of Discretion Given to Contractor to Choose Service Delivery Means



For services that are not routine, but for which there is a reasonable certainty that chosen means will lead to desired outputs/outcomes, a variety of limitations and checks could be provided over contractor discretion. First, the scope of work/specifications in the RFP could prescribe a specific means. Contractor responses to this RFP would identify how the adoption of these means would lead to the desired output/outcome. Second, the scope could ask the contractor to choose and provide an introduction or brief description of the means. If this contractor is awarded the contract, the agency by implication has approved the contractor choice. Third, the scope of work could ask for an introduction in the response, with a complete description to follow within a specified time frame, e.g., 90 days after the contract start. This latter document would have to be approved by the CA, implying that: 1) approval may require several revised versions to be submitted; and/or 2) any changes desired by the contractor after contract start must be approved by the CA.

If the service is highly complex, and there is a high degree of uncertainty regarding how to best provide the service, then more than one option is available for the CA. If output/outcome measures are reasonably valid, and a performance contract is in place, then allowing the contractor more discretion over means choice results in a lower CA commitment in terms of time. The risk, however, lies in the amount of penalty assessed and the frequency that sanctions will be enforced if the AQL is exceeded. If there is little enforcement, then the absence of CA involvement in the means choice may lead to a significant lowering of service quality.

Alternatively, if the service can be delivered in "pieces" or "modules," each identifiable by a milestone that represents a "delivery date," then allowing the contractor complete discretion may be acceptable. This may be effective for the deployment of a system based on information technology (IT) expertise, for example, for which there is reasonable assurance that the means chosen will lead to the establishment of a workable system. The potential disadvantage is that the effective role of the CA in resolving difficulties that lead to missed deadlines or milestones may be limited.

A third option involves a greater commitment of the CA, as well as the commitment of technical and program manager personnel. If means are uncertain because of evolving technology, for example, and the link between means and results is also uncertain because of the need to "custom make" the software and hardware, then there must be an understanding by all parties that the choice of means will be an ongoing effort. The contractor must commit to training the CA and appropriate agency personnel about the means chosen, receiving feedback and altering those means as a result. The CA must play a much more active role, meeting frequently with the

contractor and receiving updates regarding progress toward meeting milestones and objectives. The CA may be expected to work closely with agency personnel to assist in deployment efforts. There must be the expectation on the part of the agency and the contractor that a partnership is needed to provide the service or product.

The efforts of the Army to modernize its supply chain system by contracting with Computer Sciences Corporation (CSC) is one example. This 10-year $680 million contract, producing what is known as the "Log Mod" program, includes broad performance parameters, requiring CSC to use the latest technological processes in choosing appropriate software and hardware. CSC has hired over 200 of the 460 Army employees to create the Log Mod system. The Army has retained 77 employees, however, to monitor and administer the system (Cahlink, 2000). The complexity, size, and project length will require close cooperation between CSC and Army personnel to produce a successful system by the 2004 deadline.

The Degree of Risk

Risk can be defined in different ways for agencies and contractors. The likelihood that the service will not be provided, or the product delivered—either at all or to a much smaller degree—is a concern that at least conceptually is always present. In reality, for routine services, the amount of risk may be so small that it does not enter the consciousness of the CA or the private contractor.

Risk is dependent upon "subfactors" such as:

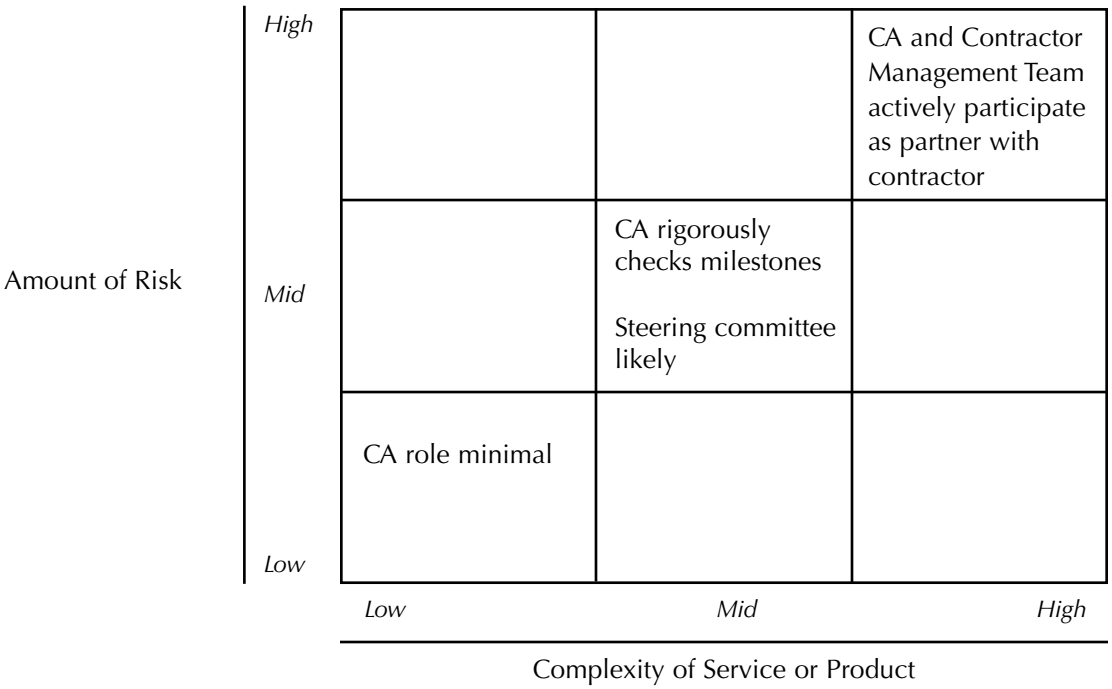
- The importance of the agency service delivery goal to the accomplishment of the agency's mission
- The degree of negative impact that will occur if the goal is not met
- The viability of satisfying the agency goal through means other than the contract at issue
- The existence of alternative contractors to deliver the service if the contract is canceled
- The ease of canceling the present contract and writing a new contract with another contractor
- The knowledge, skills, and ability of the CA to assist with finding solutions to service delivery problems

For low complexity or routine services (see Figure 3), risk is minimal. A contract for janitorial services in the General Services Administration Public Building Program, for example, falls into this category. Offices that are not clean will have little bearing on the overall agency mission. There will likely be little damage to the agency reputation if visitors experience "dirty" offices. Agency dependency on a given contractor is minimal, as other services can be easily located. Assuming that changing to an alternative contractor could occur with minimum disruption of service, or that a contingency plan is part of the RFP, the CA role is not influenced.

For services of mid complexity, the risk is much greater. The adoption of IT services by an agency to provide faster, more convenient access to clients may fall into this category if "off the shelf" software and hardware can be used to establish the system. The importance of the IT system in meeting the agency mission is greater if it affects performance results efforts related to the Government Performance and Results Act, for example. The agency reputation could suffer, a large amount of money could be "wasted," and overall goals would not be met as well if this system fails. But if there are alternatives, as clients can still contact the agency for services by non-IT means, then the risk is lessened somewhat.

The higher degree of risk clearly influences the CA role. The dependency of the agency on the contractor is greater. Although other software/hardware contractors are likely to be available, issues such as intellectual property rights may greatly hinder the deployment of an alternative system. Still, as espoused by the Information Technology Investment Management (ITIM) system, for example,[7] milestones must be rigorously monitored and processes established that may lead to choosing alternative contractors. This process involves a review committee that consists of technical and managerial personnel as well as the CA. Also, a well-thought-out contingency plan needs to be part of the contract management process.

