## **Guidebook**

for

# Performance-Based Services Acquisition

(PBSA)

## in the Department of Defense



December 2000

#### THE UNDER SECRETARY OF DEFENSE



#### 3010 DEFENSE PENTAGON WASHINGTON, DC 20301-3010

02 JAN 2001

Acquisition of services has become an increasingly significant component of procurements in the Department of Defense (DoD). From 1992 through 1999, DoD procurement of services increased from \$39.9 billion to \$51.8 billion. In 1999, total dollars spent on services equaled the amount spent on supplies/systems. As this trend is expected to continue, we have a responsibility to acquire services with the most efficient practices and processes.

Performance-Based Services Acquisition (PBSA) strategies strive to adopt the best commercial practices and provide the means to reach world class commercial suppliers, gain greater access to technological innovations, maximize competition and obtain the best value to achieve greater savings and efficiencies. DoD has developed this guidebook as a cooperative effort among the components to help the acquisition team, and any other stakeholder, better understand the basic principles of PBSA and better implement performance based methodologies into services acquisitions.

This guidebook has the following goals:

- to promote performance-based strategies for services acquisitions throughout the Department of Defense;
- to educate the acquisition workforce and highlight the key elements of performancebased services acquisition;
- to encourage innovative business practices within the DoD acquisition process;
- · to promote use of the commercial market place;
- to increase awareness that performance-based services acquisitions require participation from all stakeholders (the users, acquisition workforce personnel and industry) to ensure the requirement is adequately satisfied.

It is vital that all stakeholders understand the importance of their role in the PBSA process. This process is comprehensive and must include the user, and many different functional team players (i.e., financial managers, legal advisors, program (project) managers and contracting officers and contract specialists (buyers), etc.). It is essential that industry also be a key participant especially, but not only, when the requirements are complex (to the maximum extent practicable).

As the Department of Defense adopts more commercial business practices, we must also transition to an emphasis on overall business management, rather than a sole focus on contract management. DoD is committed to continually evolving the acquisition workforce by providing the necessary training and tools to operate in this new environment. Efficient and effective buying practices, such as PBSA, will help leverage limited resources in order to meet the many difficult challenges the Department faces.

J. S. Gansler



#### **TOP-LEVEL GUIDING PRINCIPLES**

To the maximum extent practicable, agencies shall use performance-based methods for acquiring services.

Fixed-price, performance-based commercial service acquisitions are complementary strategies that encourage commercial contractors to conduct business with DoD.

Utilize a multi-functional acquisition team to the maximum extent practicable. Support it with a knowledge management infrastructure.

Early planning is essential in determining requirements and assessing market conditions, and it should include the user and as many relevant acquisition team members as possible.

To maximize returns for all stakeholders, acquisition strategies should be tailored on the basis of experience, market research, and risk. Performance-Based Services Acquisition (PBSA) is not a "one size fits all" process.

Strive to define requirements in clear, concise language. Focus on specific work outcomes and ensure that they are measurable to the greatest extent practicable.

Templates are only a partial solution. Sample work statements should be individually tailored to the requirement, and for more complex requirements, work statements should be uniquely crafted.

Through market research, public meetings, and draft solicitations, seek industry comment and suggestions regarding performance objectives, standards, and incentives.

Incentives should motivate a contractor to achieve performance levels of the highest quality consistent with economic efficiency. Ensure that incentives are effective and that they reflect value both to the government and to the contractor.

Contractor performance assessments (the process known as "quality assurance") should focus on outcomes rather than on contractor processes. Focus on insight of the contractor performance, not oversight.

Periodic assessment of contractor performance should emphasize clear communication, with the objective of encouraging and maintaining high standards of performance, and it should be consistent with past performance assessments.

#### **INDEX**

#### **INTRODUCTION**

**Policy** 

PBSA Definition

**Objectives of PBSA** 

**PBSA Team** 

The Business Relationship with the Contractor

#### **MARKET RESEARCH**

Introduction

**Benefits of Market Research** 

Market Research and the PBSA Process

Roles and Responsibilities in Market Research

Conducting Market Research

Sample Survey Questions

## <u>DEVELOPING A PERFORMANCE-BASED WORK STATEMENT AND ESTABLISHING MEASURABLE PERFORMANCE STANDARDS</u>

Introduction

**Performance Requirement Analysis** 

**Examples of Performance Standards** 

**Performance Requirements Summary** 

The Performance Work Statement (PWS)

**Manpower Requirements and Labor Category Descriptions** 

**Historical and Projected Workload Data** 

**Performance Work Statement Review Considerations** 

#### **INCENTIVES AND REMEDIES**

Introduction

Types of Incentives

**Considerations When Contemplating Incentives** 

**Remedies for Non-Performance** 

#### **CONTRACTOR PERFORMANCE MANAGEMENT**

Introduction

**Performance Assessment Plan** 

**Quality Control Plan** 

**Assessment Methods** 

**Performance Assessment Plan Development** 

Some Considerations for Determining the Appropriate Assessment Method

**Suggested Performance Assessment Plan Outline** 

#### **SOURCE SELECTION CONSIDERATIONS**

Introduction

**Best Value** 

Instructions to Offerors

**Evaluation Factors** 

**Past Performance Information** 

#### **CONTRACT ADMINISTRATION AND OTHER CONSIDERATIONS**

Introduction

**Postaward Orientation** 

**Documenting Contractor Performance Assessments** 

#### **APPENDIXES**

**APPENDIX A - TREE DIAGRAM** 

APPENDIX B - PERFORMANCE REQUIREMENTS SUMMARY MATRIX

APPENDIX C - SAMPLE PERFORMANCE REQUIREMENTS

**APPENDIX D - INCENTIVES EXAMPLES** 

APPENDIX E – WORKLOAD DATA SAMPLE

APPENDIX F - HELPFUL PERFORMANCE ASSESSMENT METHODS

APPENDIX G - MARKET RESEARCH WEB SITES

APPENDIX H - PERFORMANCE WORK STATEMENT (PWS) WRITING TIPS

**APPENDIX I – AWARD TERMS** 

APPENDIX J - WRIGHT BROTHERS PERFORMANCE-BASED SPECIFICATIONS

APPENDIX K - REFERENCES AND WEB SITES

#### INTRODUCTION

#### **Policy**

"It is the policy of the Department of Defense that, in order to maximize performance, innovation and competition, often at a savings, performance based strategies for the acquisition of services are to be used wherever possible. While not all acquisitions for services can be conducted in a performance-based manner, the vast majority can. Those cases in which performance-based strategies are not employed should become the exception. In order to ensure that the Department continually realizes these savings and performance gains, the DoD establishes, at a minimum, that 50 percent of service acquisitions, measured in both dollars and actions, are to be performance-based by year 2005." – Under Secretary of Defense, Acquisition, Technology & Logistics (USD (AT&L)), April 5, 2000.

#### **PBSA Definition**

PBSA involves acquisition strategies, methods, and techniques that describe and communicate measurable outcomes rather than direct performance processes. It is structured around defining a service requirement in terms of performance objectives and providing contractors the latitude to determine how to meet those objectives. Simply put, it is a method for acquiring *what is required* and placing the responsibility for *how it is accomplished* on the contractor.

To be considered performance-based, an acquisition should contain, at a minimum, the following elements

- 1. <u>Performance work statement</u>—Describes the requirement in terms of measurable outcomes rather than by means of prescriptive methods.
- 2. <u>Measurable performance standards</u>—To determine whether performance outcomes have been met, defines what is considered acceptable performance.
- 3. <u>Remedies</u>—Procedures that address how to manage performance that does not meet performance standards. While not mandatory, *incentives should be used*, *where appropriate*, to encourage performance that will exceed performance standards. Remedies and incentives complement each other.
- 4. <u>Performance Assessment Plan</u>—Describes how contractor performance will be measured and assessed against performance standards. (Quality Assurance Plan or Quality Assurance Surveillance Plan).

#### **Objectives of PBSA**

By describing requirements in terms of performance outcomes, agencies can help achieve the following objectives:

<u>Maximize performance:</u> Allows a contractor to deliver the required service by following its own best practices. Since the prime focus is on the end result, contractors can adjust their processes, as appropriate, through the life of the contract without the burden of contract modifications provided that the delivered service (outcome) remains in accordance with the contract. The use of incentives further motivates contractors to furnish the best performance of which they are capable.

<u>Maximize competition and innovation</u>: Encouraging innovation from the supplier base by using performance requirements maximizes opportunities for competitive alternatives in lieu of government-directed solutions. Since PBSA allows for greater innovation, it has the potential to attract a broader industry base.

<u>Encourage and promote the use of commercial services:</u> The vast majority of service requirements are commercial in nature. Use of FAR Part 12 (Acquisition of Commercial Items) procedures provides great benefits by minimizing the reporting burden and reducing the use of government-unique contract clauses and similar requirements, which can help attract a broader industry base.

**Shift in risk**: Much of the risk is shifted from the government to industry, since contractors become responsible for achieving the objectives in the work statement through the use of their own best practices and processes. Agencies should consider this reality in determining the appropriate acquisition incentives.

<u>Achieve savings:</u> Experience in both government and industry has demonstrated that use of performance requirements results in cost savings.

#### **PBSA Team**

The PBSA team should be a customer-focused, multi-functional team that plans and manages service contracts throughout the life of the requirement. The requirement may be for a single function or for multiple functions. Estimated dollar value should not be the sole determinant of the amount of effort devoted to the acquisition. Previously, it was common for contracting and other functional experts to work independently in acquiring services. This should be a thing of the past. It is essential that all stakeholders—users/customers, acquisition personnel, and industry—be involved throughout the service acquisition life cycle, from the requirements analysis phase through contract award and administration. The duties, expertise, and contributions of each PBSA team member are important to the success of a service acquisition. Many functional experts can make up an acquisition team, as noted below. The description of their duties is not all-inclusive.

<u>Customer/User</u>: Responsible for defining the requirement, including an assessment of the risk that the government might assume when relying on commercial specifications and common marketplace performance and quality standards. The customer/user also plays an important role in deciding what tradeoffs can be made when considering a commercially available service to fulfill an agency requirement.

<u>Technical specialist/project manager/program manager</u>: These people serve as the principal technical experts and are usually the most familiar with the requirement and best able to identify potential technical tradeoffs and determine whether the requirement can be met by a commercial solution.

<u>Contracting officer/contract specialist:</u> Serves as the principal business advisor and principal agent for the government responsible for developing the solicitation, conducting the source selection, and managing the resultant contract and business arrangement. This individual researches contracts in the marketplace to identify general business practices such as commercial terms and conditions, contract type, bid schedule breakout, and the use of incentives.

