Defining Needs and Managing Performance of Installation Support Contracts

Perspectives from the Commercial Sector

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Prepared for the United States Air Force
Approved for public release, distribution unlimited

RAND | PROJECT AIR FORCE

The research reported here was sponsored by the United States Air Force under Contract F49642-01-C-0003. Further information may be obtained from the Strategic Planning Division, Directorate of Plans, Hq USAF.

Library of Congress Cataloging-in-Publication Data

Baldwin, Laura H., 1967-
Defining needs and managing performance of installation support contracts : perspectives from the commercial sector / Laura H. Baldwin, Sarah Hunter.
p. cm.
Includes bibliographical references.
"MR-1812."
ISBN 0-8330-3495-2 (pbk. : alk. paper)
1. Defense contracts—United States—Cost effectiveness. 2. United States. Air Force—Facilities. I. Hunter, Sarah, 1968– II.Title.

UG1123.B33 2003
358.4'16212—dc22

2003023326

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Published 2004 by the RAND Corporation
1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
201 North Craig Street, Suite 202, Pittsburgh, PA 15213-1516
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PREFACE

The Air Force is in the process of implementing performance-based practices within its service contracts to improve service quality and reduce costs. These practices include conveying to providers the Air Force's desired service outcomes, rather than how the service should be performed; the use of measurable performance standards and quality assurance surveillance plans to track performance against clear goals; and the use of positive and negative incentives to align provider efforts with Air Force needs. RAND Project AIR FORCE is supporting these implementation efforts.

This report describes an analysis of best commercial practices for purchasing facilities and food services that are analogous to services the Air Force purchases to support its installations. We examine whether and how commercial firms apply performance-based practices in these service contracts and draw out relevant and potentially actionable "lessons learned" for the Air Force. This information should be of interest to contracting officers, technical experts (e.g., civil engineers), and installation commanders who participate in service acquisitions for installation services.

This research is a product of the study, "Supporting the Warfighter Through Improved Service Contracts," sponsored by the Deputy Assistant Secretary for Contracting (SAF/AQC) and conducted within the Resource Management Program of RAND Project AIR FORCE.

For almost a decade, the RAND Corporation has been helping the Department of Defense improve the way it purchases goods and services. Readers may also be interested in selected related studies:

- *Implementing Performance-Based Services Acquisition (PBSA): Perspectives from an Air Logistics Center and a Product Center*, John Ausink, Laura H. Baldwin, Sarah Hunter, and Chad Shirley, RAND Corporation, DB-388-AF, 2002, which can be downloaded from www.rand.org/publications/DB/DB388
- *Implementing Best Purchasing and Supply Management Practices: Lessons from Innovative Commercial Firms*, Nancy Y. Moore, Laura H. Baldwin, Frank Camm, and Cynthia R. Cook, RAND Corporation, DB-334-AF, 2002, which can be downloaded from www.rand.org/publications/DB/DB334
- *Federal Contract Bundling: A Framework for Making and Justifying Decisions for Purchased Services*, Laura H. Baldwin, Frank Camm, and Nancy Y. Moore, RAND Corporation, MR-1224-AF, 2001, which can be downloaded from www.rand.org/publications/MR/MR1224
- *Performance-Based Contracting in the Air Force: A Report on Experiences in the Field*, John Ausink, Frank Camm, and Charles Cannon, RAND Corporation, DB-342-AF, 2001, which can be downloaded from www.rand.org/publications/DB/DB342
- *Strategic Sourcing: Measuring and Managing Performance*, Laura H. Baldwin, Frank Camm, and Nancy Y. Moore, RAND Corporation, DB-287-AF, 2000, which can be downloaded from www.rand.org/publications/DB/DB287
- *Incentives to Undertake Sourcing Studies in the Air Force*, Laura H. Baldwin, Frank Camm, Edward G. Keating, and Ellen M. Pint, RAND Corporation, DB-240-AF, 1998
- *Strategic Sourcing: Theory and Evidence from Economics and Business Management,* Ellen M. Pint and Laura H. Baldwin, RAND Corporation, MR-865-AF, 1997.