Figure 3: Influence of Risk on CA Activity



For services of high complexity, the risk is considerable and requires a change in agency contract management and CA policies, procedures, and even culture for the service goals to be achieved successfully. Even though a contract is awarded, there may be considerable uncertainty regarding how well the proposed service delivery means will work. If technology is fast changing, then technology "upgrades" are likely to be part of the contract, further adding to the complexity. The impact on agency mission and potential negative impact will vary with the nature and size of the contract, but clearly a successful project will require much more of a partnership relationship. In this role, the CA must involve a contract management team, acting in a proactive fashion to assist in the completion of the system deployment.

Specific Factors: Knowledge and Understanding

The amount and variety of knowledge required to effectively implement the CA function varies considerably. As indicated, there are at least four areas of knowledge that apply:

1. Knowledge about the service/product by CAs and contractors
2. Knowledge by the CA of federal rules and regulations, performance contracting, and other related laws and procedures
3. Knowledge by the CA of the contractor's organizational characteristics
4. Degree to which there is confidence that the contractor will continue operation or not file for bankruptcy

If there is a contract administrator and a project manager whose roles constitute the CA function, then the type and amount of knowledge needed can vary between these two individuals. The project or field manager should have much greater knowledge about the service provided by the contractor. This includes the means by which the service is delivered (discussed earlier), the milestones that the contractor should meet, and the knowledge that allows for valid inspection and testing of products and systems.

In contrast, the contract administrator should have much more knowledge about appropriate federal rules and regulations as well as laws. These would include appropriate steps to take in terms of applying sanctions and implementing change orders. In addition, there are a myriad of CA duties such as

certification for payment, etc., that are appropriately the responsibility of the contract administrator.

The Federal Acquisition Requirements (FAR) spell out additional knowledge that can be categorized as information about the contractor and his/her management team, financial status, and organizational characteristics. This knowledge includes:

- The contractor's financial condition, including commercial financing provisions
- The capability of the contractor to comply with the contract in terms of technical performance and schedule
- The capability of contractor management and engineering systems, including the purchasing system, traffic operations, and value engineering program where appropriate
- The contractor's plans regarding small, disadvantaged, and women-owned small business master subcontracting plans
- The existence of a contractor drug-free workplace program and drug-free awareness program
- Contractor environmental practices (FAR 42)

This knowledge is the responsibility of the contract administrator. To some extent, the contractor can submit documents that would confirm the existence of appropriate programs and systems and which would require little review and evaluation. In other cases, the contract administrator may have to visit the contractor's facilities to gain enough knowledge to adequately evaluate.

To the extent that the knowledge about contractor operations is obtained several times throughout the life of the contract, the project manager can assist the contract administrator in identifying potential problems in contractor performance and capability. If a milestone is not met, for example, in the course of resolving the problem, the contract administrator may wish to perform an additional review of contractor engineering and management systems.

The degree of concern about contractor bankruptcy and capability to perform the contract impacts on the diligence in collecting contractor operations knowledge and the resulting alteration in CA roles and duties. The more concern about bankruptcy, the more important the existence of a performance bond and a contingency plan for the agency, as well as an assessment of the impact of service disruption. Another consideration is the existence of alternative contractors. If there are few—or no—other contractors that could deliver the service, then the CA function may have to engage in activities that assist the contractor in maintaining viability.

For routine services/products, especially those of small scope and amount, both contract administrator and project manager will likely spend less than 100 percent of their time on the CA function for a contract. Both may have sufficient knowledge about means prior to the contract award. Both have confidence that the contractor is fully capable of delivering the service. The project manager may resolve problems without much, if any, input from the contract administrator. If there are several alternative contractors, and the number of engineers and members of the management team are few, very little time and effort will be required to obtain this knowledge.

With increasing service/product complexity comes a much greater need for all who participate in the CA function to actively communicate and cooperate (see Figure 4). The existence of a steering committee is more likely, and some CA functions, including periodic monitoring of milestone completion and review of contractor operations, will be performed by this committee. The project manager and contract administrator are more likely to devote full-time effort to the contract, with knowledge gained and roles largely separate. When problems arise, however, there is a much greater need for these two to share knowledge and interact to resolve the problems.

For contracts involving highly complex services/products, there must be a much higher degree of overlap in the types of knowledge held by all those who perform the CA function. Those representing the agency must act as a team to a much greater degree. A greater sense of partnership must exist between the agency and the contractor. It is imperative that the contract administrator become much more aware of the service delivery means, as well as the extent to which milestones are met on time. The contract administrator may expect to

Figure 4: Knowledge of Contract Administrator and Government Project Manager

Complexity/Uncertainty of Service or Product		
Low	**Mid**	**High**
Government Project Manager has service process and content knowledge Contract Administrator is responsible for FAR and knowledge of contractor's organizational characteristics Little need for knowledge and role overlap Little need for teamwork No steering committee	Government Project Manager and Contract Administrator share some service content and FAR knowledge Steering committee created and meets periodically	High degree of knowledge sharing by Government Project Manager and Contract Administrator Both participate in dispute resolution Government Project Manager has greater knowledge of contractor management systems Steering committee closely monitors

play a greater role in resolving any problems or complaints. Ongoing information about financial conditions and organizational capability may be requested from the contractor.

If part of the complexity is due to an uncertainty that the contractor understands and is capable of delivering the service in the most efficient and effective way possible, then the project manager needs to have greater knowledge of contractor engineering and management systems. There is the expectation that this knowledge will evolve over the life of the contract, with the role of agency technical and managerial personnel changing depending on the efforts and capabilities of the contractor. The project manager needs to be much more aware of contracting policies and procedures, including the capabilities of the contract administrator in assisting with deployment issues.

If there is a great concern that the contractor may not be able to meet the goals of the contract, and it would be too expensive to change contractors unless extremely poor performance resulted, then the CA function may have to change drastically. The largely reactive nature of CA duties and responsibilities—i.e., monitoring and reviewing actions by the contractor—may have to change to a much more proactive one. Those participating in the CA function may have to assist the contractor in goal achievement. If the service to be provided is new, for example, then agency personnel should assist in marketing or publicizing the existence of this service, rather than rely completely on the efforts of the contractor.

Specific Factors: Contract Management Prior to Contract Administration

Contract management must be viewed as a process consisting of highly interrelated steps. These include writing the RFP, especially the Statement of Work, and evaluating bids to the RFP in addition to contract administration. The ease of contract administration and ultimately the achievement of agency goals are greatly dependent upon the earlier contract management steps. This section reviews the key factors that influence the part of contract management that occurs prior to contract administration.

The RFP Process: Statement of Work (SOW) Creation

In devising the SOW, the most significant "subfactors" include:

- The identification of the results—service/product—desired
- The degree to which the process of delivering the service should be specified
- The degree to which the bidders should be limited in their discretion to identify the process
- The review and approval of any part of the service delivery process prior to contract administration

Much of the same analysis concerning the degree of uncertainty regarding service delivery means discussed above is relevant to the SOW creation process. Without dealing with issues of uncertainty, one logical argument is that only results should be identified without mentioning service delivery, as the bidder may have a "better way" of service delivery than can be envisioned by the agency. To the extent that the service delivery process can be and should be limited by the SOW, however, the duties and responsibilities of the CA are eased.

The writer of a SOW requesting security guard services, for example, may understand that the employees providing this service should be "certified"—that they have undergone appropriate training and that the contractor has determined that they have successfully acquired appropriate knowledge as a result. There are various options in terms of what language will appear in the SOW. First, the SOW could request that all guards must be certified and identify the process that the winning bidder must adopt for training and certification. Second, the SOW could request the bidder to identify how they will hire, train, and certify those employees. Third, the SOW could request that all guards be certified, without mentioning the need for specific aspects of hiring and training, allowing the bidder to specify how this will occur. Fourth, the SOW could request a brief statement from the contractor that outlines the processes of hiring, training, and certification, with a provision that a more detailed plan/policy will be provided to the agency within 90 days of the contract award. This more detailed plan or policy must be approved by the agency. Fifth, there could be no mention of the need for certified guards, assuming that the bidder will understand that appropriate training is needed and will state this in the response to the RFP.