<u>Cost/price analyst:</u> Analyzes and evaluates financial price- and cost-based data for reasonableness, completeness, accuracy, and affordability. Alternatively, some agencies utilize cost engineering personnel from within an engineering division to conduct cost/price analysis from a technical standpoint.

Performance assessment personnel (quality assurance personnel): Performance assessment personnel are known by many names, such as quality assurance evaluator (QAE), contracting officer's representative (COR), or contracting officer's technical representative (COTR), but their duties are essentially the same. They serve as the onsite technical managers assessing contractor performance against contract performance standards. Performance assessment personnel are responsible for researching the marketplace to remain current with the most efficient and effective performance assessment methods and techniques.

<u>Small and Disadvantaged Business Utilization (SADBU) Specialist</u>: Serves as the principal advisor and advocate for small business issues. Also serves as the liaison with the Small Business Administration (SBA).

Finance/budget officer: Serves as an advisor for fiscal and budgetary issues.

<u>Legal advisor</u>: Ensures that the commercial practices and terms and conditions contemplated are consistent with the government's legal rights, duties, and responsibilities. Reviews for legal sufficiency and advises on acquisition strategies and contract.

<u>Miscellaneous others:</u> Personnel from outside the agency may also be useful, depending on their area of expertise. These include people from agencies such as the Defense Logistics Agency, the Defense Contract Audit Agency, the Defense Finance and Accounting Service, the Defense Contract Management Agency, and the Environmental Protection Agency, to name a few.

#### The Business Relationship with the Contractor

A positive relationship between the government and the contractor is essential in fulfilling a performance-based requirement. The agency's relationship with prospective

and performing contractors should be one that promotes a strong and positive business alliance to achieve mutually beneficial goals—such as timely delivery and acceptance of high-quality services—through the use of efficient business practices. Business relationships should seek to create a cooperative environment to ensure effective communication between the parties, teamwork, cooperation, and good-faith performance. These are important for meeting mission objectives and resolving conflicts and problems. Each party should clearly understand the goals, objectives, and needs of the other. It is essential that government and industry work together as a team to communicate expectations, agree on common goals, and identify and address problems early on to achieve desirable outcomes.

#### MARKET RESEARCH

#### Introduction

Market research is the process of collecting and analyzing information on commercial capabilities, processes, pricing, incentives, warranties, and delivery and other standard terms and conditions. This information is needed in order to determine the suitability of the marketplace for satisfying a need or requirement. The ultimate goal of market research is to help the acquisition team become **informed consumers**. Information derived from market research will help the acquisition team develop the optimum strategy for meeting the requirement. This section will focus on market research as it applies to PBSA.

#### **Benefits of Market Research**

- Helps determine whether the service is commercially available.
- Helps the acquisition team understand what alternative solutions the marketplace can provide.
- Can provide insight regarding potential price expectations.
- Helps specify or describe agency needs.
- Serves as the gateway for keeping abreast of the latest in technology and current market trends.
- Assists in overall acquisition planning.

#### Market Research and the PBSA Process

There is no single, stand-alone step for market research in the PBSA process. Market research is a continuous process that should be revisited throughout the acquisition life cycle. Consider the following:

<u>Preaward</u>: Before any documents such as the performance work statement are developed, market research should be conducted to obtain information about alternative solutions that may be available from the marketplace today. Once the requirement has been thoroughly analyzed (as described in the preceding section) market research is also useful in developing, validating, and refining the Performance Requirements Summary for the performance work statement.

<u>Postaward</u>: Some commercial market areas and their practices are continually evolving, being reshaped, and responding to various trends in the market, (e.g., information technology). Therefore, market research is useful after contract award to ensure that the current acquisition strategy or business arrangement remains effective in terms of price, schedule, and technical excellence.

#### Roles and Responsibilities in Market Research

Since market research should address both business and technical considerations of a requirement, it requires the active participation of all acquisition team members as appropriate. These considerations might include technical approaches, common quality controls, contract structure, and standard industry terms and conditions. Therefore, when market research is being conducted, all members of the acquisition team should participate, as appropriate to their area of expertise.

#### **Conducting Market Research**

There are no specific procedures for performing market research; it should be tailored or adjusted to each acquisition. Different kinds of services may call for different approaches. The objective is to become informed about and well-versed in the particular service industry that will be providing the requirement. Therefore, the key is to be creative yet thorough. While not the only means of accomplishing market research, consider the following:

- Determine what information is necessary. (What do I need to know, and what kinds of questions will I need to ask to obtain it?)
- Locate informational sources where you might find specific points of contact to start
  market research, such as the Internet, industry associations, trade journals, and
  sources-sought synopses. Developing sources of information can be accomplished
  through group brainstorming, and it may require more than one brainstorming
  session.
- Define a list of sources, eventually narrowing it down to government and industry contacts that can provide specific information relevant to satisfying the requirement. Appendix G sets forth a list of Internet sites that may assist the acquisition team.
- Develop survey questions. Doing so helps to consider and capture all those items requiring investigation and research.
- Use the survey questions as a scripted point of reference for interviewing sources. Set a time line and discuss your results with the acquisition team.

#### **Sample Survey Questions**

- What is the normal length of a contract for the services being contemplated?
   Are there any special terms and conditions?
- Which services should be required on-site? Which can be provided off-site?
- What kinds of factors are used to evaluate service providers?
- What kinds of performance incentives are used?
- What kinds of performance assessment methods are commonly used?

- Who are your frequent customers? (Try to get a point of contact.)
- Who owns or furnishes needed equipment and supplies?
- What are the common qualifications of the people who are providing the services?

The answers to these questions will help you build performance objectives, performance standards, and other elements in the PBSA process or at least will allow you to be better informed. The more the acquisition team knows about the particular service industry, the more likely the team can best articulate the requirement in performance-based terms.

Keep in mind that contractors or vendors are not required to provide any information. Any furnishing of information is strictly voluntary. As a rule, information on standard commercial practices will not be proprietary. However, if vendors provide any information that they consider proprietary, agencies must afford the same protection to that information that they afford to proprietary information submitted as part of a proposal.

**TIP:** Review the results of recent or previous market research. Consider results from other agencies that have acquired similar services.

- TIP: Start early and involve all key players in the acquisition process.
- **TIP:** Contact knowledgeable individuals in the government and industry. Discuss relevant best practices and acquisition strategies.
- **TIP:** Obtain source listings (yellow pages, Internet Web sites, etc.).
- TIP: Query any known government and commercial databases.
- **TIP:** Publish formal requests for information (RFIs) in the *Commerce Business Daily* (CBD) or in other electronic posting systems. However, keep in mind that the CBD may not be the best mode for reaching those commercial companies that normally don't do business with the government.
- **TIP:** Review vendor publications/catalogs.
- **TIP:** Host pre-solicitation industry exchanges commensurate with the size and complexity of the requirement.
- **TIP:** Keep current with industry solutions in your area of expertise by attending symposiums, trade shows, etc.

## DEVELOPING A PERFORMANCE-BASED WORK STATEMENT AND ESTABLISHING MEASURABLE PERFORMANCE STANDARDS

#### Introduction

The key to using performance-based methodologies is describing requirements as outcomes and <u>not in terms of how to accomplish</u> the requirement. Therefore, a performance based work statement must be carefully structured to ensure that the requirement is articulated in this manner. Accordingly, the acquisition team will conduct a series of in-depth analyses to understand the requirement fully in order to be able to articulate the desired outcomes.

#### **Performance Requirement Analysis**

Developing a performance work statement involves a series of analysis-oriented steps to help identify and define the requirement.

1. <u>Define the desired outcomes</u>. What must be accomplished to satisfy the requirement?

To define desired outcomes, list what needs to be accomplished in order to satisfy the overall requirement, <u>from a top-level perspective</u>. Use an interview or brainstorming approach with the customer (user) to determine all dependent variables (what, when, where, who, quantity, quality levels, etc.) to ensure that all unique requirements have been considered. For some requirements, you may simply be reviewing previous requirements for validity and accuracy. For example:

#### <u>Custodial requirement</u>

- clean office administration building
- clean office training building
- clean office physics lab

#### Pre-hardware development

- conceptual design
- component development
- design
- fabrication
- testing
- reporting requirements
- 2. On the basis of the desired outcomes defined in step 1, <u>conduct an outcome</u> <u>analysis</u> to identify performance objectives. What tasks must be accomplished to arrive at the desired outcomes?

An <u>outcome analysis</u> is the process that identifies specific performance objectives for those outcomes defined in the previous step. <u>Performance objectives</u> are the specific

services that you want performed and delivered by the contractor, defined in terms of the outcomes. This step differs from the previous step in that it goes into greater detail and expands the analysis beyond the top-level perspective. The goal is to describe adequately what is expected in accomplishing the requirement (not how to accomplish it).

You should start by segregating desired outcomes into lower task levels and linking those tasks together into a logical flow of activities. Using a tree diagram to outline each of the basic outcomes (those top-level perspectives) is recommended in order to ensure that you have considered all critical elements of the requirement. Appendix A is a tree diagram that illustrates the intent of this step.

- TIP: Keep in mind that there may not have to be a performance objective (a need to get into greater detail) for each task specified, especially those tasks at the lower task levels. The performance objective of lower tasks may be inherent in the higher level tasks and thus may be captured at that higher level. You should go only as low as you have to in order to describe the requirement adequately.
- TIP: Ensure that each performance objective is necessary and carefully chosen. Try not to make any performance objective unduly burdensome or restrictive. Restrictive performance objectives are often pricey and may result in delivery of unnecessary requirements at a high price. However, if it is absolutely necessary in order to meet the mission, proceed accordingly.
- 3. On the basis of the performance objectives identified in step 2, conduct a performance analysis to identify the appropriate performance standards and acceptable quality levels (AQLs). When or how will I know that the outcome has been satisfactorily achieved, and how much deviation from the performance standard will I allow the contractor, if any?

A performance analysis is a process that identifies how a performance objective should be measured and, thus, what performance standards, (e.g., timeliness or quality levels) are appropriate and reasonable for that particular performance objective. In this step, you may also identify AQLs, also known as thresholds. Performance standards and AQLs are very important in that they identify acceptable levels of performance. Developing and setting performance standards and AQLs are judgment calls based on the needs of the mission, available expertise, and market research. The members of the acquisition team should work closely with each other when developing standards and AQLs. See Appendix C for examples of performance standards and AQLs.

AQLs constitute a minimally acceptable level of performance and are typically stated as a percentage of required conformances (e.g., clean, 95% of the time) or as a number of permissible deviations (e.g., 1 error per x time period). In developing AQLs, you are asking, "What minimum level of quality do I need to meet my mission needs?" Keep in mind that not every performance standard may have an AQL. When a performance standard does not include an AQL, then you are stating that no deviations are allowed in meeting the performance outcome (see the tips below).