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SUMMARY

In April 2000, Dr. Jack Gansler, Under Secretary of Defense for Acquisition and Technology, established the goal that at least 50 percent of all service acquisitions, measured in dollars and contracts, should be performance-based by 2005. Air Force interest in performance-based service contracts preceded Dr. Gansler's memorandum. On April 1, 1999, the Air Force issued Air Force Instruction (AFI) 63-124, *Performance-Based Service Contracts (PBSC)*, which contains guidance on implementing performance-based practices for purchasing a wide range of services to support its installations, employees, and warfighting capability. Under what is now called performance-based services acquisition (PBSA), buyers should

- describe *what* service is desired and not *how* to perform the work,
- use measurable performance standards and quality assurance plans,
- specify procedures for reductions in fee or price when services do not meet contract requirements, and
- include performance incentives where appropriate.[1]

Previous RAND research supports implementation of PBSA practices in Air Force contracts for services associated with the development and sustainment of weapon systems and installation activities (Ausink et al., 2001 and 2002, and Baldwin et al., 2002). Building on

[1]Adapted from Federal Acquisition Regulation (FAR) Subpart 37.601.

this prior work, the Air Force (SAF/AQC) asked RAND to learn how commercial buyers and providers of facilities services (including operations and maintenance, custodial, groundskeeping, refuse and recycling) and food services apply performance-based practices within their contracts. This report describes an analysis of best commercial practices, drawing upon a series of interviews with six commercial firms that are prominent buyers or providers of these services.[2] We examine whether and how these firms apply performance-based practices in their service contracts and draw out relevant and potentially actionable "lessons learned" for the Air Force, which purchases similar services.

FINDINGS

In general, interviewees were supportive of a performance-based approach to acquiring these services. Specific approaches varied across firms and services; some interviewees did not utilize or endorse all four parts of the FAR definition of a performance-based service contract.

Interviewees were consistently supportive of buyers conveying *what* they need, rather than specifying in detail *how* the work should be accomplished. Buyers thus benefit from their providers' expertise in determining the best ways to meet those needs. According to interviews, some buyers take a very general approach, specifying their needs at a high level and then working with their providers to more fully define the required services. This approach appears to be more common for complex services, dynamic environments, and less experienced buyers. In contrast, when services are relatively easy to define or buyers have a lot of outsourcing experience, they may convey a great deal of detail about the nature of their service needs. (See pp. 14–17.)

Metrics are commonly used to track and manage performance of facilities and food services. Some interviewees recommended using a small number of quality (particularly customer satisfaction ratings) and cost metrics per service, based on both qualitative and quantitative data, to capture the dimensions of performance that are most

[2]Assurances of anonymity prevent us from identification of the firms.

important to the buyer. However, one provider of janitorial services strongly objected to the use of subjective data from inspections, asserting that these data are too easily distorted by the time of day the inspections occur or by buyer behavior. Providers can play a useful role, drawing on their breadth of experiences to help buyers shape the list of metrics they use to track and manage performance. In addition, metrics tend to evolve over time as buyers' service needs or budget pressures change. (See pp. 17– 21.)

We found different opinions about how to appropriately provide incentives for these services. Firms indicated that there is a trend toward tying compensation and/or contract length to performance. Interviewees cited several examples of commonly used formal contractual incentives: award fees based on a balanced set of metrics linked to buyer needs, shared savings/cost overrun contracts, and cancellation clauses tied to buyers' overall satisfaction. However, interviewees also noted that without a properly aligned set of metrics, such incentives can skew providers' actions and lead to unintended consequences. In addition, formal incentives require additional management costs for both the buyer and provider. Strong informal incentives associated with the benefits of a good reputation can substitute or complement formal incentives. (See pp. 24–26.)

The firms we interviewed view open, continual communication between buyers and providers as a key component of managing the performance of facilities and food services. They have frequent informal discussions and conduct periodic formal performance reviews to ensure that provider activities, metrics, and goals are supporting buyer needs, especially as buyer needs, priorities, or budgets evolve. Both buyers and providers value the participation of higher-level management in formal reviews. (See pp. 21–24.)

IMPLICATIONS FOR THE AIR FORCE

The commercial best practices described in this report differ greatly from the Air Force's traditional arm's length, directive relationships with many service providers who were chosen because they were the lowest bidder. However, selected interviews at Air Force installations suggest that recent installation support contracts are beginning to incorporate performance-based practices through broader statements of needs, refinement and reduction of performance metrics, and contractual and informal incentives. As the Air Force expands its use of performance-based practices, we recommend considering the following principles derived from the research discussed in this report:

- Two-way (versus directive) communication is at the heart of productive buyer-provider relationships. Informal and formal communication at different organizational levels, throughout the sourcing process and the contract period, allows buyers and providers to work together to figure out the best way to meet the buyers' needs. The use of meaningful performance metrics can enhance communication; the Air Force may benefit from seeking provider input on metrics, drawing on the breadth of their experiences. (See pp. 29–32.)
- The Air Force should seek ways to encourage providers to identify and implement better and less costly ways of satisfying their service needs. Statements of needs and contracts that describe *what* is needed, rather than *how* those needs should be met, and management through two-way communication and performance metrics, rather than detailed oversight of processes, support provider efforts to innovate and reduce management costs for both parties. (See pp. 29–32.)
- When selecting performance metrics, the Air Force will need to guard against metrics proliferation, focusing on a relatively small set that captures the most important dimensions of performance to the buying organization so that provider activities support buyer priorities. Qualitative measures such as customer satisfaction complement more familiar quantitative metrics on performance and cost. (See pp. 29–32.)
- Participation in benchmarking activities could help the Air Force better evaluate proposals or performance during a contract. The Air Force may find it useful to begin benchmarking performance and cost of common installation services across its bases or major commands. It will need to control for base-specific and/or regional differences in these comparisons. As confidence in these activities grows, benchmarking could be expanded to other military services and commercial firms. However, a lack of detailed data is likely a challenge in the short run. (See pp. 29–32.)

