



The Space Congress® Proceedings

2001 (38th) A Space Odyssey - The Next 50 Years

May 1st, 2:00 PM

Paper Session I-A - Performance Based Launch Services Contracts: Better, Faster, Cheaper?

Jane D. Rievley
U.S. Air Force

Follow this and additional works at: <http://commons.erau.edu/space-congress-proceedings>

Scholarly Commons Citation

Jane D. Rievley, "Paper Session I-A - Performance Based Launch Services Contracts: Better, Faster, Cheaper?" (May 1, 2001). *The Space Congress® Proceedings*. Paper 3.
<http://commons.erau.edu/space-congress-proceedings/proceedings-2001-38th/May-1-2001/3>

This Event is brought to you for free and open access by the Conferences at ERAU Scholarly Commons. It has been accepted for inclusion in The Space Congress® Proceedings by an authorized administrator of ERAU Scholarly Commons. For more information, please contact commons@erau.edu.

EMBRY-RIDDLE
Aeronautical University,[™]
SCHOLARLY COMMONS

Performance-Based Launch Services Contracts:
Better, Faster, Cheaper?

Presented to the 38th Space Congress by
Jane D. Rievley, U.S. Air Force Contracting Officer
45 CONS/LGCZL (321) 494-9519
1201 Edward H. White II St., MS 7200
Building 423, Room N-204
Patrick Air Force Base, FL 32925-3238

February 2001

Performance-Based Launch Services Contracts: Better, Faster, Cheaper?

INTRODUCTION

Services comprise approximately fifty percent of what the Government buys, and with dwindling budgets and increasing costs, many recent reform initiatives have centered on using more commercial practices to obtain these needed services more effectively and efficiently. One of the most important of these initiatives is the use of performance-based acquisition strategies for services. Dr. Jacques Gansler, Under Secretary of Defense for Acquisition and Technology established a goal for DOD to have, at a minimum, fifty percent of service acquisitions, measured in both dollars and actions, to be performance-based by the year 2005. Deputy Secretary of Department of Transportation (DOT), Mortimer Downey, set DOT's goal at eighty percent by end of FY 2004 for contract actions to meet the criteria of performance-based service contracting. Similar goals have been established by NASA. The hopes are for significant savings and greater customer satisfaction through performance gains in timeliness, quality, and productivity.

DEFINITION

Performance-based contracting means structuring all aspects of an acquisition around the purpose or results of the work to be performed as opposed to dictating the manner by which the work is to be performed via detailed specifications or requiring only a level of effort against broad and imprecise statements of work for a term of time. It emphasizes objective, measurable, unambiguous performance tasks preferably against international, commercially available standards (i.e. in terms of quality, timeliness, quantity, etc) incorporated into the statements of work; quality assurance surveillance plans; and specific procedures for reductions of fee or price when services are not performed or do not meet contract requirements. In addition to these basic requirements, contracts may also include positive incentives for performance exceeding the minimum standard, wherever appropriate.

In summary, performance-based contracting should articulate clear, measurable requirements emphasizing quantifiable outcomes, with compensation based on performance measured against those outcomes, and integrated with a quality assurance surveillance plan describing how suppliers' performance will be evaluated against those measurable requirements. This allows offerors maximum flexibility to attain the greatest degree of innovation and creativity. This should also result in reduced compliance requirements, reduced reporting, and government insight in lieu of oversight.

Too often, the Government has contracted for services that, in fact, limit the scope of innovation offerors can bring to the process. This means more care must be used in selecting contractors, determining contract type and incentives. It also means a change in the way the Government has to perform contract administration. Since the Government has put more of the responsibility on the contractor to ensure completed performance of a specific goal versus his best level-of-effort towards a broad goal, the roles of both the Government and the contractor have changed. Performance must be within contractor's management prerogative.

GUIDANCE

The National Performance Review, the Government Performance and Results Act of 1993, and the Chief Financial Officer's Act of 1990, have all established goals implementing principles of streamlining and innovation in order to achieve more effective and efficient management of the Government's resources.

Performance-based service contracts are a revolutionary way of doing business within the Federal Government. Due to the extremely experimental nature of the business of some of the agencies within the Federal Government (DOD, NASA, DARPA, DOT, DOE) up until now there has seemingly been no other way of doing business than to dictate the detail of “how to” reach our stated needs. The mindset has been that we, the customer, know exactly how a needed product should be manufactured and we assume the manufacturer does not know how to manufacture it. If the manufacturer knows how to make the product, we may be missing an opportunity by limiting the possibility of obtaining an improved, less costly, or more reliable product because we have constrained the ability of the manufacturer to be innovative. In the case of commodities, as the commercial marketplace has expanded across the world and with the advent of electronic commerce, it has become much easier to find like and similar products that fit our needs. When we look at the acquisition of services, it is more difficult to define what the product is and measure our satisfaction with it. When the services are to support rocket launches the task becomes even more difficult. The key to the performance approach is to not state the methods for achieving the results but to state objective, measurable performance requirements and quality standards.