Which language appears in the SOW depends upon:

1. The degree to which the need for certified guards is an industrywide accepted practice or unique to the specific agency needs[8]
2. The degree to which there is a wide range of accepted training means and content—or there is a generally approved and accepted certification process
3. The extent to which the agency is confident that the winning bidder will have the understanding and capability of providing certified guards

If industrywide certification is generally accepted, there is one (or a few) accepted certification process, and the agency has high confidence in the winning bidder's capability, then the need for certified guards should be mentioned but no additional

Figure 5: Statement of Work: Specificity of Information Requested from Bidders

	Need for Qualifications or "Certification"	Range of Acceptable Practices	Confidence in Bidder
High Specificity	Unique to Agency	Wide	Low
Low Specificity	Industrywide Acceptance	Limited	High

information may be requested (see Figure 5). If the need is unique, there is a wide range of potential certification practices, and there is a low degree of confidence in bidder capability, then the need for and additional information about hiring, training, and certification should be specified. If there is any doubt that all bidders would specify that guards should be certified, then there should be mention of that need in the SOW.

In general, the more information about the service delivery process that is requested in the SOW, the easier it will be for the CA to assure that the contractor is meeting the goals stated in the RFP. If the service is routine, however, and the amount of skills needed to deliver the service is small, then requesting information in the SOW about the service delivery process may not be needed.

With greater service complexity or uncertainty, the SOW should request information about process. For services of mid complexity for which few problems are anticipated, either the entire service delivery process could be described in the response or requested after the contract award. The expectation here is that the CA would likely approve it without further discussion. For example, the existence of a drug-free workplace policy would most likely be reviewed and approved without much discussion from the CA.

For those services of highest complexity, the requirement of detailed policies after the contract award is essential, with the expectation that there may be a process of review, feedback, and approval over a longer period of time. In this instance, the SOW cannot specify many limitations regarding process, especially if there is uncertainty regarding how best to deliver the service. At best, through the request for post-award policy review, a partnership is begun that allows for continued discussion regarding policies and procedures.

To the extent that valid performance measures and Accepted Quality Levels can be identified, the need for the SOW to request process information lessens. The greater the knowledge of process, though, the more likely the CA can provide meaningful input to resolve any service delivery problems.

Choice of Bid Type and Process

There are three major bid types and resulting processes that have been discussed extensively. These are:

1. Sealed bids
2. Multi-step or two-step bids
3. Negotiated competition

The complexity and amount of discretion allowed by each bid type varies similarly with the complexity of the service delivered (see Figure 6). Sealed bids, the most commonly accepted bid type, is appropriate for routine services with low complexity/uncertainty. Along with the bid, potential contractors certify that they can perform the work identified in the ITB or RFP. The bidder with the lowest price receives the contract.

Multi-step or two-step bids, in which the response to the technical proposal is submitted separately from the cost or price response, are preferable for services of mid complexity. Bidders are required to demonstrate capability to deliver the service through their response to the technical proposal. The price bids of only those bidders whose response to the technical proposal is deemed "responsive and responsible" are opened, with the contract awarded to the lowest bidder.

Figure 6: Choice of Bid Type and Process

Complexity/Uncertainty of Service or Product		
Low	**Mid**	**High**
Sealed Bid	Multi-Step	Negotiated Competition

This process is effective to the extent that the responses to the technical proposals are similar in the service delivery process that they identify. In other words, the responses must be comparable. The evaluation team must fully understand the processes as described in the response and be able to adequately judge their effectiveness. To the extent that one or more responses contain a service delivery process that is radically different from the norm, the use of the multi-step process may not lead to the best choice of contractors.

Also, since the decision regarding technical capability is made on a "pass/fail" basis, the bid process does not allow for different rating scores to influence the final selection of a contractor. Furthermore, there must be highly valid criteria to evaluate the technical proposal. Finally, there must be a fixed price (or fixed price with economic adjustment) contract type (Welch and Costello, 2000).

For services of high complexity, negotiated competition is the only appropriate bid type and process. If any of the stated conditions for the multi-step process cannot be met, then it is a significant viable alternative. After the technical proposals are opened, then discussions are held with those bidders whose response is deemed in a "competitive range." After discussions, each bidder proposes a "last and final best offer" regarding service delivery and price.

Negotiation offers several potential advantages for the agency. First, if there is any disagreement regarding completion of tasks, milestones, etc., in which the agency wishes changes from that proposed in the bidder response, these can be clarified and agreement reached. A highly tailored agreement that favors the agency can be reached. Second, to the extent the selection team does not fully understand the technical proposal, the negotiations may constitute a "training seminar" or educational experience via bidder answers to selection team questions. Third, these discussions are the beginning of a continuing dialogue that will characterize the partnership with the winning bidder after the contract has been awarded.

The major drawback of increased time and effort spent by agency personnel must be viewed as necessary to meet service delivery goals and choose the most effective contractor.

The Timeline Required to Complete the Project

The timeline in the bidder response and/or agreed to in subsequent negotiations has a direct bearing on contract administration. Influencing factors include:

1. The length of the timeline
2. The number of milestones/delivery dates
3. The degree of consistency or "sameness" in terms of deliverables
4. The expectation that milestones will be met
5. The importance of the project in meeting needs identified in the agency strategic plan

The complexity/uncertainty of the service determines the importance of these factors and the subsequent reaction of the CA to them. For services of low complexity, the length of the timeline—the contract award length—is less relevant because there is a high expectation that all services/products will be delivered on time. Likewise, if the same service/product is delivered repeatedly, then the number of delivery dates is less important. The priority of the service/product in meeting agency needs is most likely low as well. The Environmental Protection Agency telephone hotline contract (Laurent, 1998), for example, would fit this category.

With increasing service/product uncertainty, the relevance of the timeline becomes more important, requiring greater attention by the CA (see Figure 7). If it is a relatively long timeline, e.g., five years, the greater uncertainty suggests greater opportunity for problems or difficulties to occur. More consistent CA attention is required. Also, if the expectation of a long-term commitment is high, and the timeline for one project is likely to lead into another project —e.g., a contract for design leading to a contract for deployment—realistically the timeline becomes indefinite in terms of the agency contractor relationship. Although project timeline length is not likely to vary much given the outcome of negotiations, the discussions held at this point help to establish key partnership relationships after the contract award.

The number of milestones and delivery dates are directly related to what is promised to be delivered

Figure 7: Timeline Importance and Resulting CA Review

	Complexity/Uncertainty of Service or Product		
	Low	**Mid**	**High**
Length of timeline	Not applicable	More CA attention if contract renewal is anticipated	Greatest CA attention because partnership required and long-term commitment expected
Expectation that milestone will be met	High: minimal CA review	Some problems anticipated Greater CA attention	Low: Greatest CA attention because most problems expected
Sameness of deliverables	High: minimal CA review	More CA inspection and monitoring if different elements	Low: Each deliverable reviewed and tested, especially if "building block" service or product

and the amount of time and effort the contractor pledges to meet a given milestone. To the extent these differences can be more clearly identified during negotiations, the CA will have an easier time in monitoring and reviewing contract progress. The agency is potentially able to: 1) persuade the contractor to agree on milestones that best meet its needs, while at the same time; 2) assist the contractor in more thoroughly assessing the time, effort, and resources necessary to meet each milestone.