- The Air Force would likely benefit from expanding the use of formal contractual incentives, especially when there are few measurable key dimensions of performance. In addition to fees, the Air Force can take advantage of award term contracts that tie contract length to provider performance. Informal, reputation-based incentives can be quite powerful as well; continued and expanded use of past performance in source selection decisions reinforces these incentives. (See pp. 29–32.)
- Given the changing environment the Air Force faces, contract flexibility can yield important benefits by allowing buying organizations to continually tailor the contract and relationship to their needs with minimal administrative burden. Potential risks of underspecification should be evaluated against the benefits of flexibility before making decisions about specificity in statements of needs, metrics, pricing, and other terms and conditions. (See pp. 29–32.)

ACKNOWLEDGMENTS

We wish to acknowledge the many private-sector personnel we interviewed who graciously donated their time to help us learn about the application of performance-based practices within their firms' facilities and food services contracts. Because of our pledge of confidentiality, we are unable to identify them by name; however, without their help, this research would not have been possible. We also thank the many Air Force contracting officers who helped us better understand the Air Force's progress in implementing performance-based services acquisition.

Several of our RAND colleagues provided valuable assistance in this research. We thank John Ausink and Chad Shirley for their participation in two of our interviews and Clifford Grammich for helping us better communicate our research findings. Belinda Greenfield and Natalie Weaver provided important document assistance.

Finally, we thank Victoria Greenfield of RAND and Tony Freeman of Team XL for their insightful reviews of an earlier version of this document.

ACRONYMS

AFI	Air Force Instruction
A&T	Acquisition and Technology
BOMA	Building Owners and Managers Association
BOS	Base Operating Support
DoD	Department of Defense
FAR	Federal Acquisition Regulation
FM	Facilities Management
FY02 NDAA	Fiscal Year 2002 National Defense Authorization Act
HVAC	Heating, Ventilation, and Air Conditioning
IFMA	International Facilities Management Association
KPI	Key Performance Indicator
PAF	Project AIR FORCE
PEO	Program Executive Officer
PBSA	Performance-Based Services Acquisition
PBSC	Performance-Based Service Contract
PSC	Product/Service Code
RFP	Request for Proposals
SAF/AQC	Air Force Deputy Assistant Secretary for Contracting
SOO	Statement of Objectives
SOW	Statement of Work
Sqft	Square Foot

Chapter One

RECENT POLICY EMPHASIS ON PERFORMANCE-BASED SERVICES ACQUISITION (PBSA)

Federal Acquisition Regulation (FAR) Subpart 37.601 gives four requirements for a service contract to be considered performance-based. First, the requirements document must reflect *what* the purchaser or user of the services needs, not *how* the work should be performed. Second, there should be measurable performance standards and performance thresholds so that the purchaser or user, through the quality assurance surveillance plan, can track performance against clear goals. The third and fourth requirements for performance-based service contracts tie compensation and other types of benefits to the provider's performance. There should be provisions to reduce fees or the price of fixed-price contracts if services do not meet the purchaser's specified needs.[1] Performance incentives, such as award fees or award-term contracts, should be used when appropriate.

Performance-based practices are expected to help the Department of Defense (DoD) improve performance, spur innovation, and increase competition in purchased services, often at a reduced cost to the government (Gansler, 2000). On April 5, 2000, Dr. Jack Gansler, the Undersecretary of Defense for Acquisition and Technology (A&T), issued a memorandum requiring that at least 50 percent of DoD service acquisitions, as measured in both dollars and contracts, be

[1]The Air Force considers the contract clauses 52.246-4 and 52.246-5, which specify re-performance at no additional cost in the event of unsatisfactory work, to satisfy this requirement.

performance-based by the year 2005 (Gansler, 2000). More recently, the Fiscal Year 2002 National Defense Authorization Act (FY02 NDAA) requires the use of performance-based contracts for services.