TIP: Exercise care in establishing AQLs for performance standards. Often, the closer to 100 percent perfection, then the higher the price. It is also important to ensure that performance standards are measurable. Think carefully when establishing a 100 percent standard (or not establishing deviations), since this threshold can directly affect the price. 100 percent AQLs (thresholds) can be unreasonable or unrealistic for some performance objectives. However, if the performance objective is critical (for instance, if it covers a life-threatening matter), 100 percent is acceptable. Conversely, if the AQL is set too low, it could act as a disincentive to good contract performance.

TIP: Market research may be helpful for this area. It might reveal that a particular service area may have specific, commercially acceptable performance standards that as expressed in terms other than percentages or deviations. It is generally wise to use commercial standards unless otherwise inappropriate for the requirement. You might find it necessary to establish your own performance standards. It's a good idea to employ industry input or review of agency standards to ensure that measures are realistic and effective. This may be accomplished through public meetings, public comment on proposed standards, or draft solicitations. The contracting officer should serve as a business advisor to guide the team on the use of commercial performance standards.

#### **Examples of Performance Standards**

- Response times, delivery times, timeliness meeting deadlines or due dates, adherence to schedule.
- Error rates number of mistakes/errors allowed in meeting the performance standard.
- Accuracy rates similar to error rates, but most often stated in terms of percentages.
- Completion milestone rates x percent complete at a given date.
- Cost control keeping within the estimated cost or target cost. Applies in cost-reimbursement contract arrangement.

#### **Performance Requirements Summary**

The desired outcomes, performance objectives, performance standards, and AQLs, that have been developed through the previously explained analyses are then documented in a Performance Requirements Summary (PRS). See Appendix B for a sample PRS matrix. The PRS will be the baseline for the performance work statement. PRSs should be brief and should capture the salient elements of the requirement. In the actual performance work statement, the acquisition team will elaborate on and describe the requirement in greater detail. The ultimate goal is to describe the requirement in a way that allows an offeror to understand fully what will be necessary to accomplish it. Appendix C contains several samples of PRSs.

NOTE: Many of the samples in Appendix C come from various agencies and other sources. Performance objectives and performance standards are sometimes combined in one tasking sentence. Likewise, performance standards and AQLs can also be combined. There is no preferred format. Agencies should ensure only that PRSs and performance work statements fully communicate the expectation using the appropriate performance-based service acquisition elements.

#### **Performance Work Statement (PWS)**

In the actual work statement, the acquisition team will elaborate on the contents of the PRS and describe the requirement in such a way that offerors will be able to understand fully from their point of view, what will be necessary to accomplish the requirement. Issuing a draft PRS is always a good way of obtaining industry feedback in order to achieve the best-quality work statement. Expect the PWS to evolve as a result of this feedback. It is also important to allow adequate time for meaningful exchanges with industry. (See Appendix \_\_\_\_.)

#### **Manpower Requirements and Labor Category Descriptions**

As reiterated throughout this guidebook, the key to performance-based acquisition is describing requirements in terms of measurable outcomes and not in terms of **how** to accomplish the requirement. This applies equally to labor category descriptions.

Previously, manpower requirements were commonly prescribed in terms of "required number of bodies" or by using other qualifiers such as college degrees or specific years of experience. Prescribing manpower requirements limits the ability of offerors to propose their best solutions, and it could preclude the use of qualified contractor personnel who may be well suited for performing the requirement but may be lacking—for example—a complete college degree or the exact years of specified experience.

Instead, the requirement should be described in a way that allows offerors to meet the requirement by applying alternative sets of resources. Offerors can then propose their best solutions for manpower requirements, in accordance with the described requirement. Once the offeror submits its proposal, the acquisition team will evaluate the offeror's proposal, including manpower solutions, for best value.

Since performance-based acquisition methodologies are results-oriented, agencies should not focus on contractor-proposed labor mixes after contract award, as long as the desired outcome is achieved in accordance with the stated performance standards and any other requirements in the contract.

#### **Historical and Projected Workload Data**

Consider including historical and projected workload data and any surge requirements in the PWS, as applicable. See Appendix E for an example. This type of information allows prospective contractors to predict manpower and supply needs more accurately as they relate to the specific requirement and thus to develop more realistic proposals.

While historical data are often useful, it is important to remember that they merely describe past experience and may not necessarily be indicative of the future.

Workload data are often available from existing management information systems, databases, and records. If workload data are not available, consider consulting with other agencies to obtain information on similar requirements. Some agencies incorporate in PWSs a requirement to maintain accurate workload data that can be useful for future contract work estimates.

#### **Performance Work Statement Review Considerations**

- Will offerors be able to prepare a sound technical proposal? Are specific outcomes clearly stated so that the offeror will know exactly what to do and know when it is required? Are tasks realistic and performable?
- Will offerors be able to prepare a sound cost proposal? Is the PWS sufficiently detailed to enable both the government and the offeror to estimate labor and other costs and to identify other resources required for accomplishing each task element?
- Are standards clearly identified in such a way that all parties can adequately measure performance? Is the PWS too restrictive?
- Are proper quantities and delivery dates indicated for each deliverable? Are schedules and frequencies of performance clearly defined?
- When it will be necessary to reference other documents, are they properly described and cited?
- Have the appropriate government and industry standards been researched and referenced in the PWS?
- Have any data requirements been specified separately in a data requirements section? Have extraneous data requirements been eliminated?

#### **INCENTIVES AND REMEDIES**

#### Introduction

Incentives are not unique to performance-based contracting. Contracts, by their very nature, motivate successful performance—contractors that fail to per form satisfactorily don't get paid. And, increasingly, contracts are incorporating specified incentives designed to encourage superior performance. Beyond that, the government collect, maintain, and uses information on past performance. An exceptional track record gives a contractor a greater competitive edge in future source selections and thus a stronger assurance of future work. Also, contract clauses such as *liquidated damages* provide a negative incentive—if the contractor causes harm or damage to the government as a result of failure to perform, the contractor must compensate the government in accordance with the contract clause. The overall point is that incentives are an essential element of PBSA (or any contract) and that several methodologies are available that are useful for motivating high-quality performance. This section discusses the use of incentives and remedies.

#### Types of Incentives

Incentives can be monetary, non-monetary, positive, or negative. They can be based on cost, on schedule, or on quality of performance. Regardless of the final composition and structure of the incentives, the goal is to encourage and motivate the best-quality performance.

<u>Cost-based incentives</u>: Performance incentives are designed to relate profit or fee to results achieved by the contractor in relation to identified cost-based targets. For services such as maintenance of equipment, typical measures would be mean time between failures (MTBF), mean time to repair (MTTR) or system availability rates (incommission rates). Regardless of the measure, performance incentives must be quantified and within a reasonable range (high-target-low

Award-fee contract arrangements: Using evaluation factors established in an award fee plan, award-fee contracts are a tool for subjectively assessing contractor performance for a given evaluation period. They allow contractors to earn a portion (if not all) of an award-fee pool established at the beginning of the evaluation period. The agency unilaterally determines the amount of earned fee. In the context of PBSA, the award-fee evaluation will be based on a subjective assessment of how well the contractor meets or exceeds the applicable performance standards.

Award-term contract arrangements: Award-term arrangements are very similar to award-fee contracts, however, instead of money as compensation for quality performance, the contractor is awarded additional periods of performance. Or, if performance is habitually below standard, the period of performance can be shortened. Award-term arrangements are most suitable when establishing of a long-term

relationship is valuable both to the government and to the potential contractor. They differ from options in that award terms are based on a formal evaluation process and do not entail the regulatory procedures associated with priced options. Award-term arrangements are relatively new. See Appendix I for more information.

<u>Schedule incentives:</u> Schedule incentives focus on getting a contractor to exceed delivery expectations. They can be defined in terms of calendar days or months, attaining or exceeding milestones, or meeting rapid-response or urgent requirements.

<u>Past performance</u>: Past performance information can affect decisions to exercise options or to make future contract awards. Thus past performance assessments are a quick way for motivating improved performance or to reinforce exceptional performance. Keep in mind that the integrity of a past performance evaluation is essential.

#### **Considerations When Contemplating Incentives**

- Will enhanced performance provide additional value to the mission?
- Which areas of the requirement would benefit most from enhanced performance?
   Which areas do not need added incentives (or which areas can do without than)?
- How much is the agency willing to pay to achieve a level of performance beyond the performance standard? Is there a potential for using cost-sharing?
- Do contractors within the particular industry prefer additional performance periods (award terms) in lieu of monetary incentives (award fees)?
- Is the incentive affordable? Will it affect timelines or in a schedules in a positive way? Adversely?
- TIP: Make sure incentives are realistic and attainable—in other words, understand that a contractor will not spend a dime to earn a nickel. To achieve the desired outcome, incentives should be consistent with the effort and the contract value. They must also be carefully structured to consider their overall impact and to avoid any unintended consequences while providing value for achieving the mission.
- TIP: Make sure that incentives are built upon performance objectives and performance standards, and ensure that they are measurable and attainable. If they do not clearly communicate the agency's desires and expectations, they will have—at best—only a random chance of achieving the desired outcome. An "Ill know it when I see it" approach is neither an incentive nor a performance standard.

#### Remedies for Non-Performance

Performance-based contracts should specify procedures or remedies for reductions in price (or fee) when services are not performed or do not meet contract requirements.

Additionally, agencies must give the contractor an opportunity to correct nonconforming services at no increase in contract price. While reductions in price may be appropriate for a particular circumstance, it is also recognized that it may be more feasible to require the contractor to re-perform the service at no additional cost. Acceptance procedures should provide the appropriate terms to address less-than-satisfactory performance. In cases where commercial item acquisition procedures are used, agencies should rely on contractor' existing quality assurance systems as a substitute for acceptance procedures. The bottom line is that agencies should not pay for services that do not conform, do not meet performance standards, or have not been properly rendered.

#### CONTRACTOR PERFORMANCE MANAGEMENT

#### Introduction

Traditionally, performance-based contracting methods have used the term "quality assurance" to refer to the functions performed by the government to determine whether a contractor has fulfilled the contract obligations pertaining to quality and quantity. The term "quality assurance," however, does not accurately capture the true essence of performance-based service acquisition, since agencies do not "assure quality"—rather they assess contractor performance. As such, performance assessment is not surveillance. In a performance-based environment, it is the contractor that is contractually responsible for quality assurance, further motivated through various kinds of incentives such as award-fee and past performance assessments. Agencies are still responsible for ensuring that they get what they are paying for – by periodically evaluating performance through the appropriate assessment methods. Hereafter, "performance assessment" will be used in place of the term "quality assurance" unless otherwise noted.