The Office of Federal Procurement Policy (OFPP) issued “A Guide to Best Practices for Performance-Based Service Contracting” in October 1998 (final edition). This document is neither mandatory regulatory guidance, nor is it intended to serve as a detailed “how to” manual. Comparisons done, for the purposes of this technical paper, between the OFPP guide and existing performance-based service contracts are done for the purpose of analysis and illustration only for this forum as an educational tool.

PERFORMANCE-BASED SERVICE CONTRACTING (PBSC) CHECKLIST

Minimum Mandatory PBSC Requirements

1. Performance requirements that define the work in measurable, mission-related terms.
2. Performance standards (i.e. quality, quantity, timeliness) tied to the performance requirements.
3. A Government quality assurance (QA) plan that describes how the contractor’s performance will be measured against the performance standards.
4. If the acquisition is either critical to agency mission accomplishment or requires relatively large expenditure of funds, positive and negative incentives tied to the Government QA plan, and incentives. PBSC encourages and enables the increased use of fixed-price contracts and incentives to encourage optimal performance. Cost reimbursement contracts should include specific incentive provisions in addition to the award fee to insure that contractors are rewarded for good performance, as well as quality assurance deduction schedules to assure satisfactory performance.

Additional PBSC Components

5. An historic workload analysis is performed, or the workload is estimated if historic data is unavailable, to aid in determining the performance requirements and standards, Government QA plan, and incentives.
6. The solicitation and contract/task order convey a logical, easily understood flow among performance requirements, performance standards, Government QA, and performance incentives.
7. Process-oriented requirements (e.g. job descriptions, education requirements, level-of-effort) and reports are eliminated to the maximum feasible extent.
8. Government QA performance evaluators assigned to assess contractor performance are trained in PBSC.
9. Commercial and/or industry-wide performance standards, where available, are relied upon.

10. The marketplace and other stakeholders are provided the opportunity to comment on draft performance requirements and standards, the Government QA plan, and performance incentives.
11. If the size of the requirement justifies the resource expenditures, potential offerors are given the opportunity to learn more about the “as is” operation to facilitate their ability to develop intelligent proposals.

RESULTS

In October 1996, the Office of Federal Procurement Policy (OFPP), a division of OMB, initiated a performance-based service contracting (PBSC) Government-wide pilot program. Agencies designated non-PBSC contracts that were due to expire, and re-solicited them using PBSC methods. Twenty-six contracts, ranging in amount from \$100,000 to \$325 million, from 15 agencies with a combined award value of approximately \$585 million were included in this project. The participating contracts experienced an average price decrease of 15 percent in nominal dollars and improvement in customer satisfaction with contractor performance of over 18 percent. Moreover, reduced prices and increased customer satisfaction occurred at all price ranges, for both non-technical and professional and technical services, and whether the contract remained fixed-price or was converted from cost reimbursement to fixed-price. Also gained was an industry pledge to utilize conflict resolution mechanisms to avoid protests and disputes, identify services convertible to performance-based contracting on a firm, fixed-price (FFP) basis, work with the government to eliminate obstacles to implementing this initiative, and identify commercial contracting practices adaptable for use by the Government.

A December 1999 NASA Headquarters Performance-Based Contracting Assessment noted difficulty in developing appropriate and meaningful performance standards for advanced R&D activities. It was also noted that while the Government does not always need to specify the “how”, it needs to understand the contractor’s approach to ensure safety and mission success. The Joint Base Operations and Support Contract (JBOSC) is a cost plus award fee (CPAF) contract which acquires base support for NASA’s Kennedy Space Center, Cape Canaveral Air Station, Patrick Air Force Base, and certain other locations. This contract is the first attempt to consolidate the acquisition of base support at these locations. The JBOSC approach to developing the performance requirements and standards used a statement of objectives technique. That is, the Government described its needs in the solicitation, and the offerors were invited to propose the specific implementation. The award of this first time consolidation contract was on a CPAF basis to allow the Government to have maximum flexibility and control. This is somewhat controversial, since control is not in line with the concept of PBSC. While the contract is CPAF, the prime contractor is already writing fixed-price subcontracts to the maximum extent practicable. The contractor has identified other areas that are candidates for FFP. The following are some of the findings by NASA Headquarters on JBOSC:

1. The contractor has to conform to multiple accounting practices and multiple levels of detail
2. The Government’s continuously unexpected requests for additional contractor-generated data to justify spending priorities and additional budget justification added to the cost of doing business
3. The continued use of policy and guidance requiring Government involvement in approvals in direct conflict with the responsibility contractually given to the contractor
4. Performance standards were not directly linked to the award fee and in effect, contractor performance is measured objectively, and assessed subjectively
5. The highly subjective award fee plan was written at a very high level
6. The surveillance plan was written at an extraordinarily high level which did not enumerate the specific surveillance tools and processes that are employed.