The extent to which the project results in a product that will not be fully complete until the end of the timeline, e.g., an IT system, suggests that the deliverables identified at each milestone will be very different—e.g., development of software, installation of hardware, etc.—even though they are intended to be "building blocks" that result in an integrated whole. The CA must be very aware of all milestones, and much more thoroughly inspect and review the deliverables, assessing not only to what extent they are working, but also the extent to which a similar, if the not the same, deliverable can be produced by an alternative contractor.

For projects of highest complexity/uncertainty, there must be an understanding that milestones may be only approximate. If there is a high likelihood that factors outside the control of the agency or the contractor will cause project delays, then milestones will have to be open to continual adjustment. The role of the CA is much more difficult and time-consuming, since the cause of each delay must be reviewed and investigated, with the CA providing assistance in resolving difficulties as possible.

At some point in the timeline, with projects of high uncertainty, the agency passes a "point of no return." After this point, the cost and effort of terminating the contract and seeking a viable alternative is greater than staying with the present contractor and resolving problems. The earlier in the timeline that this point exists, the greater the amount of time, effort, and resources the agency must commit to CA. A successful public-private partnership is the only agency-contractor relationship that will lead to the desired results, especially if the project is a high priority for the agency as defined by its strategic plan.

Expectation of a Long-Term Commitment
Much of what government does exists in terms of projects that have a clearly defined beginning and end, rather than the expectation of a long-term commitment between an agency and a contractor (e.g., Kelman, 1990). Traditionally, the short-term contractual relationship has been an essential part of American procurement culture for several reasons. First, there has always been the fear of corruption—that agency representatives may become too "cozy" with contractors, allowing costs to escalate and/or service quality to diminish. Second, the short-term view coincides with the philosophy that greater competition from contractors in the marketplace will lead to lower prices and better service quality. Third, the threat of contract termination or non-renewal keeps current contractors always striving to deliver high service quality. Fourth, for some services or products that are uniquely governmental, there is the need to maintain competition over time by giving contracts to more than one contractor (Kettl, 1993).

In the private sector, a long-term commitment between buyer and seller is desired.[9] Both parties are more likely to establish a relationship that is flexible and that is expected to be dynamic and evolving. To achieve the goals set out by the contract, there will be less adherence to specific contract language, with the expectation that changes will occur and problems solved even if behavior is required that is not specified in the contract.

The 1994 Federal Acquisition Streamlining Act (FASA) recognized the importance of long-term commitment by acknowledging that agencies should consider contractor's past performance when evaluating bids received for future work.The following language is found in Section 1091 of FASA:

> Past contract performance of an offeror is one of the relevant factors that a contracting official of an executive agency should consider in awarding a contract.
>
> It is appropriate for a contracting official to consider past contract performance of an offeror as an indicator of the likelihood that the offeror will successfully perform a contract to be awarded by that official (USOFPP, 2000).

The relevant assumption is that contractors will be more likely to perform at a higher quality under a present contract in anticipation of receiving future contracts. As a result, there is a greater likelihood of a long-term relationship and commitment when past performance is given greater weight in contract award decisions.

There are several additional potential advantages to the agency if it enters into a long-term commitment with a contractor. First, the contractor may be more willing to identify problems unforeseen by the agency and suggest means of improvement. This may occur within the boundaries established by the contract, or suggestions could be made regarding other aspects of agency policies and procedures. These suggestions may lead to change orders and additional profit for the contractor, but the agency benefits from greater efficiencies and higher quality service.

Second, the willingness to be flexible in establishing a long-term relationship may become significant if: 1) the volume of work needed by the agency changes from that identified in the original contract; and 2) unexpected variations in the service demand requires more or less effort from the contractor compared to what was identified in the contract. Under the short-term contract, if the agency discovers that it needs more service or greater amounts of a product than originally envisioned, then the cost of this additional work may be much higher. Alternatively, if the agency realizes it needs less than it originally contracted for, the contractor may insist that the agency accept and pay for the amount specified in the contract.

In some situations, even if the service is routine and the contract for the short term, a high degree of potential competition may be enough of an incentive for the contractor to suggest improvements and be willing to solve problems without change orders. The contractor may wish to keep the contract for an extended period of time, and therefore will act in ways to elicit continued goodwill from the agency. The agency may not have the same interest in a continued relationship with a specific contractor, anticipating that other contractors could provide the same level of service if necessary. Problems that occur, however, may be infrequent and easily solvable, therefore limiting

the contact between the agency and the contractor in ways not defined by the contract. The contractor may be willing to provide this "additional service" because it does not require much time and effort.

As service complexity increases, however, the value of a long-term commitment will increase. To the extent that a more efficient/effective means to deliver the service may be created before the conclusion of a given contract, the agency will wish to have the flexibility and provide sufficient contractor incentives to adopt this better means of service delivery. To the extent that the technology needed to deliver the service is uncertain, and would require extensive interaction between agency personnel and the contractor to effectively deliver the service, then this long-term commitment is even more desired.

There are various ways to increase commitment, even in the context of laws or regulations that may prohibit contracts beyond five years. One of the easiest may be to include a clause of renewal for another time period up to an additional five years, with possible additional renewal periods. This decision to renew would be at the discretion of the agency. An alternative would be to issue a new RFP, allowing for the incumbent contractor to bid. This alternative may be chosen if the agency feels there might be other contractors who would perform significantly better.

For highly complex services, the long-term commitment may be couched in phases. If a new customized IT system is to be deployed, one contractor could assist with planning the system. Once completed, a second contract could be let for design work. Third, installation could follow. In each case, a separate RFP could be issued. If the performance of the contractor who helped plan is high, this contractor would have an advantage in outbidding other contractors as long as evaluation criteria allowed for consideration of past performance.

From an agency perspective, there are risks to engaging in a long-term commitment. Costs may rise, either through change orders or at the time of renewal, as the additional services that the contractor provides may elicit additional costs if the services represent a significant change. The agency has to decide if potential increased costs are offset by potential increases in service quality. For highly complex services, the long-term commitment is necessary because of the risk that service quality may decline.

Degree of Competition from Alternative Contractors

As discussed in the previous section, it is often desirable for an agency to be able to choose from among alternative contractors or potential contractors. A high degree of competition underlies much of the philosophy and reasoning associated with outsourcing or privatization, in that such competition drives down prices charged by contractors, which leads to increased efficiency.[10] For services/products of low to mid complexity in which certainty of results and process are at least relatively high, the agency should maintain viable alternative contractors.

The challenge comes at the time that a contract must be renewed or an ITB or RFP issued. If the latter occurs, the agency must be able to convince these contractors that they have a reasonable chance of winning a contract. Otherwise, only the incumbent contractor will enter a bid. The agency has little choice but to renew the contract, even if higher costs are incurred.[11]

Performance-based service contracts can potentially assist, as it is more easily discernable if a given contractor is not performing acceptably, and therefore the decision to seek outside contractors can be made with more confidence that alternative contractors would provide a better service. Also, clearly stated valid results can allow other contractors to more confidently calculate costs and, therefore, increase the probability they would bid on a contract.

A major factor in the calculation made by alternative contractors is the ease with which an agency can change from one contractor to another. Various efforts can help increase this ease. To the extent that multiple contracts can be awarded for "parts" of the same service, the agency can maintain competition if one contractor is willing to assume the increased workload of another contractor who is not renewed. This arrangement has the increased advantage of more than one contractor becoming familiar with agency personnel and understanding agency needs.

If a significant expenditure of equipment is required, the agency can insist that the contractor lease agency-owned equipment. The agency could also require any operating policies and procedures to become the property of the agency, thereby increasing the knowledge held by the CA and making it easier for another contractor to assume services with limited interruption and change for clientele.

If sufficient institutional memory and personnel can be maintained so that the service could be reacquired by the agency, adequate competition can exist. This may be viable only in a limited number of cases.