#### **Performance Assessment Plan**

A performance assessment plan describes how government personnel will evaluate and assess contractor performance. It is intended to be a "living" document that should be revised or modified as circumstances warrant. It is based on the premise that the contractor, not the government, is responsible for managing and ensuring that quality controls meet the terms of the contract. If the performance assessment plan is not incorporated into the contract, it should nevertheless be furnished to the contractor.

#### **Quality Control Plan**

A quality control plan is a plan developed by the contractor for its internal use to ensure that it performs and delivers high-quality service. Often the quality control plan is part of the contractor's original proposal, and in many cases it is incorporated into the resultant contract.

#### **Assessment Methods**

Several methods can be used to evaluate a contractor's performance. Below are some examples of commonly used assessment methods:

Random sampling: Random sampling is a statistically based method that assumes receipt of acceptable performance if a given percentage or number of scheduled assessments are found to be acceptable. The results of these assessments help determine the government's next course of action vis-a-vis the contractor, if necessary, and whether adjustments in this method of assessment are necessary. If performance is considered marginal or unsatisfactory, the evaluators should document the discrepancy

or finding and begin corrective action. If performance is satisfactory or exceptional, they should consider adjusting the sample size or sampling frequency. Random sampling is the most appropriate method for frequently recurring tasks. It works best when the number of instances is very large and a statistically valid sample can be obtained.

<u>Periodic Sampling</u>: Periodic sampling is similar to random sampling, but it is planned at specific intervals or dates. It may be appropriate for tasks that occur infrequently. Selecting this tool to determine a contractor's compliance with contract requirements can be quite effective, and it allows for assessing confidence in the contractor without consuming a significant amount of time.

<u>Trend analysis:</u> Trend analysis should be used regularly and continually to assess the contractor's ongoing performance over time. It is a good idea to build a database from data that have been gathered through performance assessment. Additionally, contractor-managed metrics may provide any added information needed for the analysis. This database should be created and maintained by government personnel.

<u>Customer feedback</u>: Customer feedback is firsthand information from the actual users of the service. It should be used to supplement other forms of evaluation and assessment, and it is especially useful for those areas that do not lend themselves to the typical forms of assessment. However, customer feedback information should be used prudently. Sometimes customer feedback is complaint-oriented, likely to be subjective in nature, and may not always relate to actual requirements of the contract. Such information requires thorough validation.

<u>Third-party audits</u>: The term "third-party audits" refers to contractor evaluation by a third-party organization that is independent of the government and the contractor. All documentation supplied to, and produced by, the third party should be made available to both the government and the contractor.

#### **Performance Assessment Plan Development**

Performance assessment plans should be developed in conjunction with the preparation of the performance work statement. For every performance objective listed in the Performance Requirements Analysis, determine one or more methods of performance assessment. Also make sure that the methods allows for adequate assessment of the performance standard itself. In other words, will random sampling allow you to adequately measure performance in relation to the stated performance standard?

The performance assessment plan should outline the acceptance process and should state how acceptance of services will occur (i.e., DD-250, etc).

Performance assessment plans should describe how performance information is to be captured and documented so that it can later serve as past performance information.

Effective use of the performance assessment plan, in conjunction with the contractor's quality control plan, will allow the government to evaluate the contractor's success in meeting the specified contract requirements.

Those assessment methods identified in the performance assessment plan, together with the contractor's quality control plan, will also help in evaluating the success with which the contractor delivers the level of performance agreed to in the contract.

#### Some Considerations for Determining the Appropriate Assessment Method

- What is the most effective way to assess the contractor's performance outcomes in relation to the associated performance standards?
- How critical is this particular task to the requirement and to the overall mission? Is performance assessment critical to a particular task, and is it is worth the government's time and effort?
- How long should the assessment period be? How is this linked to the criticality of the task? How frequently should performance assessment take place?
- What is the availability and of assessors (quality assurance evaluators)? Are there enough evaluators to carry out the degree of evaluation contemplated?
- do the proposed evaluation methods represent a common commercial practice for the particular service area?
- Is re-performance practical or reasonable?

#### **Suggested Performance Assessment Plan Outline**

- Purpose
- Roles and responsibilities
- Procedures
- Methods of assessment
- Successful performance and remedies
- Certification of services
- Sample of contract discrepancy report
- Customer complaint procedures and training instructions
- Acronyms and other abbreviations
- **TIP:** Employ a variety of techniques. Degrees of performance assessment should be based on the criticality of the service or task and also on the resources available to accomplish the assessment.

- **TIP:** Recognize that the methods and degrees of performance assessment may change over time in proportion to the evaluator's level of confidence (high or low) in the contractor's performance.
- **TIP:** Degrees of performance assessment are typically based upon difficulty or criticality of a service—the greater the difficulty or criticality, the more performance assessment may initially be necessary.

#### SOURCE SELECTION CONSIDERATIONS

#### Introduction

PBSA source selection procedures do not necessarily differ from source selection procedures in general or have special considerations. However, there are some key areas worthy of brief review. The key to successful use of any factor in the source selection process is the establishment of a clear relationship between the performance work statement (PWS), Section L of the solicitation (Instructions, Conditions, and Notices to Offerors or Respondents), and Section M of the solicitation (Evaluation Factors for Award). The factors that are chosen for evaluation should tie in with the work requirements.

#### **Best Value**

A source selection based on best value is an excellent strategy to follow when using performance-based contracting methods. One of the goals of PBSA is to achieve the highest degree of quality and efficiency at a reasonable price. While competition is critical to attaining these goals, the best-value offeror may not be at the lowest price. Best-value source selections allow for tradeoffs in evaluation factors that will consider award to other than the lowest-priced offeror.

One of the main challenges in determining best value is assessing performance risk. This is challenging because the offerors may be proposing different approaches that can be difficult to compare (an "apples to oranges" comparison). While Section M of a solicitation provides the basis for evaluation, there is no precise science to assessing dissimilar approaches toward fulfilling a performance-based service requirement. If no expertise exists, consider enlisting the aid of consultants if possible.

#### Instructions to Offerors

Section L is that place in the solicitation where information and guidance are provided to help offerors prepare proposals in response to the solicitation. As previously stated, the PWS, Section L, and Section M all tie together. The PWS describes the requirement. Section L requests information relating to how the offeror will execute that requirement, for evaluation purposes. Section M describes how the proposal will be evaluated for source selection purposes. The following example describes one piece of a requirement to illustrate the relationship between the three areas simply.

Performance work statement	Section L	Section M
Provide taxi service so that pick-up time is within 5 minutes of request time, 95% of the time.	The offeror shall describe how taxi service will be provided in accordance with the stated	The agency will evaluate the offeror's approach for taxi service. The offer will be evaluated for best

requirement.	value, in terms of
	technical merit and cost, with additional
	consideration for the offeror's relevant past performance (track
	record).

#### **Evaluation Factors**

Evaluation factors used for assessing offerors' proposals should be crafted so as to permit the selection of the offeror that will most likely provide the best value. To help ensure that selection decisions are based on significant determinants, evaluation factors should be kept to a minimum. Each factor should receive the appropriate weighting based on its relative importance. Evaluation factors may include areas such as management approach, relevant experience, past performance, and price.

#### **Past Performance Information**

Past performance information should be an important element of every evaluation and contract award. The use of past performance as an evaluation factor in the contract award process enables agencies to better predict the quality of future work and the likelihood that the work will be satisfactory. It also gives contractors a powerful incentive to strive for excellence. Performance factors should be tailored to the key performance requirement. For example, if one of the performance standards for a call-center requirement is that the contractor must respond within 2 minutes when answering specific questions, the performance evaluation can objectively address how well the contractor met this standard in performing past contracts.

Consider using past performance information from a wide variety of sources both inside and outside DoD. *The DoD Guide to Collection and Use of Past Performance Information* (PPI) is a great source for helping understand the importance of PPI in awarding and administering government contracts. It is a practical reference tool on DoD past performance policy. It is designed to articulate the key techniques and practices for collecting and using performance information. You can find the guide at http://www.acq.osd.mil/ar/#ppiguide for further details on the subject.

#### CONTRACT ADMINISTRATION AND OTHER CONSIDERATIONS

#### Introduction

Contract administration embraces all those activities performed by government officials after award to ensure the performance and delivery of requirements within the terms of the contract. It encompasses all activity involving the government and the contractor from contract award until performance completion and contract closeout. Contract administration constitutes the management of the contract from both a contractual and technical standpoint to assure that the contractor delivers in accordance with the contract's terms. Therefore, it is incumbent upon the PBSA team to understand some of the common activities within contract administration and their role in this process.

The specific nature and extent of contract administration varies from contract to contract. It can range from the minimum acceptance of a delivery and payment for delivery to extensive involvement by program, audit, and procurement officials throughout the contract term. Factors influencing the degree of contract administration include the nature and complexity of the service and the type of contract.

Good contract administration also assures that the end users are satisfied with the product or service being obtained under the contract. One way of verifying customer satisfaction is to obtain input directly from the customers through the use of customer satisfaction surveys. These surveys help to improve contractor performance because the feedback can be used to notify the contractor when specified aspects of the contract are not being met. Customer satisfaction surveys also help to improve communications between the procurement, program, and contractor personnel.

#### **Postaward Orientation**

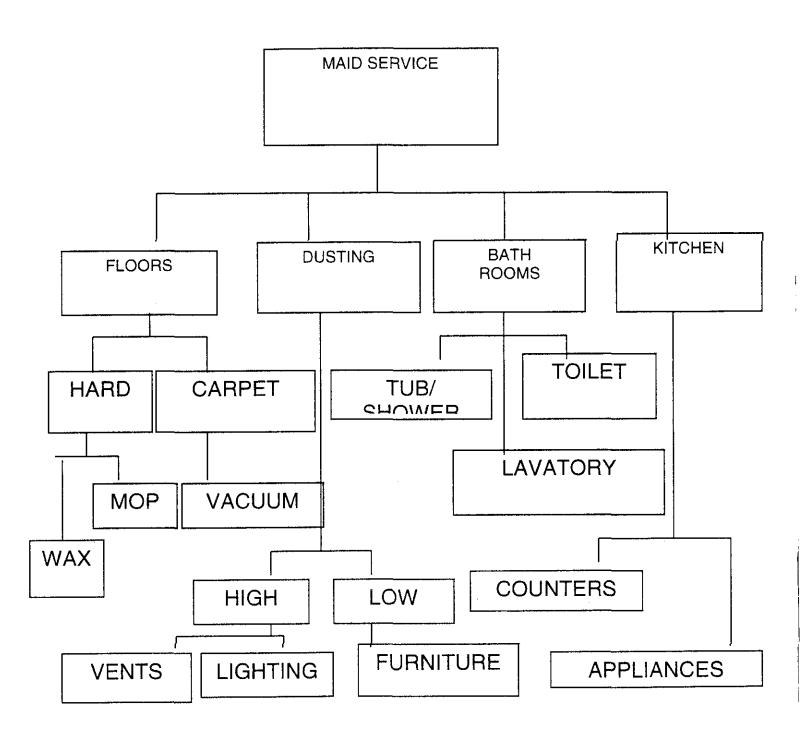
The purpose of a postaward orientation is to ensure that the contractor and the government completely understand their respective roles in the contract arrangement and their relationship after award and before contract performance begins. While the decision to conduct a postaward conference is at the discretion of the contracting officer, postaward orientations are highly recommended to encourage a strong business relationship at the onset of the contract.