Air Force efforts to implement performance-based practices preceded Dr. Gansler's memorandum and the FY02 NDAA.[2] In 1999, the Air Force Deputy Assistant Secretary for Contracting (SAF/AQC) issued an Air Force Instruction, AFI 63-124, containing guidance for implementing PBSA practices (U.S. Air Force, 1999).[3] This instruction is based on the FAR Part 37 definition of a performance-based service contract described above, and it applies to virtually all Air Force service contracts over $100,000 annually.

The Air Force purchases a broad range of services to support its installations, military and civilian employees, and primary warfighting capabilities. Initial Air Force PBSA implementation efforts focused on installation support services purchased through operational contracting activities ($10.7B in contracts in FY02).[4] RAND's previous research and this report support these implementation efforts.

Ausink et al. (2001) describe the experiences of personnel at several Air Force installations who identified themselves as successful early adopters of PBSA for their service contracts. In addition to highlighting the areas in which Air Force personnel were changing their services acquisition practices, the authors note the need for additional training and tools to help personnel more fully, effectively, and efficiently implement performance-based practices. To help address these needs, SAF/AQC asked RAND to identify best commercial practices for purchasing and managing the performance of contracts for services similar to those purchased to support installations. We were also asked to gather examples and tools to help installation personnel emulate these practices where appropriate.

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[2] However, Air Force efforts appear to have intensified as a result of Dr. Gansler's goal. The Air Force issued an implementation plan for performance-based practices in June 2000 (U.S. Air Force, 2000) and began formally tracking the use of performance-based service contracts in October 2000.

[3] AFI 63-124 is being revised under a new title, *Performance-Based Services Acquisition (PBSA)*. The revision that the authors have seen includes clarification of ambiguities reported by Air Force organizations.

[4] See Thrailkill and Porter (2003).

During spring 2002, we conducted a series of interviews with commercial providers and buyers of facilities and food services to explore the use of performance-based practices in their contracts.[5] The services discussed in these interviews are similar to those purchased by Air Force installations to support daily activities (typically categorized as Base Operating Support [BOS] services). We discuss the methodology we used to select these firms in Chapter Two. We believe their experiences represent innovative practices for purchasing facilities and food services. The purpose of this report is to

- describe how well-respected commercial buyers of facilities and food services specify their service requirements and manage the performance of their providers, and
- draw lessons from these commercial practices to help the Air Force more effectively manage the performance of its installation support services contracts to improve service quality and cost.

OUTLINE OF THE REPORT

The remainder of this report is organized as follows. In Chapter Two, we describe our study methodology, including the selection of firms and the personnel interviewed. In Chapter Three, we present our findings. We describe the kinds of services discussed in our interviews, types of contracts used, and how these firms apply performance-based practices within these contracts. In Chapter Four, we discuss how lessons from these firms could improve the Air Force's implementation of AFI 63-124 for installation support services contracts, with reflections from recent visits to an Air Force Product Center, Air Logistics Center, and Air Force Test Center. In Appendix A, we provide the interview protocols that guided our discussions with commercial firms. In Appendix B, we list performance metrics that the study participants shared with us. Appendix C summarizes reported use of performance-based practices.

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[5]Throughout this report, the term "buyer" refers to a firm that purchases facilities and/or food services rather than provides them through in-house personnel. It does not refer to purchasing or contracting personnel.

Chapter Two

GATHERING INFORMATION FROM LEADING COMMERCIAL BUYERS AND PROVIDERS OF FACILITIES AND FOOD SERVICES

In this chapter, we describe our study participants, the methodology we used to select them, and the structured questionnaire we used to guide our discussions.

SELECTION OF FIRMS

We conducted interviews with representatives of six commercial firms—two buyers and four providers of facilities and/or food services. We weighted our sample more heavily toward providers (who work with many diverse customers) to more efficiently access a greater breadth of practices that have worked well.

One buyer has a single global contract for all its facilities services (including the day-to-day management of those services), and the other uses multisite contracts for single services or for a few related services. Providers included a global real estate management firm that provides facilities management services to many different types of clients, two firms that offer both facilities management and food services through separate business units within their firms (although we had an opportunity to discuss both types of services with only one of these firms), and a national provider of janitorial and engineering services associated with building operations and maintenance.[1]

[1]Industry professionals differentiate between providers of facilities management services, i.e., management and integration of multiple facilities services (e.g., custodial,

To identify prospective interviewees, we researched well-respected trade associations such as Tradeline and the International Facilities Management Association (IFMA), and we conducted a business literature search on facilities management and food services. We selected firms for our study based on four criteria:

- Reputation: Was the firm cited in the literature as using best practices to purchase or provide the services of interest? Were representatives of the firm asked to speak at a well-respected trade association meeting or conference?
- Relevance: Does the firm buy or provide services similar to those the Air Force buys to support its installations? For study efficiency purposes, we sought firms that buy or provide a wide range of relevant services.
- Size: Does the buyer have a large demand for services (so that it would likely encounter challenges similar to those the Air Force faces)? Does the provider work with many clients so that it can draw from multiple, potentially diverse experiences and approaches in our discussion?
- Recommendation: Did another study participant recommend that we talk with this firm?