The danger for the agency is that the service is not complex enough to warrant the creation of a public-private partnership but competition has lessened to the extent that the agency has become "captive" or overly dependent on the contractor. Over time, costs may increase without the benefits of a long-term commitment, as described earlier.

Nature of Potential Sanctions or Incentives and Default Contingency Plans

If the contractor does not meet performance standards, sanctions may be applied in terms of reduced payments. Alternatively, incentives could be offered to reward performance that exceeds expectations. If continued poor performance occurs, a default contingency plan should be put into place, and another contractor hired to continue the service.

The basis for sanctions or incentives must be valid performance measures. Given that it is unrealistic to expect perfect on-time delivery for the life of the contract, these measures must include an acceptable error rate, or Acceptable Quality Level. For services of low complexity or standard products, measures could be based on industry standards or past levels of performance. In some cases, clientele survey data could be used to establish a "satisfaction index" that determines acceptable performance. In other cases, percentage of delivery of services/products on time could constitute a viable performance measure.

To the extent that service delivery means are uncertain, and/or unexpected conditions or other factors result in missed deadlines, the issue of sanctions becomes much more complex. The importance of a contractor meeting the proposed timeline with appropriate milestones as identified in the bid and/or in subsequent negotiations depends on a number of factors. These include:

1. Delays that are the fault of the contractor
2. Delays that are caused by changing conditions, including increases in volume or need of services
3. The degree to which changing technology may mean changes in service delivery prior to the conclusion of the contract
4. The degree to which the CA imposes sanctions for missed deadlines

Contractor-caused delays in meeting milestones should be investigated by the CA to determine the cause and provide appropriate reaction. If the reason is human error by contractor personnel, then the CA must determine if additional oversight or review of personnel actions is required. The lack of appropriate experience may cause the CA to request a change in personnel, especially if the personnel identified in the bidder's response are not the same personnel that deliver the service after contract award. If poor management or planning is the cause, then the CA must determine if resolution of the immediate delay will correct the problem, leading to limited delays in meeting future deadlines.

If delays in meeting deadlines are the result of unexpected market conditions or unanticipated changes in the demand for services from clientele, then performance measures that refer to deadline delay may have to be discarded or changed. Likewise, performance standards may have to be altered. If service delivery means are highly uncertain, then it may be expected that changing technology, for example, will lead to the choice of different means as the timeline progresses. Deadlines or milestones may have to be changed if this occurs.

The choice of sanctions is always challenging, no matter how routine the service. This choice depends on several factors. In one sense, the agency never wishes to impose penalties, hoping high levels of quality will be maintained. From this

perspective, the penalty could be a small amount, as it may never be imposed. Conversely, a large penalty amount may result in higher bids or may ultimately deter bidders.

Also, the dollar amount must be significant enough to provide an incentive for the contractor to meet the AQL. In other words, if the penalty is not high enough, the agency runs the risk of the contractor being more willing to "pay the fine" rather than maintain performance at acceptable levels. The choice of sanctions, as the choice of performance measures, depends upon the knowledge of service delivery means as well as on the results.

Three other factors to consider are: 1) the reason for the lack of compliance, 2) the degree to which a failure to meet the AQL can be corrected, and 3) the impact or effect of not achieving the AQL. If performance weakness is the result of human error and is not likely to be repeated, then the penalty may not have to be severe. However, if the response time is too high because of a lack of contractor staff and/or poor scheduling or staffing procedures, then the penalty needs to be severe enough to force the contractor to hire additional staff or correct what may be a pattern of undercompliance. If the penalty is too slight, then the agency risks repeated violations of the AQL, because it may cost the contractor less to correct the problem than to pay the penalty.

If the failure to meet performance standards is not significant in terms of its impact, then the penalty may not be severe. Waiting additional minutes to have a computer repaired may not cause any more harm than inconvenience. If a product that does not meet the AQL can be easily replaced by another, then the amount of the penalty may be low. However, if impacts are high, and the need for adherence to acceptable performance standards crucial to an agency's mission,[12] then the penalties must be much higher.

Finally, the penalties that are identified must be imposed. If not, they lose their effect as a means to stimulate consistent high-quality performance. The CA may feel that the imposition of penalties may have a demotivating effect, as contractor efforts to correct past errors may not occur (USDOE, 2001b).

If these problems can be successfully overcome, and contractor performance is maintained at acceptable levels, the amount of time/effort devoted to quality assurance can be considerably less with PBSC. As with any type of contract, though, the CA's role becomes more demanding the more problems that occur. A key assumption of PBSC is that the CA does not have to know much about how the contractor delivers the output. It does not matter, because if it is not delivered, a penalty is imposed.

However, if any action other than penalty imposition is considered by the CA, then it is to the advantage of the CA to understand the process. The CA may suggest solutions to the problem in lieu of penalties. If a shortage of qualified contractor staff is the likely cause of low response time, then the CA can suggest that more be hired. If the contractor claims that the AQL is too stringent, and performance problems are caused by changes in agency policies, for example, the CA may decide to change the AQL. Without an understanding of the work process, the CA may be dependent upon information furnished by the contractor in deciding what changes to make.[13]

The creation of a default contingency plan is a necessary part of the RFP creation process, and it should be fully communicated to the contractor who is awarded the contract. It can include the choice of the next lowest bidder, for example, and the present contractor can be notified that such discussions have taken place. If valid performance measures and sanctions exist, then there can be a clear link between these and the default contingency plan. For example, if the AQL is not met 50 percent of the time over a two-month period, then the contractor may be declared in default.

Although needed, the deployment of this plan may represent a failure on the part of the CA—as well as the contractor. It is best to make every effort to resolve problems. Sanctions may not be relevant for missed deadlines unless it is determined that the entire project is in serious jeopardy. This may be truer for highly complex services.

Summary: Characteristics of Low, Mid, and High Service Complexity and CA Roles and Responsibilities

Figure 8 compares and contrasts the functions of contract administration under the three levels of service complexity. A more detailed look at each of the scenarios follows.

Low Complexity

For services that are routine, with low uncertainty regarding how best to deliver the service, the ITB/RFP describes the service, including outputs, and specifies any restrictions. It does not specify choice of equipment or means, leaving that decision to the contractor. It may specify personnel either in the sense that all personnel must be "courteous to the customers" or that anyone the government wishes to fire will be fired. Otherwise, the contractor has maximum discretion to choose the best means in the response to the ITB/RFP and for the life of the contract. There is little need for the processes to be described in the bidder response, as price is the determining factor in awarding a contract. A sealed bid process is the most appropriate.

Understanding of the service delivery process by the CA can be minimal, although the routine nature of the service most likely means the CA will learn a great deal about the process through contract monitoring. A description of the service and or standard specifications of a product appear in the ITB/RFP. The CA may choose the "manage by exception" approach if competition is sufficient to ensure that another contractor would be quickly available. A complaint log is sufficient, with the contractor responding quickly to resolve the complaints.

Contract negotiations are easy, as there are few points of contention. Complex specifications are not necessary, as the scope of work is simple. No change orders are necessary.

Mid Complexity

In this scenario, the RFP specifies services and scope of work in more detail. There is a greater complexity of service and uncertainty in how to deliver the service because:

- Technological advances may refine or alter service delivery means.
- Full acceptance of service by citizens may not be assumed.
- There are potentially more problems in delivery and/or acceptance.
- The service may be more open to external influences to a greater degree, which would lead to changes in delivery schedules or processes.
- More technical expertise is required to understand the product/service.
- Result may not be easily visible or requires some inspection or testing.

The SOW may specify the equipment to be used, or it may request that the contractor specify the equipment. It will specify personnel in one or more of the following ways:

- Qualifications of management personnel may be specified;
- Any changes in management personnel or reorganization of management or non-management personnel must be approved by the government; and/or
- Anyone the government deems "unacceptable" will be fired and replaced.