A postaward orientation allows all interested parties to discuss the contract and the elements of the requirement. This type of discussion helps the contractor and the government to achieve a clear and mutual understanding of contract requirements, terms, and conditions and identify and resolve any potential or current problems. However, the contractor should already have a strong working knowledge of the requirement. All issues discussed during the postaward conference should be documented.

### **Documenting Contractor Performance Assessments**

Each performance assessment activity should be documented as it is conducted. This documentation constitutes an official record and may be considered past performance information. The people assessing performance should use a checklist to record their observations of the contractor's performance. ALL performance should be documented, whether it is acceptable or unacceptable in accordance with the performance assessment plan.

# APPENDIX A TREE DIAGRAM



## Appendix B

# Performance Requirements Summary Matrix

Performance objective	Performance standard	Acceptable quality level (AQL)	Monitoring method	Incentive

## **Appendix C**

## Sample Performance Requirements Providing Access to a Service

Performance objective	Performance standard (and AQL)	Method of performance assessment
Maintain customer access to automated information during	Service must not be closed to public access more than <b>x</b> minutes	Random inspection (site visits, telephone calls).
established hours.	during the month. (day, hour)	<ul> <li>Review automated telephone system reports.</li> </ul>
		Review contractor reports.

Courtesy of Jefferson Solutions

## **Maintaining an Information Data Base**

Performance objective	Performance standard (and AQL)	Method of performance assessment
Maintain an electronic database.	The inquiry response database may not contain more than <u>x%</u> of incorrect, inaccessible, or inappropriate lines of information.	Review random portions of database for accuracy, appropriateness, and accessibility of information.

Courtesy of Jefferson Solutions

### **Reporting to the Government**

Performance objective	Performance standard (and AQL)	Method of performance assessment
Provide timely notification on items requiring government action.	No more than $\underline{x}$ (or $\underline{x\%}$ ) of the reports to appropriate government contact may be later than the specified time period, <b>AND/OR</b> no more than $\underline{x}$ (or $\underline{x\%}$ ) of required situations may go unreported.	Review operational logs, databases, or metrics.

Deliver required reports.	No more than <u>x</u> (or <u>x%</u> ) of the reports to appropriate government contact may be later than the specified time period.	Review reports and logs.
Gather required information from callers.	Report every (month, quarter) on the statistical or other information that has been gathered. At least x% of the information gathered must be relevant and accurate.	<ul> <li>Review records and reports.</li> <li>Make test calls.</li> <li>Randomly verify process on-site.</li> </ul>

Courtesy of Jefferson Solutions

## **Responding to Inquiries**

Performance objective	Performance standard (and AQL)	Method of performance assessment
Provide accurate and current responses tailored to the individual needs of the caller and to agency requirements.	Provide at least <u>x%</u> acceptable responses during the month. OR Receive no more than <u>x</u> valid complaints about service during the month.	<ul> <li>Make sample or test calls.</li> <li>Review call logs.</li> <li>Review standard scripts.</li> <li>Review complaint logs.</li> <li>Review quality control activities.</li> </ul>
Respond to all incoming telephone inquiries during the operating hours within standard call load.	Respond to at least x% of incoming telephone calls. OR Respond to at least x% of incoming telephone calls within x seconds.	<ul> <li>Review of automated telephone system data.</li> <li>Review reports.</li> </ul>
Respond to surges of telephone inquiries (calls that exceed the standard call range per (day, month, etc).	Respond to at least x% (less than the % in the standard above) of incoming telephone calls in a surge. OR Within x minutes (or hrs) of the beginning of a surge respond to at least x% (the same % as in the	<ul> <li>Review of automated telephone system data.</li> <li>Review of reports.</li> </ul>

	standard above) of incoming telephone calls.	
Response to inquiries must be delivered timely.	All employees must be able to respond to any inquiry within x minutes. OR At least x% of callers must receive a final responses from the first contact.	
Provide courteous service.	Receive no more than x valid complaints during the month.	<ul> <li>- Make sample or test calls.</li> <li>Review complaint logs.</li> <li>Review quality control activities.</li> </ul>

Courtesy of Jefferson Solutions

## **Supporting a Call Center Operations**

Performance objective	Performance standard (and AQL)	Method of performance assessment
Maintain all equipment and materials.	Equipment failures, non-availability, or maintenance shall not interfere with operations for more than x minutes during a month (day, etc.).	Random inspection; audit or review by third party.
Develop and conduct a liaison program.	Contact (phone, visit) at least x% of the required offices each month, with at least x% of the offices having been contacted at the end of each year.	Perform random verification of list of contacts.
Develop and conduct a public outreach program.	Perform at least x% of the required program each month, with at least x% of the program having been completed at the end of each year.	<ul> <li>Review contractor records, sample products.</li> <li>Review the effect on call volume in call records.</li> </ul>

Assure continuous quality improvement in service and technology.	Report every month (qtr, etc.) on improvements in service and technology that could be implemented.	Review recommendations.
Assure that customers are satisfied with quality of service.	At least x% of customers contacted (or potential customers contacted) must be satisfied with service.	<ul> <li>Review and validate customer surveys.</li> <li>Conduct independent surveys.</li> </ul>

Courtesy of Jefferson Solutions

## **Examples of Performance Requirements Summary**

Requirement (outcome)	Performance objective	Performance standard and AQL
Safety program	Establish, implement, and maintain a comprehensive safety program.	Program meets current requirements of federal law.  1) No OSHA-reportable violations resulting from contractor action or inaction.  2) Mishap frequency and severity rate shall not exceed the base three-year average.
Network help desk	Provide timely and efficient service.	75% of technical support questions resolved within eight working hours; remaining 25% of technical support calls resolved within 24 working hours.
Family housing maintenance	Provide maintenance and repair services to family housing at XYZ location.	Valid customer complaints concerning response and execution of all work orders shall not exceed X per month.

### **Mess Attendant Services**

Performance objective and standard	AQL
Prepare food listed on menu according to commercially acceptable standards for the particular menu item.	95% of menu items per meal period meet the standard.
Comply with sanitation requirements of the food code and state and local laws/regulations, resulting in a satisfactory or better rating in health inspections.	100% of the time (no deviation).
Deliver timely service and courteous employees.	95% of monthly meal periods meet the standard.

Provide food supplies (i.e., utensils, condiments, napkins)	95% of monthly meal periods meet the standard.
Maintain the interior and exterior of the dining facility in a clean and sanitary condition.	95% of the days in the month meet the standard.
Maintain food service during contingency operations to ensure no impact on the mission.	100% of the time (no deviation).

## **Elevator Maintenance and Repair**

Performance Objective	Performance standard and AQL
Perform preventive maintenance.	Elevators are fully operational 99% of the time.
Repair service calls.	Repairs are made in a timely manner; customers are informed of expected repair time within three hours of call.
Emergency calls.	Response and repair is made within the specified time; response: 30 minutes
Submit maintenance and repair reports	Accurate reports are delivered within two business days 90% of the time.

#### **Lead-Based Paint Abatement**

Performance objective	Performance standard and AQL
Remove lead-based paint	Paint is removed and no additional lead is present; air, soil, and surrounding work area free of lead; all waste disposed of properly; 100% of the time.

# Operations and Maintenance (O&M) of an Energy Management and Control Systems

Performance objective	Performance standard
Operate EMCS equipment.	Comfort levels are maintained; energy goals are met; metrics are maintained on system efficiencies; all systems are balanced; (INSERT AQL)
	(INSERT AQL)
Preventive maintenance	System is fully operational; system defects are identified for timely repair;
	(INSERT AQL)

#### **Satellite Control Center Service**

Performance objective	Performance standard and AQL
-----------------------	------------------------------

Conduct an effective position certification program to ensure qualified personnel are provided for orbital analysis.	95% of personnel certified within X timelines per year (offeror-proposed).
Provide orbital analysis and related services to support mission requirements.	Telephonic support within 15 minutes. In- person support (as requested) within 90 minutes.
Provide orbital safety support for protection of space systems from damaging debris.	No more than one noted incident of system impact per month.

# Transportation and Delivery of Munitions/Maintenance of Bomb Racks

Performance objective and standard	AQL
Deliver Munitions	Accurate deliveries and scheduled delivery
Priority 1 on time	times met:
Priority 2 1 hour	Priority 1 100%
Priority 3 8 hours	Priority 2 95%
, , , , , , , , , , , , , , , , , , , ,	Priority 3 90%
Maintain proper quantity and distance.	No safety violations.
Munitions trailer maintenance.	98% of trailers serviceable.
Adjustment and inventory report.	No discrepancies report by MASO.
Bomb rack maintenance.	95% of racks serviceable.
Report of discrepancies.	No reports received.

### **Appendix D**

### **Incentives Examples**

#### **POSITIVE**

When performance exceeds standard, pay x% of monthly payment into pool. At end of y months, pay contractor amount accrued in pool.

When performance exceeds standard, pay x% of monthly payment into pool. When pool has reached y dollars, pay contractor amount accrued in pool.

When performance has exceeded the standard for x consecutive months, reduce government oversight or contractor reporting, as appropriate.

Document past-performance report card, paying particular attention to performance that exceeded the standard.

Courtesy of Jefferson Solutions

#### **NEGATIVE**

When performance is below standard for a given time period, x% of that period's payment will be withheld.

When performance is below standard for a given time period, require the contractor to re-perform the service at no additional cost to the government.

When performance is below standard for x consecutive months, increase surveillance or contractor reporting.

Document past-performance report card, paying particular attention to performance that failed to meet the standard.