Table 2.1 shows which criteria each participating firm met.

In our interviews, we sought more detailed information about implementation of service contracts than one typically finds in the literature or conference presentations. In order to delve more deeply into performance-based practices, particularly in areas that might involve proprietary or otherwise sensitive information, we promised anonymity to participating firms and interviewees. Hence, we do not identify them by name in this report. In our conversations with providers that have both commercial and government contracts, we

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grounds, building maintenance), and the facilities services themselves. Facilities management firms view the management as their core competency and typically use some combination of their own personnel and subcontractors to provide the actual services. Firms that specialize in the provision of the services typically provide a smaller set of related services (e.g., building maintenance, grounds maintenance, or custodial services).

Table 2.1

Selection of Firms for the Study

Firm	Selection Criteria
Buyer A	Reputation, relevance, size
Buyer B	Reputation, relevance, size
Provider A	Reputation, relevance, size
Provider B	Reputation, relevance, size
Provider C	Reputation, relevance, size
Provider D	Relevance, size, recommendation

focused on their experiences working with commercial buyers. In fact, many firms handle federal and commercial contracts in separate business units.

DESCRIPTION OF INTERVIEWEES

We had opportunities to talk with several different types of people involved in purchasing or providing facilities (including management) and food services within the firms in our sample. Although now senior managers, most participants told us that they had worked on a wide range of facilities and food services throughout their careers.

For each buyer, we interviewed the executive responsible for facilities services. We also spoke with the head of facilities-related procurement for one of these firms.

For each provider, we interviewed a vice president responsible for either specific service areas or client groups. In one case, we also spoke with the marketing director.

In total, we spoke with nine representatives of the six firms. See Table 2.2.

Table 2.2

General Description of Interviewees

Firm	Interviewee Responsibilities
Buyer A	Head of facilities services
	Head of purchasing for facilities services
Buyer B	Head of facilities services
Provider A	Head of corporate facilities services
	Head of division that provides food services and installation services to the military[a]
Provider B	Head of marketing for facilities services
	Head of facilities services
Provider C	Senior manager for corporate facilities services
Provider D	Senior manager for building maintenance and janitorial services

[a]This person was relatively new to the position. He previously had worked with private-sector clients.

INTERVIEW PROTOCOL

Our interviews with these executives typically lasted one to two hours.[2] We used a focused interview protocol to guide each of our discussions. We provided the questionnaire in advance to ensure that the appropriate staff were available for the interview. (Appendix A contains the questionnaire.) We addressed five main topics in these interviews.

We began each interview with a description of the purpose of our study, which included the FAR Part 37 definition of a performance-based service contract. After learning about the types of services the firm buys or provides, we asked which types of contracts they (for buyers), or their clients (for providers), use for these services. We then asked whether they consider these contracts to be performance-based, as defined by the FAR. This provided a foundation for the rest of the discussion.

Next, we sought information about how buyers convey their service needs to providers. Finally, we examined how buyers and providers

[2]Five interviews were conducted via conference call. The sixth interview was conducted in person.

manage the performance of these services, including (1) how buyers evaluate provider performance, (2) how buyers and providers communicate about expectations and levels of performance, and (3) how buyers motivate improvements in performance. We asked about the personnel who are involved in these performance management activities as well as the processes used.

Chapter Three

RESEARCH FINDINGS ON SERVICES, CONTRACT TYPES, AND THE USE OF PERFORMANCE-BASED PRACTICES

In this chapter, we discuss the information gathered through our interviews. We begin with a description of the types of services purchased or provided by the firms we interviewed and the types of contracts used. We then describe the use of performance-based practices in these firms' service contracts. We examine how buyers specify their service needs and how they manage the performance of their providers to ensure that those needs are met. Findings are summarized in Tables 3.1 and 3.2 and in Appendix C.

TYPES OF SERVICES DISCUSSED

The firms that we interviewed purchase or provide a broad range of services similar to the base operating support (BOS) services purchased by the Air Force. These firms indicated that in the commercial sector, facilities services are often thought of and purchased separately from food services.

The food services discussed include catering as well as dining services. Facilities services include operations and maintenance services, custodial and janitorial services, groundskeeping and landscaping services, and refuse and recycling services.