The CA role is moderately complex and requires more time and effort. Milestones/dates of completion or delivery are important. The quality of the product/service needs to be checked, inspected, or tested. Performance measures are needed to ensure contract performance. There are likely to be conflict-resolution skills required. Change orders are possible. The need or demand for the service/product may change or fluctuate over the life of the contract.

It is anticipated that although the processes used to deliver the service or produce the product are moderately complex, the CA will have sufficient understanding to adequately check/inspect.

Training may be required for the CA on an as-needed, updated basis. This can occur through various means such as monthly meetings, manufacturing plant visits, or educational seminars.

Figure 8: Characteristics of Service Complexity Scenarios

Low	Mid	High
Contractor has maximum discretion to choose service delivery means. No equipment or personnel restrictions specified. No description of service delivery means in the bidder response. CA knowledge about service delivery means can be minimal. CA activities are minimal, using sampling or management by exception approach. Contract negotiations are minimal. No change orders are needed.	RFP describes services and scope of work in more detail. SOW may specify equipment and restrict personnel. Contractor discretion to choose service delivery means is limited. CA will have sufficient understanding of service delivery means. CA must check that milestones are met and deliverables are of appropriate quality. Performance measures are needed to ensure contract performance. Conflict-resolution skills are more necessary. Need for service may change over life of contract, leading to change orders.	Public-private partnership should be created, requiring all participants to be considered as equals. RFP provides general goals and results, inviting bidders to specify service delivery means. Competitive negotiations are expected. Long-term commitments are expected more frequently. CA staff need to work as a team, involved in all aspects of contract management. CA and contractor will jointly choose specific service delivery means, expecting that these may change over the life of the partnership. Education and training of CA is a continual process.

For those projects of mid complexity, discretion given to the contractor to choose means may be limited or restricted by the CA. For example, approval of plans, schedules, policies, etc., may be required before implementation. The CA may monitor the degree to which changes have occurred once approved as the contract and related personnel evolve and change. The CA may have to require additional means changes in writing as part of the monitoring process. Understanding by the CA of the means will be established by initial training/education early in the contract process, along with the increased understanding that would occur as the CA manages the contract.

Performance outputs/outcomes are not as certain, and the requirement of a performance contract may be more focused on outputs than outcomes. The service volume may be dependent on variables that are not fully predictable and thus open to uncertainty. The extent to which the choice of means and the resulting efficiency is dependent on the volume of the service must also be managed by the CA.

High Complexity

If the service is highly complex, and understanding of the service delivery means not clear, then the agency and the contractor should enter into a true public-private partnership. As described below, to be fully effective, the roles of both agency and contractor personnel must change from the traditional contractor-agency relationship that characterizes the low and mid complexity services. All participants must interact as equals. It must be recognized that the service to be provided will evolve in a dynamic manner, with changes likely to occur after the contract has been awarded. Whatever these changes, all partners must fully participate in their review and implementation.

The RFP provides very general goals and results, inviting the bidders to propose a service delivery means. Specifications may not be written. Instead, milestones will be identified that reflect "work packages" or service "segments" that can be identified. For example, software design may be completed by a given date. The scope of work is general, with few restrictions; or the only restrictions are those of delivery dates/milestones.

Competitive negotiation is the appropriate bid type and process, as the discussions involved begin the partnership. Those on the agency evaluation team should play a significant role in the PPP, acting as a steering committee or contract management team that coordinates and communicates frequently with contractor personnel, fulfilling the CA function. There is a long-term commitment, because it is recognized that to completely implement the IT system, for example, will take a number of years.

As the partnership evolves, the contractor and CA together will jointly choose and approve more specific means than what was originally identified. The contractor, with viable input from the CA, has maximum discretion to alter the means if greater efficiency or effectiveness can be obtained. There is the expectation that due to changing technology or other learning experiences, changes in means may be likely. This may be especially true to the extent that software, for example, must be custom-made to meet agency needs.

The duties of the CA include checking delivery milestones and approving means changes as they evolve. It is expected that the education of the CA will involve a continual process.

Ultimately, the effectiveness of the CA role is determined by the extent to which agency policies match resources in terms of personnel and time to the scenario as identified. Furthermore, in the most highly complex/uncertain services or products, the role of the CA may have to change more drastically. The creation of a public-private partnership is necessary to ensure success of the service/product.

The following sections discuss the major characteristics of PPPs, contrasting them with those of traditional contractor agency-customer, or CCR, relationships. The latter are clearly more appropriate for services of low or mid complexity. To the extent that the relationship between agency and contractor for a highly complex service does not take on the characteristics of a PPP, it is likely to fail.

Implementing Complex Contracts: The Need for Public-Private Partnerships

For services/products of the highest complexity, government must consider entering into a public-private partnership. Although typically based upon a contract, it requires CA staff to play roles that are radically different from those relevant to low and mid complex service/product contracts. The CA staff must be much more proactive, working much more closely with the contractor to achieve project goals and objectives.

Increasingly, PPPs are found in a vast range of government-related products and services. It is a term that is politically popular, as it connotes greater efficiencies and higher quality services/products than if the public sector were the sole provider. It is also a term, though, that has several different meanings and is often applied inappropriately.

In the most general sense, PPPs can be defined as:

> An arrangement of roles and relationships in which two or more public and private entities coordinate/combine complementary resources to achieve their separate objectives through joint pursuit of one or more common objectives (National Highway Institute, 1999).

This generic definition does not provide a full understanding of the "separate objectives" and the "common objective" as it relates to agency and contractors.

Another definition of PPPs shifts the focus to the United States federal research and development field, defining them as:

> cooperative arrangements engaging companies, universities, and government agencies and laboratories in varying combinations to pool resources in pursuit of a shared R&D objective (*National Transportation Strategy,* cited in Smallen, 2000).

This definition provides a more specific example of separate and common objectives. The government agency wishes the university/private firm partnership to develop a product that can be marketed to better meet a pressing public need or achieve a public policy goal. The private firms wish to make a profit/return for their investment in developing the product.

These definitions do not suggest that the only goals of public and private partners are those as identified. The private contractor involvement may also lead to an improved reputation if the project is successful, as well as helping to meet a social or public policy need. Rather than a private firm, a nonprofit firm may become part of a PPP. The public agency may be in a position to collect revenue from a successful project as well. The partnership will not be successful, however, if the separate objectives of public and private partners are not met.

Contractor-Customer Relationships Versus Public-Private Partnerships

Since public-private partnership is a term applied to almost all relationships between public agencies and private firms, it is often used inappropriately. It is often applied to the traditional public agency —private contractor contractual or customer

relationship. To more fully understand PPPs, characteristics of the more traditional low to mid complexity contractual relationships must first be understood.

First, the contract is to build a product or deliver a service that fits one or more of these categories:

- The product/service has relatively little complexity and uncertainty.
- There is a great deal of knowledge on the part of both public agencies and private contractors concerning the most widely accepted ways/methods used to deliver the service.
- There is a generally accepted set of principles, methods, and materials used to deliver the service.

Second, the public agency pays the private contractor to deliver the product or the service. As a result, another characteristic of the traditional contract is that an institutional or organizational culture exists that recognizes that the private contractor is "employed" by the public agency. There is a hierarchical relationship that clearly identifies the public agency as the "boss" or the customer. Much of the public agency role is that of contract administrator. The public agency checks the work of the private contractor, inspects facilities, monitors progress, reviews deliverables, and resolves problems or enforces deadlines and penalties if they are not met.

Third, the relationship is viewed as project based and short term. A private contractor may provide janitorial services to an agency over many years. But there is no expectation that the two-year contract to provide these services will be renewed in the future even though previous contracts have been renewed in the past. There is no expectation of a longer-term, continuous relationship, as the contract may be awarded to a competitor who provides better services at less cost.