Courtesy of Jefferson Solutions

## Appendix E

## **Workload Data Example**

## **Elevator Maintenance**

Item	Name	Estimated Q	uantity
1	Inspect and test elevators		Ea
2	Number of (LIST EACH TYPE OF ELEVATOR SEPARATELY)		Ea
3	Number of (LIST EACH TYPE OF ELEVATOR SEPARATELY)		Ea
4	Number of (LIST EACH TYPE OF ELEVATOR SEPARATELY)		Ea
5	Estimated number of repair service calls per year		Ea
6	Estimated number of emergency repair calls per year		Ea

# Appendix F

## **Performance Assessment Methods**

Performance objective and standard	AQL	Method of performance assessment
Customer Service Center Emergency – 30 min duty hrs 1 hr non duty completed (safed)in 24 hrs Urgent – completed in 5 days Routine – completed in 30 days	Emergency 100% Urgent 98.5% Routine 95%	Contractor metrics. Periodic review of records and customer feedback.
Control backlog of work requests/workorders	Max 10% of all work	Contractor metrics. Periodic review of records.
Operate, maintain and repair UPS system	Max system utility failure 5.3 minutes (99.99%) annually	Contractor metrics. Periodic review of maint records, outage reports.
Environmental program: comply with Fed, State, local, DoD, AF, and base regulations statutes, directives, policies, and programs	Zero environmental enforcement actions	Contractor metrics. Quality audits of contractor records, area, and inspection reports
Contractor quality program	Zero major & > 5 minor defects per period	Semi-annual audit of govt & contractor records.

Performance objective and standard	AQL	Method of performance assessment
Deliver munitions Priority 1 on time	Accurate deliveries and scheduled delivery	Review delivery schedules
Priority 2 1 hour Priority 3 8 hours	times met Priority 1 100% Priority 2 95%	

	Priority 3 90%	
Maintain proper quantity and	No safety violations	Contact safety office for violations
distance		
Munitions trailer	98% of trailers	Review contractor provided metric
maintenance	serviceable	
Adjust and	No discrepancies	Contact MASO for discrepancies
inventory report	report by MASO	
Bomb rack	95% of racks	Review contractor provided metric
maintenance	serviceable	

## **Appendix G**

## **Helpful Market Research Web Sites**

#### http://www.imart.org/

A collection of search engines, directories, and databases to aid in market research.

#### http://www.cadv.org/

Disseminates information to enable exchanges of questions and answers and to share best practices and lessons learned.

#### http://govcon.com

#### http://www.industrylink.com

Hundreds of links to companies grouped by technology.

#### http://bigbook.com

Yellow pages of 16 million U.S. businesses.

#### http://switchboard.com

Business search engine.

#### http://www.techweb.com

More than 100 links to industry, focused on electronics.

## **Appendix H**

## **Performance Work Statement (PWS) Writing Tips**

#### Sample PWS Format

<u>Support Services Contracts.</u> A PWS for support services will generally describe all the pertinent work to be performed, along with measurements of adequate work performance, evaluation and assessment techniques, and applicable incentives. Below are common elements that are included in a PWS:

- 1. Introduction
- 2. Scope of Work
- 3. Requirements/Performance Standards
- 4. Contract Deliverables
- 5. Data Requirements
- 6. Appendixes

Major Systems Contracts. Contracts for definition and development of major systems should consist of short, outcome-based PWSs that do not necessarily incorporate the detail of that of a support-service PWS. These requirements will usually have a specification/contract deliverable requirements list, which may contain specific product requirements as well. Regardless, the PWS should describe all requirements necessary to complete each task element and should be comprehensive to allow the contractor the means of generating information necessary for design, prototype, test, and verification phases of the procurement. Following is a suggested outline:

- 1. Introduction
- 2. Scope of Work
- 3. Work to be Performed
  - 3.1 Program Management
  - 3.2 Systems Engineering
  - 3.3 Design and Development of Primary Mission Product or Space Vehicle
  - 3.4 Other Work
    - 3.4.1 Launch Support
    - 3.4.2 Performance Assurance
    - 3.4.3 Training
    - 3.4.4 Anomaly Resolution
  - 3.5 Performance Standards
- 4. Contract Deliverables

The PWS goal for major systems acquisition is to acquire the effort in distinct phases, with each phase encompassing a concrete objective. This approach also helps safeguard against committing scarce resources to an effort prematurely.

<u>Study and Preliminary Definition Contract.</u> For study and preliminary definition contracts, the PWS should provide sufficient latitude for creativity, innovation, and research. Describe desired outcomes in such a way that further study can be made for the most promising systems. Following is a suggested outline:

- 1. Introduction
- 2. Scope of Work
- 3. Project Schedule
- 4. Contract Tasks
  - 4.1 Performance Standards
- 5. Study Management
- 6. Guidelines
- 7. Data Requirements Appendix

Research and Development (R&D) Contracts. R&D efforts often focus on abstract objectives where outcomes are difficult to describe precisely in advance. Therefore, an R&D PWS can be challenging to develop. Consider breaking the effort into "suboutcomes" or phases. The PWS should provide flexibility to allow offerors innovation and creativity. In basic research, emphasis will normally focus on limited rather than ultimate objectives. In basic research programs, where results cannot be determined in advance, no deliverable is required except a final report, and objective performance standards cannot be set, the proper procurement vehicle is usually a cooperative agreement rather than a contract. Following is a sample outline:

- 1. Introduction
- 2. Scope of Work
- 3. Description of Tasks to be Performed
  - 3.1. Performance Standards
- 4. Schedule
- 5. Reporting Requirements
- 6. Attachments, Appendixes and Exhibits

#### **Typical Sections of the PWS**

<u>Introduction.</u> Describes program goals, desired results to be achieved, interfaces that must be considered, and any previous problems that have been encountered (e.g., any known phenomena, techniques, methodology, or results of related work). Keep this section succinct and to the point.

<u>Scope of Work.</u> This is a summary section that briefly describes the purpose of the current work and the desired outcome. It should also establish such general requirements as place of performance, normal work hours, applicability of Service Contract Act, etc.

Requirements. This portion is basically transference of the Performance Requirement Summary (PRS) matrix into the PWS. In other words, it is the PRS in text form, also containing greater detail. Specify standards to which the requirement must be completed. Include historical data on previous contracts or work by in-house personnel. Consider that a contractor will have a greater chance at success with adequate information that clearly defines the magnitude, quality, and scope of each outcome.

<u>Data Requirements.</u> This section contains information on data requirements, such as reports or any of those items contained within a contract data reports list (CDRL). (Some agencies instead list CDRL items separately in Section J of the contract). Strive to minimize data requirements that require government approval and delivery. Acquire only the data thaat are absolutely necessary. The usual rule of thumb is to limit data to those needed by the government to make a decision or to comply with a higher level requirement.

Attachments, Appendixes, and Exhibits. Through preliminary research and acquisition planning, the acquisition team should already have screened potentially relevant and necessary directives (e.g., the government, DoD, and federal agencies). If only a portion of a directive is pertinent, do not reference or include it in its entirety. Instead, excerpt only required parts of the directive into the PWS. Consider that the number of directives referenced should be few and should be restricted to those necessary as sources of such vital information as task descriptions, quality standards, and statutory or regulatory limitations.

Many undesirable consequences can result from excessive or inappropriate application of directives, such as confusion or error due to conflicting guidance or unintentional direction buried within the document. If the government specifies "how to perform," even within the context of one or more published documents, it then assumes outcome responsibility.

Any essential document referenced in the solicitation should be furnished either with the solicitation or made available at a specified location noted in the solicitation. Remember to include the date or version of each document.

<u>Schedules or Period of Performance.</u> This PWS section provides a realistic delivery schedule for contractor performance and completion. Provide sufficient detail for the contractor to establish specific, detailed milestones against which progress can be measured.

<u>Task Orders</u>. Task-order contracts will also require well-written, precise, definitive PWSs that include performance standards and incentives as appropriate. Ensure that all essential taskings are included and that those that are unnecessary or duplicative are deleted. Task descriptions should clearly define each deliverable outcome. Subtasks should be listed in their appropriate order and should conform to the numbering within the basic PWS from which the task order derives.

#### Language Principles Helpful in Writing the PWS

The PWS will be read and interpreted by a variety of personnel from diverse disciplines. the words must be understood not only by the drafters but also by the readers. Moreover, offerors interested in proposing will interpret words within the PWS to identify potential costs to determine anticipated profit and ability to compete with other offerors. Therefore, define and express each requirement in a *clear*, *concise*, *correct*, *and complete* manner.

<u>Style.</u> This is the method used in expressing ideas in phrases, sentences, and paragraphs. Strive to include all the essential information in a concise, accurate, thorough, and logical sequence, with the clearest, simplest possible presentation. Avoid the use of complex words. The purpose of writing is to express, not impress.

<u>Sentences.</u> Good writing of any type depends on natural order. It is wise to eliminate a long, complicated sentence by rearranging it into two or three shorter, simpler sentences limited to a single thought or idea. Avoid spicing sentences with legal phrases, technical jargon, and other elaborate phrases. This type of writing is difficult to read and comprehend. Strive to omit extraneous words or phrases—eliminate unnecessary words from sentences and omit unnecessary sentences from paragraphs.

<u>Paragraphs.</u> A paragraph may consist of one or more sentences to state and discuss a single idea or like ideas. State the main idea in the first or topic sentence at the beginning of the paragraph to allow readers to grasp the meaning immediately. The topic sentence provides a base for subsequent sentences in developing and supporting the main idea. While paragraph length will vary, avoid long paragraphs if possible, since they may crowd ideas and confuse the reader. Shorter paragraphs usually are more visually appealing and easier to read and understand.

<u>Language Use.</u> Use the active voice rather than the passive. Active writing uses action verbs that illustrate the subject as performing rather than receiving the action verb. The active voice is nearly always clearer and more direct than the passive, resulting in fewer words without reducing clarity of technical and contractual intent. Also, the active voice makes the subject (i.e., the contractor) responsible and accountable for the action or performance required. The active voice is tailor-made for the performance-based contracting world. Examples of active versus passive voice use (for routine services) include:

Active: Clean up all debris at the end of each workday.

Passive: The debris shall be picked up at the end of each workday.

Active: Empty trash containers twice a week.

Passive: Trash containers shall be emptied twice a week.

Active: Install new air filters in accordance with manufacturer's recommendations.

Passive: New air filters are required in accordance with the manufacturer's

recommendations.

<u>Ambiguity.</u> Ambiguity is the use of vague, indefinite, uncertain terms and words with double meanings. Examples of some ambiguous phrases include "securely mounted," "properly assembled," and "carefully performed." They are ambiguous because one can't quantify, precisely measure, or state objectively what these phrases mean.

<u>Punctuation.</u> Use minimal punctuation to keep the PWS clear. Since the goal is to write simple, short, concise sentences, a well-written document should require minimum punctuation. When complicated punctuation is required, consider rewriting the sentence instead. Construct sentences so that inadvertent misplacement or elimination of a punctuation mark will not alter the intended meaning. Moreover, for maximum possible clarity, follow the formal rules of punctuation.