Among facilities services, operations and maintenance is the broadest category. It includes activities such as building maintenance, preventive maintenance, equipment repair, paving, vehicle management and maintenance, customer service center operations,

Table 3.1

Types of Services Purchased or Provided

Firm	Services Discussed
Buyer A	Catering, custodial, grounds maintenance, facilities repair and maintenance, carpentry, painting, moves, construction, security, mail, reprographics (retained some service management in-house)
Buyer B	Facilities operations and maintenance, maintenance and repair project management, budget and financial reporting, vendor contract management, lease administration, operation of centralized facilities customer service call center
Provider A	Food/dining services, custodial, grounds maintenance, plant operations and maintenance
Provider B	Custodial, grounds maintenance, refuse/recycling, building maintenance, other daily facilities services, energy management, strategic facilities management
Provider C	Management of services for owner-occupied corporate space/facilities (e.g., custodial)
Provider D	Janitorial and engineering services

move management, pest control, hazardous waste removal, utilities, and security. It may also include major maintenance and construction projects. At some firms, this category includes business services such as mail and reprographic services, receptionists, shipping and receiving, audiovisual support, management of company stores and warehouses, and coffee service. Custodial and janitorial services include cleaning windows and carpets, pressure washing, and construction cleanup. Groundskeeping and landscaping services include snow removal in cold climates.

Virtually all of these services are purchased by the Air Force to support one or more of its installations.

CONTRACT PRICING AND LENGTH

Interviewees indicated that buyers tailor the type of contract they use to the degree of uncertainty they have about their service needs. Many firms face uncertain demands for facilities and food services because of such factors as unpredictable maintenance requirements or changing facilities portfolios and employment from corporate mergers or divestitures. Many also face limited or decreasing budgets for these services. To address these issues, they use cost-based contracts with annual budget ceilings to allow them to optimize the workload within their budget to best meet their needs at a particular time.[1]

We discussed a variety of types of fees for these cost-based contracts. Two providers told us that some of their clients use fixed fees;[2] however, one buyer told us that his firm found fixed fees undesirable when the facilities portfolio is changing rapidly because the fee has to be renegotiated with major work scope changes. Both buyers and two providers report having fees based on a percentage of labor and/or other costs in the contract. However, one of the buyers performs a careful analysis based on metrics and benchmarking against other organizations to ensure that the level of resources is not artificially inflated to increase the provider's profits. One buyer and three providers discussed incentive fees, e.g., shared savings or cost overruns. We discuss incentives in greater detail later in this chapter.

One buyer and two providers have fixed-price contracts (or contracts with fixed-price components) when they feel that demand is fairly well defined. However, given the inherent uncertainty associated with these services, the contracts often include "relief valves" that allow for adjustments based on realized levels of demand. For example, snow removal up to X inches may be covered under the contract; the buyer then incurs additional charges for snowfall beyond that level. If utility costs rise beyond a certain level, the provider may be responsible for covering only a portion of the change in price. Even with these types of provisions, a number of contract changes throughout a given contract period may be necessary.

Among the firms we interviewed, basic contract lengths ranged from three to seven years, with three to five years the most common. We learned that some buyers use "evergreen" contracts that can be

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[1]Most interviewees did not distinguish among the different potential types of cost-based contracts, such as cost reimbursement or time and materials. In the context of our discussions, we understood these contracts to obligate the buyer to reimburse the provider for mutually agreed-upon types of costs incurred on the buyer's behalf, up to a budget ceiling.

[2]Tony Freeman of Team XL, one of the reviewers of this report, notes that the fixed fee is the most commonly used fee in industry.

Table 3.2

Contract Pricing and Length

Firm	Contract Pricing Used	Contract Length
Buyer A	Cost-based, occasionally lump sum	3–5 years is typical
Buyer B	Cost-based	3–year base with two 1–year options
Provider A	Fixed price, cost-based, hybrids (components of each)	3–5 years is typical, a few that are 7 years
Provider B	Typically cost-based	5 years is typical
Provider C	"Benchmark" contracts: budget is set based on proposed level of savings and adjusted annually based on prior year's experience	3 years is typical
Provider D	Cost-based for engineering, flat fee for janitorial	—

renewed each year (without recompetition) as long as they are satisfied with the provider's performance.

USE OF PERFORMANCE-BASED PRACTICES

Using the four-part definition of PBSA from the FAR, we asked our interviewees whether they thought that their contracts were performance-based. Each firm advocated a performance-based approach, but use of specific practices varied from contract to contract.

Conveying Service Needs

Participants were consistently supportive of the first part of the FAR definition of a performance-based service contract, that is, defining service needs in terms of outcomes rather than processes. Buyers indicated that they seek to define what they want, not how it should be accomplished. Providers felt that this is the best way for the contract to be written, because it allows them to be innovative in their approach to serving their buyers' needs. However, the extent to which contracts contain the "how" aspect of the work varies.