Fourth, in terms of awarding the contract, a sealed bid or multi-step bid type and process is used to choose from among the private contractors that are qualified. Even though the rating system used to rate bids allows for better qualified contractors to achieve a higher rating, in most cases cost becomes the determining factor once all contractors are judged to be "responsible and responsive."

In general, the traditional contractual relationship is not characterized by a sense of commitment to a higher level goal or objective. There is no expectation that the employees of the janitorial service have any allegiance to the improvement of the agency's employees or United States citizens' "quality of life." They should be polite and professional in dealing with the public, but no more is expected.

Public-Private Partnerships

PPPs consist of partners from public and private sectors. They differ from traditional contractual relationships in several ways.

First, they involve providing a service or product that potentially can involve a great deal of uncertainty regarding how best to deliver that service. The service may be highly complex; changing technology may determine varying ways to deliver the service; and/or the service may require knowledge from service deliverers that is not present or difficult to obtain by one or more partners.

Second, all partners have discretion to identify ways/means of achieving goals. There is greater opportunity for innovation and creativity as a result. Third, risk occurs for each partner in a number of ways. For public agencies that contract out/partner an already existing service, there is always the risk that the private partner will not be able to deliver the same high quality service. Or, the private partner may not be able to achieve the initially agreed to stated partnership goals. From the private contractor's point of view, failure of the service, to the extent that the contractor leaves the partnership, means loss of profit, jobs, and reputation.

Public agencies, for example, may contribute a greater amount of financial support for the initial stages of a project. The private partner may contribute in-kind services as well as a line of credit initially. Risk may involve the loss of taxpayer dollars or private investment funds if the project is not successful.

Fourth, genuine cost-sharing is part of the partnership commitment. Private partners will make signif-

icant contributions, even if no funds are transferred. The "matching" can be in terms of contributing in-kind services and personnel time and effort, as well as in development costs of products, such as software, that are contributed to the partnership.

Fifth, partnerships are characterized by expected long-term commitments and relationships. The time period transcends the completion of one project with an identifiable product or outcome. It assumes that over time the products and/or services will evolve and change as new technologies are applied, or as problems are solved and improvements made. It also may be that return on investment may be many years after the product or infrastructure has been built.

Over all, there is the expectation that the PPP is based on trust, on commitment to problem or conflict resolution, and on the recognition that flexibility is necessary and that the relationship will evolve and change over time. If deadlines are not met, or public agency goals change with differing political climates, then the partners need to discuss the basis of the partnership and construct a different relationship.

The Agency-Contractor Relationship: Analysis

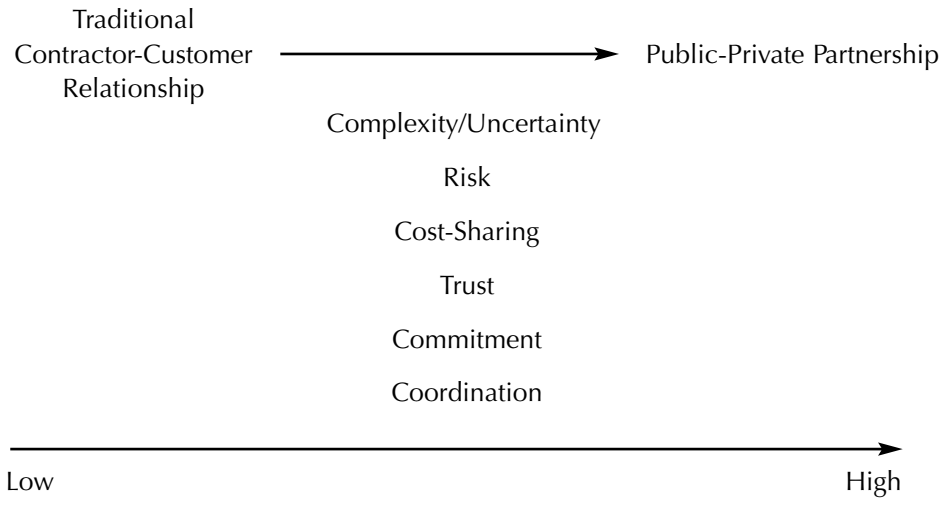
The relationship between public agencies and private contractors can best be viewed as occurring along a continuum. At one end is the traditional arrangement, where the private contractor works for the public agency on a specific project with a start and end date, with no expectation that there will be a continuing partnership relationship. At the other end is the ideal partnership relationship. As indicated in Figure 9, there are various dimensions that comprise the relationships that exist along this continuum.

Complexity/Uncertainty

The greater the uncertainty of how best to deliver the service, the greater the service will be "custom made" for the clientele who receive the service. Contributing to the uncertainty is the lack of knowledge on the part of both public and private partners. As a result, completion of the processes and infrastructure needed for service delivery may take a longer time than originally anticipated. The partnership must be willing to accept this outcome to remain successful.

The greater the likelihood that "off the shelf" software can be purchased and applied to delivery of IT services, for example, the less time it will take to design and implement the service, and the more a contractor-customer contractual relationship is likely. Compared to services such as janitorial services, however, the complexity of delivering IT services may mean that PPPs will always be necessary to ensure success.

Figure 9: Dimensions of Effective Contractor Agency Relationships



Risk
There is risk in any public-private relationship, as a private contractor may default on a contract and declare bankruptcy. With a PPP, though, the risk is much greater and much more varied. With a contractor-customer relationship, the janitorial services will be furnished and the telephone hotline manned, even if different firms complete the task because the initial firms no longer exist. When a new service such as that provided by IT systems is the basis for a PPP, the uncertainty of technology and market may mean the service will not be provided at all if the partnership fails, with the loss of public and private investments that may be very difficult to recoup.

Since the continuum involves several dimensions, identified by the characteristics as discussed above, the relationship may "slip" or move from partnership back into contractual relationship on one or more of these dimensions, especially if there are difficulties. To the extent that this movement occurs, the partnership is not likely to succeed.

Cost-Sharing
The value of in-kind or "soft" contributions by the private partner may be difficult to calculate. The "overhead" or administrative costs typically added to the salaries of personnel in a contract with a public agency may be somewhat arbitrary. Alternatively, if, for example, the public partner contributes funds—and the private partner contributes software, hardware, and time of engineering personnel—then the profit of the private partner from involvement in the project may be less than that compared to other projects. This situation may be acceptable to the private partner initially, as a lower return on investment may lead to gained knowledge and product success that will translate into additional projects and enhanced reputation.

The risk of uncertain, soft cost-sharing is that the PPP may not be that much different from a typical public-private contractual relationship. If the public sector spends a great deal of time in contract management, reviewing and responding to work performed by private contractors, then there is less of a partnership and more of the traditional CCR.

Trust
When trust breaks down because there are indications that a private partner may not deliver a specified project, then the public agency role must switch into a contract administrator role rather than a partner role. Additional communication and interaction must occur between the public and private partners in this situation. There must be a decision at some point to reconstitute the partnership, modifying roles and perhaps lowering expectations, or the relationship becomes predominantly a contractual one.

Coordination
There needs to be coordination of efforts between all partners. Too often, one partner may play a more passive role, allowing and/or expecting the other partner to provide information or services that may or may not be forthcoming. If the public partner plays the passive role, the danger is that a lack of coordinated effort may be perceived as the fault of the private partner, and contract administration efforts commence, sliding the PPP back toward the traditional contractor-customer relationship.