<u>Abbreviations/Acronyms</u>. Abbreviations/acronyms are a form of shorthand used to make complex terms short and precise. However, many misunderstandings arise from using them because of reader unfamiliarity or because they may have multiple meanings (e.g., "CO" could mean commanding officer, contracting officer, or change order, depending on the context in which it appears). Remember to define them upon first use, followed by the abbreviation/acronym in parentheses. When there are many abbreviations/acronyms, develop a glossary of them.

<u>Symbols.</u> Recommend using the full word associated with the symbol unless the meaning is universally clear (e.g., *foot* for ', *inch* for", *pound* for #, at for @, *percent* for %).

Numbers. Spell out numbers under 10 except when they represent dimensions. Use the numeral form for figures 10 and above (e.g., 12, 45, 88). Represent dimensions, degrees of temperature, percentages, and dollars and cents as numerals (e.g., 2 inches by 4 inches, 40 degrees F., 30 percent, \$6.75). "One" or "zero" should always be spelled out when used alone. When two numbers are used together to define both size and quantity, use a written word for one number (e.g., six 55-gallon metal drums; eight 40-Cu. Yd. non-compactor containers). Using both words and numerals (e.g., "ten (10) calendar days") is allowable but is usually superfluous.

<u>Redundancy and Repetition.</u> Avoid redundancy and unnecessary repetition. They reduce clarity and increase the likelihood of ambiguity, inconsistency, and internal contradiction.

<u>Misused Words and Phrases.</u> Here is a list of often-misused and abused words, phrases, and terminology that, when they are improperly applied, will only confuse the reader and obfuscate rather than clarify what the government's true requirements are:

1. Use of shall and will. Shall is used to specify that a provision is binding, and it ordinarily is used to describe the work required to be done by the contractor. Will, on the other hand, is used simply to express a statement of acts and actions that will occur (simply futurity).

- 2. Use of any and either. These words imply a choice in what needs to be done contractually. Unless the intent is to give the contractor a choice, specify the true intent. For instance, the word any means a limited number selected at the discretion of the reader (contractor). The statement, "mow any areas over..." can mean any of the areas selected by the contractor, while "mow areas over..." means every area spelled out in the requirements. The word either implies a choice between two options. For instance, "clean glass on either side" is incorrect if the intent is to require the contractor to clean both sides of the glass.
- 3. Use of *and*, *or*, *and/or*, *and etc*. Use *and* if both conditions are true, and *or* if only one of the conditions is true. Avoid using a *nd/or*, because using those two words together creates ambiguity. That is, they may be intended to indicate that both conditions are true or that only one is true, and it is unknown which of the two cases is intended. Avoid the use *of etc*. because the reader may not be aware of what constitutes of the subset of *etc*.

## Appendix I Award Terms

#### SAMPLE OF AN AWARD-TERM PLAN

#### 1.0 INTRODUCTION

This is the basis for evaluating of the contractor's performance and for presenting an assessment of that performance to the term-determining official (TDO). The evaluation for the number of term points to be awarded will begin at the start of the contract.

Award-term contracting is effective when

- performance metrics are objective,
- a long-term business relationship is of value to the government and to the contractor, and
- the expected outcomes are known up-front.

The specific criteria and procedures used for assessing the contractor's performance and for determining the award term earned are described herein. All TDO decisions regarding the award-term points—including, but not limited to, the number of points, if any; the methodology used to calculate the points; the calculation of the points; the contractor's entitlement to the points: and the nature and success of the contractor's performance—are final and not subject to dispute.

The award term will be provided to the supplier through unilateral contract modifications based upon points earned as determined by the TDO.

#### 2.0 ORGANIZATION

The award-term organization includes the TDO and an Award-Term Review Board (ATRB) consisting of a chairperson, the contracting officer, a recorder, other functional area participants, advisory members, and the performance monitors.

#### 3.0 RESPONSIBILITIES

- a. <u>Term-Determining Official</u>. The TDO approves the award-term plan and any significant changes to it. The TDO reviews the recommendations of the ATRB, considers all pertinent data, and determines the earned award-term points for each evaluation period. The TDO appoints the ATRB chairperson.
- b. <u>Award-Term Review Board Chairperson</u>. The ATRB chairperson chairs the meetings of the ATRB and appoints the non-mandatory members of the board and the performance monitors. The ATRB chairperson briefs the TDO on recommended earned term amounts and the contractor's overall performance and recommends award-term

plan changes to the TDO.

- c. <u>Award-Term Review Board.</u> ATRB members review performance monitors' evaluation of the contractor's performance, consider all information from pertinent sources, prepare interim performance reports, and arrive at the earned award-term points recommendation to be presented to the TDO. The ATRB will also recommend changes to this plan. An assessment of the contractor's performance will be done on a yearly basis.
- d. <u>ATRB Recorder.</u> The ATRB recorder is responsible for coordinating the administrative actions required by the performance monitors, the ATRB, and the TDO.
- e. <u>Contracting Officer (CO)</u>. The CO is the liaison between contractor and government personnel. Subsequent to the TDO decision, the CO evaluates the award-term points available and modifies the contract period of performance, if necessary, to reflect the decision.
- f. <u>Performance Monitors</u>. Performance monitors maintain written records of the contractor's performance in their assigned evaluation areas so that a fair and accurate evaluation is obtained. Monitors prepare interim and end-of-period evaluation reports as directed by the ATRB.

#### 4.0 AWARD-TERM PROCESSES

- a. <u>Available Award-Term Points.</u> The earned award-term points will be based on the contractor's performance during each evaluation period. An accumulation of positive points (e.g., +50, +75, or +100) is required for a one-year term extension, while an accumulation of negative points (e.g., -50, -75, or -100) results in a one-year reduction in the contract period. It is important that the point system be tailored to the particular acquisition.
- b. <u>Evaluation Criteria</u>. If the CO does not give specific notice in writing to the contractor of any change to the evaluation criteria prior to the start of a new evaluation period, then the same criteria listed for the preceding period will be used in the following award-term evaluation period. Modifications to the plan shall take effect in the next evaluation period.
- c. <u>Interim Evaluation Process.</u> Interim evaluations will be conducted at least every six months. At the discretion of the TDO, interim evaluations may take place more frequently (e.g., at major milestones). The ATRB recorder notifies ATRB members and performance monitors 14 calendar days before the midpoint of the evaluation period. Performance monitors submit their evaluation reports to the ATRB 21 calendar days after this notification. The ATRB determines the interim evaluation results and notifies the contractor of the strengths and weaknesses for the current evaluation period. The CO may also issue letters at any other time when it is deemed necessary to highlight areas of government concern.

d. End-of-Period Evaluations. The ATRB recorder notifies ATRB members and performance monitors 14 calendar days before the end of the evaluation period. The contractor presents its self-assessment to the CO within five working days after the end of the evaluation period. This written assessment of the contractor's performance throughout the evaluation period may also contain any information that could be reasonably expected to assist the ATRB in evaluating its performance. The selfassessment may not exceed 25 pages. Performance monitors submit their evaluation reports to the ATRB 14 calendar days after the end of the evaluation period. The ATRB forwards copies to the contractor. The performance monitors provide oral presentations to the ATRB 21 days after the end of evaluation period. The contractor is then given an opportunity to address the performance monitor evaluations. The ATRB prepares its evaluation report and recommendation regarding earned or unearned award-term points. The ATRB briefs the evaluation report, and recommendation to the TDO within 30 calendar days after the end of the evaluation period. The TDO determines the overall award-term points for the evaluation period within 45 calendar days after each evaluation period. The TDO letter informs the contractor of the earned award-term points and the total cumulative points. Upon the accumulation of sufficient award termpoints, the CO issues a contract modification within 15 calendar days after the TDO's decision is made authorizing an award extension or reduction based on the earned or unearned award-term points.

#### 5.0 AWARD-TERM PLAN CHANGE PROCEDURE

Proposed changes to the award-term plan will be bilateral. If either party desires a change to the award-term plan and a mutual agreement cannot be reached, the original award-term plan will remain in effect.

#### AWARD-TERM CLAUSE

In addition to the terms set forth elsewhere in the contract, the contractor may earn an extension or reduction to the contract period from a minimum of 5 to a maximum of 10 years on the basis of performance during the evaluation periods. The contractor is evaluated during the first year of performance, but extensions or reductions start in the second year. If scores are very good during Year 2, the contractor earns Year 4; if scores are very good in Year 3, the contractor earns Year 5. In Year 5, the contractor must earn a score of "excellent" in order for the contract period to be extended beyond Year 5. Consistent scores of "excellent" during succeeding years earn contract period extensions up to a maximum of 10 years.

The contract period may also be reduced on the basis of the contractor's performance against the stated performance parameters. Points are awarded or deducted during each year of the contract on the basis of how the contractor has performed against the predetermined criteria. The contract period is then extended or reduced to reflect this assessment.

- (a) <u>Award Term.</u> The award-term concept is an incentive that permits extension of the contract period beyond the base period of performance for superior performance or reduction of the contract period of performance because of poor performance.
- (b) <u>Term Points.</u> Positive or negative points are accumulated during each evaluation period on the basis of the contractor's performance. An accumulation of positive points (e.g., +50, +75, or +100) is required for a one-year term extension, and an accumulation of negative points (e.g., -50, -75, or -100) results in a one-year reduction in the contract period.
- (c) <u>Monitoring of Performance</u>. The contractor's performance will be continually monitored by the performance monitors whose findings are reported to the ATRB. The ATRB recommends an award term to the TDO, who makes the final decision on the award-term amount on the basis of the contractor's performance during the award-term evaluation period.
- (d) <u>Award-Term Plan</u>. The evaluation criteria, the associated points, and the associated award-term extensions or reductions are specified in the award-term plan.
- (e) <u>Modification of Award-Term Plan</u>. Changes may be made to the award-term plan at any time during contract performance, provided that both parties agree to them. If agreement cannot be reached on changes, the initial award-term plan remains in effect.
- (f) <u>Self-Evaluation</u>. The contractor will submit to the CO, within 5 working days after the end of each award-term evaluation period, a brief written self-evaluation of its

performance for that period. This self-evaluation shall be limited to 25 pages. It will be used in the ATRB's evaluation of the contractor's performance during this period.