Buyers and providers discussed two types of approaches to defining desired service outcomes in their requests for proposals (RFPs), statements of work (SOWs) or statements of objectives (SOOs), and contracts. Interviewees described either a very general approach to defining needs or a detailed approach that may include part of the "how." We found that the chosen approach, either general or detailed, seems to depend primarily on three factors: the characteristics of the services, the operating environment of the buyer, and the experience of the buyer.

General Statement of Service Needs. With a general approach, buyers begin with broad statements of needs that describe the kind of outcomes they desire and provide very little information, if any, about the processes providers should use to meet those needs (i.e., the "how") in the RFP or contract. This becomes the basis for discussions with prospective or chosen providers. Most of our providers stated that they prefer this kind of approach because it allows them to help the buyer more fully determine its needs, which these providers consider to be a strong and unique selling point of the services they provide.[3] A reflection of this approach in contract language is "has the ability to install and maintain [a particular piece of equipment]."

We found common characteristics among the examples of services given. Complex services, such as plant operations and maintenance or preventive maintenance were more likely to be defined using a general approach. As an example, one contract specifies that the service provider "shall develop, implement and manage a long-term preventative maintenance program designed to preserve each Facility and associated equipment, fixtures and contents in good condition and repair. Such program shall include, but not be limited to: electrical/supplemental power systems, exterior and interior paint, flooring, grounds, life safety, lighting, mechanical (including plumbing and HVAC [heating, ventilation, and air conditioning]) equipment, pavement, roofs, satellite dishes and signage." In addition, interviewees noted that the general approach works well in dynamic environments where the buyer's needs or budget are in flux. Providers also said that buyers with little outsourcing experience are better off working with the provider to help define their needs than trying to use a more detailed approach.

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[3]One provider told us that when a prospective buyer visits its current clients' sites to learn about the provider's performance capabilities, the provider then has an opportunity to explore and better understand the prospective buyer's needs.

Buyers that use general statements of needs during the proposal process may seek to include more detailed information about service needs in their contracts over time. Buyers and providers may work together during the initial phases of the contract (i.e., first several months) to help further refine service levels to meet needs. In many cases, the contract vehicle may evolve over time to reflect further refinement or changes in needs. An example of contract language that includes this flexibility is "as service levels change, these staffing levels will be adjusted up or down."

Both buyers indicated that they manage the performance of their service providers outside the confines of the contract. With evolving or diverse needs, these relationships rely more heavily on communication than on the contract language. One buyer indicated that general contract language allowed for easier tailoring of services to the needs of different locations. The other buyer, with a single comprehensive facilities management contract, indicated that its provider may manage its subcontractors with more detailed statements of service needs, but that the buyer did not find it necessary or desirable to manage at this level.

Specific Information About Service Needs. The other approach to defining needs was detail-oriented. In these cases, the contract contains much more information about the "what." For example, an RFP may contain details about the frequency rates for each of the different kinds of services that are required and information about the space or facilities to be managed, such as size, utilization, and type of building. In these cases where the buyer has fully defined the parameters of its needs, each prospective provider simply responds with an explanation of how it would address those needs.

We heard about the use of this approach in several different types of situations. The detailed approach was more commonly used for fairly straightforward services, such as janitorial services. In addition, some buyers who have a history of outsourcing these services know exactly what they want based on their prior experiences and may be more likely to use this approach. One provider indicated that some buyers use this approach after being "burned" by a bad outsourcing experience; they feel that they are safer with a highly specified statement of needs. However, as previously discussed, buyers and providers working in extremely dynamic or complex environments tend to shy away from this approach because they find it less efficient.

Sometimes buyers are interested in conveying the “how” as well. One buyer asked providers to determine staffing levels as part of their proposals. This buyer then used industry standards (e.g., Building Owners and Managers Association (BOMA) or IFMA) to help determine whether the providers’ recommended staffing levels were adequate and efficient. We also heard examples of buyers specifying in their contracts the number and type of individuals to be hired, sometimes including labor rates. This information may be based on results from the bid and proposal process. In our opinion, contracts that include this type of detailed information about required staffing may be considered process-based.

Performance Management

Our interviewees indicated that there are three primary components to managing the performance of service contracts:

- performance metrics
- communication
- incentives.

Metrics are used to track important dimensions of performance and to provide a foundation for discussions between buyers and providers. Successful management depends on frequent communication between the buyer and provider. The use of positive and negative incentives requires careful consideration. Incentives need to be thoughtfully selected to ensure alignment of provider activities with buyer priorities. Each of these components is discussed in more detail below.