If the complexity of the service or product is high, and the uncertainty of how to achieve the desired outputs/outcomes is high, and/or the risk of failure is high, then a PPP is the only viable structure and relationship that will be successful. Under these conditions, a PPP is characterized by:

- The expectation of a long-term commitment
- Genuine cost-sharing
- A high degree of trust
- A high degree of coordination
- Commitment to a higher quality of service
- Commitment by the private partners to educate or train the public partners
- Flexibility/innovation in service delivery

The role of the CA function is much more proactive in a PPP. The nature of this role involves substantial change from the traditional CCR. There should be sharing of workplans, roles, and expectations that

identify specific activities of the CA to help the private partners to achieve the overall project goals. To some extent, these can appear in the RFP process, and/or be identified and clarified during the contract negotiation process. In other instances, there may be a commitment before the contract is signed that recognizes the evolution of cooperative efforts.

To the extent that the PPP begins to fail and there is a return to the more traditional contractor-customer relationship along one or more continua, the role of the CA must change as well. For example, if trust begins to lessen because the private contractor has withheld information about problems with service delivery that have been subsequently discovered by the CA, then knowledge about the means must rise, and the CA must fall back on checking for process progress, changing the number of and date due of milestones identified in the RFP.

Recommendations

The function of contract management, including contract administration, may be undergoing additional changes in the near future. Revisions of the A-76 process, plus OMB policy statements that encourage and require adherence to the FAIR Act and likely greater contracting out, will place continuing focus on how effectively federal agencies contract for services/products.

To achieve maximum effectiveness in the contract administration function, there must be appropriate understanding of concepts such as service complexity and public-private partnerships. Accompanying this understanding should be changes in the roles of contracting officers, program managers, and others who monitor, oversee, and administer contracts. Especially for services of high complexity and uncertainty, such as information technology, successful delivery of services cannot occur without these changes.

1. Link contracting out decisions to agency missions and strategic plans as much as possible.
The more complex the service, and the greater the impact of the service on the agency's highest priority goals, the more important it is to establish this linkage. Stronger top management support is a likely result, as well as greater appreciation of the need for sufficient CA staff and knowledge.[14]

2. Assess the amount of time and staff necessary for contract administration either when making the contracting out decision or early in the RFP creation.
During the process that results in the decision to contract out an already existing service, valid consideration should be given to the amount of effort likely for effective contract administration. The more complex the service, the more staff will be needed. With careful calculations, efforts to reduce contracting or project management staff to levels that are too low for effective CA may be overcome.

3. Involve contract administrator staff in as many aspects of contract management as possible.
Ideally, those involved in performing the CA function should also participate in the following key aspects of contract management:

- Knowledge or data gathering from industry representatives needed prior to RFP creation
- The creation of the RFP
- The review and evaluation of bids
- The negotiation process—either before or after the contract award

The greater the service complexity, the more valuable the participation in terms of avoiding potential difficulties that would occur during CA.

4. Identify early in the contract management process what level of knowledge of the service delivery means is necessary for effective contract administration.
If the service is routine, the contract is a PBSC type, and/or there is a great deal of confidence in the validity of performance standards, the AQLs, and the system of penalties and/or incentives created, then knowledge of service delivery means by the CA can be minimal. This information will be established early in the contract award/management process.

With more complex services, or if there is uncertainty regarding the validity of the AQLs, then information about service delivery means should be gathered throughout the process leading up to contract award as much as possible. The importance of this effort becomes greater if there is an expectation that the service delivery means will change after the contract award.

5. Establish the means by which sufficient knowledge for the CA is obtained from the contractor.
The contractor can provide training, workshops, inspections, and policies/procedures before the contract award and throughout the life of the contract. These specific means should be identified as early in the process as possible.

6. Establish clearly defined relationships among all members of the government contract administration team.
As stated in USOFPP (1994), there are a variety of means to establish a well-defined relationship among all members of the team. For example:

> Some agencies have developed a joint partnership agreement that is signed during the preaward phase which defines how the parties will work together (p. 6).

In other cases, all team members can attend training together. Involvement in all aspects of contract management will also foster teamwork.

7. Ensure that all members of the CA staff have the requisite training and skills to effectively administer the contract.
All members of the CA staff should have sufficient knowledge of the Federal Acquisition Requirements and other related policies and procedures prior to the start of contract administration. Training in conflict resolution is necessary. This determination is more important for contracts of mid to high complexity.

8. For contracts of highest complexity, realistically identify the need for changed efforts and relationships—those required by a public-private partnership.
All of the recommendations above become more vital if a PPP will be established. All agency and contractor staff need to understand the nature of changed roles and efforts. The CA function must be much more proactive, engaging in activities that require much greater coordination with contractors/partners. Activities such as review, inspection, and monitoring may still remain, but they must be supplemented with additional CA efforts that are much more aligned with achieving agency goals.

9. For PPPs, trust and flexibility must be continually maintained by all partners.
Both public and private partners must be open and honest with each other, especially if there must be significant changes in the original contractual agreement.

If, for example, the private partner finds that it is more expensive or difficult than originally thought to provide some aspect of what was promised, then the public partners must either accept this change and revise expectations, or find ways to assist the private partner in resolving difficulties.[15]

Likewise, the private partner must be honest about cost-sharing, for example, and other financial aspects of the organization. To maintain trust, the private partner must document all in-kind and dollar contributions in ways that are satisfactory to the public partners.

The partnership must seek to find the balance between flexibility that means lowered expectations or changes from original goals, and insisting that partners follow through on original promises even if costs are higher than expected. It may be that this balance depends upon the priority given to the item at issue, requiring a reallocation of funds and plans.

Again, the public partner cannot simply allow the private partner to not meet contractual obligations/partnership goals without interaction leading to a revision or reestablishment of the partnership. Each change from the original partnership agreement must be considered a new agreement, even if the formal contractual documents are not amended and the new agreement is documented in the minutes of a partnership meeting.

Otherwise, the partnership risks "sliding back" into a contractor-customer relationship and ultimately will face failure. If the public partners are paying the private partners and decide payments must be withheld because there is no agreement from the private partner on an issue, then the partnership is not likely to be successful.

Endnotes

1. With the passage of the Clinger Cohen Act in 1996, all restrictions for agencies to issue GWACs were lifted (Laurent, 1999).

2. The use of business and process reengineering techniques at the Naval Surface Warfare Center Division, Crane, Indiana, is one example. See Aucremanne (2001).

3. See also the discussions in USGAO, 1998; 2001b.

4. Other terms may be used to describe the COR including Contracting Officer's Technical Representative (COTR), Government Technical Representative (GTR) and Government Technical Evaluator (GTE). See USOFPP, 1994.

5. Competition is considered viable only to the extent that competing contractors exist in a given market, and that they would be willing to bid on an RFP and assume delivering the service.

6. If the contract is a PBSC type, then CA understanding can be less.

7. See USGAO, 1998.

8. See, for example, the discussion of Navy contracts for aircraft maintenance, in USOFPP, 1998.

9. This does not imply that all buyer-seller relationships would benefit from a long-term commitment. See the analysis in USGAO, 1994.

10. Many authors make this point. See Savas (2000), for example.

11. For a discussion of this point at the state and local level, see Lavery (1999).

12. In the Navy maintenance contracts, for example, the performance standard for meeting flight schedules is 100 percent. See USOFPP, 1998.

13. See USDOE, 2001b, for an example of changes in performance standards after the contract has been awarded.

14. See the ITTM system as discussed in USGAO, 1998.

15. See the discussion in USDOE, 2001a.

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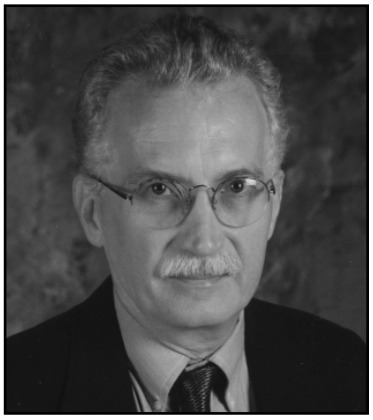

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