Recommendations included:

1. Identification and use of a single appropriated level of reporting and attempt to reduce the number of data calls
2. Performance of a risk assessment of contractor activities to develop a structured approach to surveillance and revision of the surveillance plan accordingly
3. Monitoring of contractor performance for the right opportunity to convert significant portions of the contract to FFP
4. Conversion of some of the award fee into an objective incentive fee structure.
5. Because each affected agency, i.e. NASA, Air Force and Navy, has a unique organizational culture, sometimes divergent, there is a need to manage the contract in a manner that is acceptable to all of the agencies.

Both agencies anticipated a cost savings of twenty to thirty percent from the JBOSC. Initially, the consolidation of services to support the Air Force and NASA into one contract, the JBOSC, resulted in several hundred less jobs being contracted for versus the previous separate contracts. Analysis by the JBOSC Joint Performance Management Office (JPMO) to account for the projected savings revealed that:

1. The contractor under-estimated his costs (as was recognized in the Most Probable Cost analysis done by the Source Selection Board) and recognized contractually by modification
2. Requirements increased which were not included in the budget
3. Government budget projections were too low due to reliance on reimbursable work which not realized
4. There was an excess projection of funding from other agencies
5. There was sharing in overheads not previously shared
6. Labor rates increased as a result of combining consolidated bargaining agreements between agencies where pay differentials had existed
7. Unanticipated costs resulted from the initiative to stop providing general purpose vehicles and maintenance of them and require contractor to lease them.

Another initiative of the JBOSC was to establish a means of promoting, advertising and ensuring customer feedback on the satisfaction of the performance of the JBOSC contractor. An electronic site was established for this purpose. The JPMO has received numerous customer feedback responses. To date, customer satisfaction has been generally above an average of around 95% measured on product, process, interface and overall satisfaction.

A 10 March 2000 Inspector General report on the DOD titled "Contracts for Professional, Administrative and Management Support Services" (D-2000-100) said that DOD service contracts are riddled with errors from bad cost estimates to weak technical reviews to a lack of competition among bidders. Errors were found on every contract reviewed. It was concluded that the errors are widespread because DOD acquisition professionals are overworked and don't have enough training in good contracting practices. Further, there is inexperience in writing performance-based statements of work, cultural inertia, and concerns about more open and interactive communication with industry throughout the acquisition process.

LESSONS LEARNED

A September 1998 self-evaluation of lessons learned by the JBOSC Source Evaluation Board relays a message about the importance of choosing the right people when doing a source selection. Members were asked to leave attitudes behind and arrive with the willingness to see the other point of view and to work out differences. They must be assigned full time and not as an additional duty. Giving up this type of valuable person to a temporary assignment is a painful sacrifice for any parent organization. Members should not be assigned that cannot devote their full effort to the tasks – part time members attempting to

function in their past capacity are disruptive to team efforts and hinder project/tasks completion. Once assigned, it is difficult to understand the “language” and philosophies of the two cultures. Every area of service had its own differences, for example construction and security.

A self-evaluation of lessons learned by the Space Flight Operations Contract (SFOC) program relays the following messages:

1. Taking an existing contract to a performance contract with the same budget is difficult because the perception by bidders is that something extra is being asked for
2. The contractor will want to remove as much content as possible, while the government wants work content to remain and efficiencies realized.
3. Periods of performance should line up with pre-existing major contracts in order to aid potential future Government-owned Contractor-operated (GOCO) transition efforts or additional contractor consolidations. If the option years start and stop at the same time, then lining up all affected contracts for a GOCO starting point is easier.
4. Take advantage of the available computer systems and networks to optimize the development, review, control, and maintenance of the acquisition documents. Use these systems to effectively communicate actions, schedule and progress with board members, management, industry, etc.
5. State your requirements in the form of desired output; not wants, but valid needs, and avoid “how to”.
6. Providing morning status reports or performing tasks that government personnel can do for themselves are not valid contracting requirements. “Go-fer” tasks are not requirements and should be discouraged for Performance Based Contracting.
7. Government Agency or Center specific standard and specifications should not be copied from previous contracts and dumped in without adequate screening. Many of these standards and specs are “how to” documents. Take time to examine applicable documents, put how-to’s in reference document lists only, and identify that type of document back to the OPR to allow them the opportunity to revise.
8. Spend a lot of time and effort up front to select the verbiage and desired outputs in performance based terms/measures and avoid “how to” and the RFP/SOW will be much smaller.
9. Do not let existing or future organizations or financial reporting schemes dictate the shape of the WBS/SOW. Think “out of the box” and pursue a process or work-based approach.
10. Aggressively challenge and validate higher level requirements because of their influence on award fee.
11. Empower the contractor, transfer of a greater share of the risk, and hold the contractor accountable.
12. Because of the contractor giving accountability back to the government while you are paying them to be accountable. The contractor will readily agree to the government’s reviewing and approving their plans and procedures, both technical and administrative.
13. Assure yourselves that management is ready for PBC because it requires a different management concept than our traditional government-contractor style. Try to minimize the need for management assurance through civil service involvement and the requirement to approve contractor activities rather than assess contractor performance.
14. Avoid contractor proprietary information management or technical data systems that hinder future competition or government insight.
15. Information that the contractor does not need to do the job is most likely information the government does not need either. What the contractor needs should be available and accessible to the government. If the contractors want the government out of their business tell them this information must be freely accessible and available in order to facilitate the government stepping back.

16. Minimize data requirements and deliverable requiring explicit government approval and delivery. Limit only to information/data needed for government to make a decision upon and/or comply to some higher level requirement that has been validated.
17. The most important lesson is to be flexible. There is no one way to do things. The government is reinventing itself, and the old orthodox procurement ways are being rethought. Each of us must be willing to learn during the process, change our ways of thinking, and accept new ways of doing business.

CONCLUSIONS

1. Only one performance standard and process for each type of base support service required should be used if consolidation and efficiencies are expected to reduce cost, particularly when more two or more agencies are involved. Only one format and level of reporting of accounting data should be required of the contractor. Multiple standards and processes increases cost of doing business and opens the door for multiplicity in labor union agreements, which also increases cost.
2. It may be slow to see cost reductions for services being contracted for using PBSC methods if CPAF type contracts are used in lieu of FFP type contracts. Due to the extensive man-hours required on the part of both the Government and the contractor in the administration of the award fee process coupled with the subjectivity of the evaluation, use of award fee should be minimized. When performance standards and their metrics are mature, metric evaluations can be tied to positive and negative incentives allowing a more streamlined and objective evaluation process. An incentive could be tied to obtaining the best Collective Bargaining Agreement for the Government (for example: maximizing cross-utilization of crews, average wage rates between two divergent existing agreements).
3. Attempts should be made before award to separate those requirements which have good historical price data and which are of moderate risk for award as FFP portions, or separated into one FFP contract.
4. Due to the complexity of space launch services, the lack of specific historical cost data for comparison, the magnitude of the change in approach from level of effort term contracts with subjective award fee to performance based completion contracts with performance standards tied to incentives and the number of other initiatives that were incorporated, it may not be reasonable to expect one contract to effect this change all at once. It will most probably be a reiterative process by which each source selection will fine-tune until a completely performance-based launch services FFP contract with positive and negative performance incentives can be created.

SUMMARY

Are performance-based launch services contracts better, faster and cheaper? At this time this writer is prepared to say yes to all of the above based mainly on professional intuition.

In the opinion of the writer and based on the foregoing, it seems intuitive that since we have moved more of the performance responsibility to the contractor versus the Government, that we are by definition getting a better service. Without a customer satisfaction rating on the previous contracts to compare with, it is not possible to make a quantitative analysis of better based on increased customer satisfaction.

At this time, there is not information available to the writer to determine if the services are being offered faster, but again, intuition would predict that where services have been consolidated, just having one contractor providing a range of electronically published services would be faster for a launch service requester than having to deal with several contractors and multiple agencies to obtain needed services. This is especially true for new programs just getting into operation.

The answer to whether our performance-based launch services contracts are cheaper is much more difficult to answer. Again, while we might not be saving the dollars that we had projected, my intuition is that we have gained a better and faster service, and additional services, with a decreased budget. The size and complexity of our launch service contracts and the lack of detailed historical data make this a difficult question to answer. In my professional opinion, since we are now concentrating on gathering data and understanding our requirements more in performance-based terms, we will be laying the groundwork to realize and account for cost benefits. The initial gain is the emphasis by all levels of the Government and the contractor community to strive for better, faster, cheaper. That emphasis, in and of itself, is a step in the right direction to the desired goal. To ensure success we must continue to emphasize and strive for that goal, look for ways to foster flexibility, stay informed about the successes and failures across Government agencies and learn lessons from them. We must stay focused on education, analysis and implementation. The Government must think of themselves as part of the commercial marketplace and not a dictator to it.