- (g) Disputes. Decisions regarding the award term, including—but not limited to—the amount of the award term, if any; the methodology used to calculate the award term; calculation of the award term; the supplier's entitlement to the award term; and the nature and success of the contractor's performance, are made by the TDO. These decisions are final and are not subject to dispute.
- (h) <u>Award-Term Extension</u>. The contract period may be modified to reflect the TDO decision. The total contract ordering period, including extensions under this clause, will not exceed 10 years. The award-term provision *must* be included in the solicitation and resulting contract. If at any time the contract period does not extend more than two years from the TDO decision, the operation of the award-term provision will cease and the ordering period will not extend beyond the term set at that time.

# Appendix J Wright Brothers Performance-Based Specification

SIGNAL CORPS SPECIFICATION, NO. 486.

ADVERTISEMENT AND SPECIFICATION FOR A HEAVIER-THAN-AIR FLYING MACHINE

#### To THE PUBLIC:

Sealed proposals, in duplicate, will be received at this office until 12 o'clock noon on February 1, 1908, on behalf of the Board of Ordnance and Fortification for furnishing the Signal Corps with a heavier-than-air flying machine. All proposals received will be turned over to the Board of Ordnance and Fortification at its first meeting after February 1 for its official action.

Persons wishing to submit proposals under this specification can obtain the necessary forms and envelopes by application to the Chief Signal Officer, United States Army, War Department, Washington, D. C. The United States reserves the right to reject any and all proposals.

Unless the bidders are also the manufacturers of the flying machine they must state the name and place of the maker.

*Preliminary.* ~-- This specification covers the construction of a flying machine supported entirely by the dynamic reaction of the atmosphere and having no gas bag.

Acceptance.---The flying machine will be accepted only after a successful trial flight, during which it will comply with all requirements of this specification. No payments on account will be made until after the trial flight and acceptance.

*Inspection.---The* Government reserves the right to inspect any and all processes of manufacture.

#### GENERAL REQUIREMENTS.

The general dimensions of the flying machine will be determined by the manufacturer, subject to the following conditions:

- 1. Bidders must submit with their proposals the following:
- (a) Drawings to scale showing the general dimensions and shape of the flying machine which they propose to build under this specification.
  - (b) Statement of the speed for which it is designed.
  - (c) Statement of the total surface areas of the supporting places.
  - (d) Statement of the total weight.
  - (e) Description of the engine which will be used for motive power.
- (f) The material of which the frame, pieces, and propellers will be constructed. Plans received will not be shown to other bidders.
- 2. It is desirable that the flying machine should be designed so that it may be quickly and easily assembled and taken apart and packed for transportation in Army wagons. It should be capable of being assembled and put in operating condition in about one hour.

- 3. The flying machine must be designed to carry two persons having a combined weight of about 350 pounds, also sufficient fuel for a flight of 125 miles.
- 4. The flying machine should be designed to have a speed of at least forty miles per hour in still air, but bidders must submit quotations in their proposals for cost depending upon the speed attained during the trial flight, according to the following scale:

40 miles per hour, 100 per cent 39 miles per hour, 90 per cent 38 miles per hour, 80 per cent 37 miles per hour, 70 per cent 36 miles per hour, 60 per cent Less than 35 miles per hour, rejected. 41 miles per hour, 110 per cent 42 miles per hour, 120 per cent 43 miles per hour, 130 per cent 44 miles per hour, 140 per cent

- 5. The speed accomplished during the trial flight will be determined by taking an average of the time over a measured course of more than five miles, against and with the wind. The time will be taken by a flying start, passing the starting point at full speed at both ends of the course. This test subject to additional details as the Chief Signal Officer of the Army may prescribe at the time.
- 6. Before acceptance a trial endurance flight will be required of at least one hour during which time the flying machine must remain continuously in the air without landing. It shall return to the starting point and land without any damage that would prevent it immediately starting upon another flight. During this trial flight of one hour it must be steered in all directions without difficulty and at all time under perfect control and equilibrium.
- 7. Three trials will be allowed for speed as provided for in paragraph 4 and 5. Three trials for endurance as provided for in paragraph 6, and both tests must be completed within a period of thirty days from the date of delivery. The expense of the tests to be borne by the manufacturer. The place of delivery to the Government and trial flights will be at Fort Myer, Virginia.
- 8. It should be so designed as to serve in any country which may be encountered in field service. The starting device must be simple and transportable. It should also land in a field without requiring a specially prepared spot and without damaging its structure.
- 9. It should be provided with same device to permit of a safe decent in case of an accident to the propelling machinery.
- 10. It should be sufficiently simple in its construction and operation to permit an intelligent man to become proficient in its use within a reasonable length of time.
- 11. Bidders must finish evidence that the Government of file United States has the lawful right to use all potential devices or appurtenances which may be a part of the flying machine, and that the manufacturers of the flying machine are authorized to convey the same to the Government. This refers to the unrestricted right to use the flying machine sold to the Government, but does not contemplate the exclusive purchase of patent rights for duplicating the flying machine.

- 12. Bidders will be required to furnish with their proposal a certified check amounting to ten per cent of the price stated for the 40-mile speed. Upon making the award for this flying machine those certified checks will be returned to the bidders, and the successful bidder will be required to furnish a bond, according to Army Regulations, of the amount equal to the price stated for the 40-mile speed
- 13. The price quoted in proposals must be understood to include the instruction of two men in the handling and operation of this flying machine. No extra charge for this service will be allowed.
  - 14. Bidders must state the time which will be required after receipt of order.

JAMES ALLEN, Brigadier General, Chief Signal Officer of the Army. SIGNAL OFFICE, WASHINGTON, D.C., *December 23, 1907.* 

#### FORM No. 18.

#### Signal Corps, United States Army.

ARTICLE I. That the said contractor shall manufacture for and deliver to the United States of America, One (1) heavier-than-air flying machine, in accordance with Signal Corps Specification No. 486, dated December 15, 1907.

ARTICLE II. That the deliverance of the supplies and materials herein contracted for shall be made in the manner, numbers, or quantities, and for each number or quantity, on or before the date specified therefor, as follows, vix: That complete delivery shall be made on or before August 28, 1908.

ARTICLE III. All supplies and materials furnished and work done under this contract shall, before being accepted, be subject to a rigid inspection by an inspector

appointed on the part of the Government, and such as do not conform to the specifications set forth in this contract shall be rejected. The decision of the Chief Signal Officer, United States Army, as to quality and quantity shall be final.

ART. IV. That for and in consideration of	the faithful performance of the stipulations of
this contract, the contractor shall be paid a	it the office of- the Chief Signal Officer
	of the Army
at	
	for all supplies and materials
delivered in conformity with the requirement	
above specified (Article II, supra) and acce	epted, the following prices, vix:

- One (1) heavier-than-air flying machine at a total cost of twenty-five thousand (25,000) dollars to be paid as soon as practicable after the acceptance of the same, in funds furnished by the United States for the purpose, reserving per cent from each payment until final settlement, on completion of the contract or otherwise.
- ART. V. It is further agreed that for all supplies and materials which shall not be delivered in conformity with the requirements of this contract on or before the dates prescribed therefor in Article II, above, but which shall be subsequently delivered and accepted, the prices shall be as follows:
- ART. VI. That in case of the failure of the said contractor to perform the stipulations of this contract within the time and in the manner specified above, Articles I to III, inclusive, the said party of the first part may, instead of writing further for deliveries under the provisions of the preceding article, supply the deficiency by purchase in open market or otherwise, at such place as may be selected (the articles so procured to be the kind herein specified, as near as practicable); and the said contractor shall be charged with the increased cost of the supplies and materials so purchased over what they would have cost if delivered by the contractor on the date they were received under such open-market purchase.
- ART. VII. It is further agreed by and between the parties hereto that until final inspection and acceptance of, and payment for, all of the supplies and materials and work herein provided for, no prior inspection, payment, or act is to be construed as a waiver of the right of the party of the first part to reject any defective articles or supplies or to require the fulfillment of any of the terms of the contract.
- ART. VIII. The contractor further agrees to hold and save the United States harmless from and against all and every demand, or demands, of any nature or kind for, or on account of, the use of any patented invention, article, or process included in the materials hereby agreed to be furnished and work to be done under this contract.
- ART. IX. Neither this contract nor any interest herein shall be transferred to any other party or parities, and in case of such transfer the United States may refuse to carry out this contract either with the transferor or the transferee, but all rights of action

for any breach of this contract by said contractor are reserved to the United States.

ART. X. No Member of or Delegate to Congress, nor any person belonging to, or employed in, the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise therefrom.\*

ART. XI. That it is expressly agreed and understood that this contract shall be noneffective until an appropriation adequate to its fulfillment is made by Congress and is available.

ART. XII. That this contract shall be subject to approval of the Chief Signal Officer, United States Army.

IN WITNESS WHEREOF the parties aforesaid have hereunto placed their hands the date first hereinbefore written.

WITNESSES:

as to

Captain, Signal Corps, U. S. Army

as to

as to

Wright Brothers by Orville Wright

as to

## APPROVED: ,190

Brigadier General, Chief Signal Officer of the Army.

\*Here add to any contract made with an incorporated company for its general benefit the following words, vix: "But this stipulation, so far as it relates to Members or Delegates of Congress, is not to be construed to extend to this contract." See section §780, Revised Statutes.

# Appendix K References and Websites

Department of Defense policy on PBSA, 5 April 2000 <a href="http://www.acq.osd.mil/ar/doc/ganslerpbsa.pdf">http://www.acq.osd.mil/ar/doc/ganslerpbsa.pdf</a>

Defense Acquisition Deskbook Http://web2.deskbook.osd.mil/default.asp

Federal Acquisition Regulation (FAR) <a href="http://farsite.hill.af.mil/VFFAR1.HTM">http://farsite.hill.af.mil/VFFAR1.HTM</a>

Air Force Contracting Toolkit on Services <a href="http://www.safaq.hq.af.mil/contracting/toolkit/part37/">http://www.safaq.hq.af.mil/contracting/toolkit/part37/</a>

Army Acquisition Web site <a href="http://acqnet.sarda.army.mil/">http://acqnet.sarda.army.mil/</a>

Navy Acquisition Reform <a href="http://www.acq-ref.navy.mil/">http://www.acq-ref.navy.mil/</a>

Office of the Inspector General, Audit Report on Contracts for Professional, Administrative and Management Support Services, 10 March 2000, Report No. D-2000-100

http://www.dodig.osd.mil/audit/reports/00report.htm

Best Practices for Performance Based Contracting, Best Practices, Final Edition, October 1998

http://www.arnet.gov/Library/OFPP/BestPractices/

Department of Energy, Performance Based Contracting Guide, June 1998 <a href="http://www.pr.doe.gov/9808atc.htm">http://www.pr.doe.gov/9808atc.htm</a>

Health and Human Services (HHS) Performance-Based Contracting Desk Reference <a href="http://www.ogam2000.com/acquisition">http://www.ogam2000.com/acquisition</a>