Performance Metrics. All but one interviewee thought that using metrics to manage provider performance was a good idea. Metrics may be used to capture many different dimensions of performance, and buyers choose metrics to capture those dimensions that are most relevant to them. As an example, for operations and maintenance services, a buyer may be concerned with the responsiveness of its provider to customer requests, overall customer satisfaction, the site safety record, completion of preventive maintenance actions on time, and cost. Both financial and quality metrics are important. One provider indicated that it does not bid on contracts that focus solely on financial metrics. Interviewees also emphasized distinctions between qualitative and quantitative metrics, noting that they complement each other in terms of capturing performance.

However, the provider of janitorial and engineering services did not think that performance metrics are meaningful management tools. When pressed for clarification, this provider cited an objection to metrics based on subjective inspections and actions beyond the provider's control. That is, ratings of cleanliness are highly subjective, dependent on time of the inspection (e.g., immediately prior or after cleaning occurred) and tenant behavior (i.e., whether the tenant is neat and clean). In addition, this provider thought that the collection of metrics data required additional resources that added more cost than value.

We learned about a variety of methods used to collect performance data, including handheld devices to track technician data, customer call center databases,[4] comment cards left after a service action is performed, and periodic customer surveys. We heard about cases where the buyer, the provider, or a third party collects this information. For example, the food service provider uses a third-party organization for all of its customer satisfaction surveys; this strategy helps reduce perceptions of bias in these results. This firm also told us that some of its clients use third parties to conduct facilities audits, particularly for high-dollar or high-risk activities such as preventive maintenance and regulatory compliance.

Our interviews suggest that customer satisfaction is the most commonly used measure of service quality. We learned about a number of different methods to measure customer satisfaction, including comment cards and follow-up phone calls after a service is performed as well as more formal survey instruments. Providers and buyers work together to determine the most appropriate approach. Some providers use general customer satisfaction forms, whereas others tailor their customer satisfaction metrics to each of their buy-

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[4]See Baldwin et al. (2000) for information about the use of customer call centers for facilities management services.

ers. The use of web-based surveys is becoming more common. Typically, surveys measure satisfaction with a numeric scale (e.g., ratings from one to ten), and sometimes the survey contains a section for open-ended comments and suggestions to improve service.

Customer satisfaction surveys may seek feedback from direct customers and/or buyer management. Providers usually work with the buyer to determine the appropriate survey respondents. Sometimes, survey respondents are a randomly selected sample of customers (e.g., querying half of current customers through random selection).

The frequency of the survey depends on the preferences of the buyer. Some firms survey customers once or twice a year. One provider told us that one of its buyers requires it to follow up with the relevant customer(s) after the completion of each work order (i.e., 100 percent customer call back). One buyer offers an incentive to increase its survey response rates. For example, all respondents are entered into a raffle, with a chance to win a small gift.

Interestingly, one provider cautioned that survey results are not always closely aligned with budget levels, but rather reflect alignment with customer expectations and the quality of the relationship between the buyer and provider. In other words, this provider said that the firm does not always receive its best ratings at its largest budget sites, but rather from sites where its services are properly aligned with customer needs and expectations.

Interviewees noted that choosing meaningful metrics and interpreting and using quality and cost data require skill and experience.

The number of metrics used to assess performance varied widely across buyers, providers, and type of service. In general, firms recommended between two and seven key performance indicators (KPIs), i.e., high-level measures, per service. The number of metrics chosen may reflect buyer emphasis on a particular service, perhaps due to past problems or future expectations, and complexity of the service. For example, one provider indicated that food services were less complex and required only a couple of metrics to assess quality, i.e., customer satisfaction with the food and whether it was served on time. In contrast, plant operations and maintenance may require several metrics to assess diverse dimensions of performance. Metrics may cover preventive maintenance completion rates, work-order backlogs, safety record of the provider, customer satisfaction, and cost. One provider mentioned that it is difficult to respond to and manage more than seven metrics per single service. See Appendix B for a list of metrics provided by interviewees.

Metrics are not always included in contractual language. One provider told us that it is rare to see metrics specified in contracts. In contrast, two other providers stated that they see metrics included in facilities service contracts (although they may not be included until after the first few months of performance). We also learned from the provider of food services that metrics are only included in a contract when food services are considered "mission critical" for the buyer (e.g., in a hospital or university setting).

Several firms stated that they are trying to use their performance metrics information to benchmark across sites and time to identify potential opportunities for improvements in service quality or cost. They described several challenges associated with such an endeavor. For example, meaningful benchmarking for facilities services can be difficult when facilities portfolios are changing over time (e.g., through mergers), facilities uses vary (e.g., warehouse versus laboratory space), and facilities are located in different regions (e.g., market wages differ). In other words, firms noted that it was difficult to track performance over time in such a dynamic working environment. Although BOMA and IFMA provide data on standard industry measures, we heard different opinions on their usefulness for benchmarking. Some of the criticisms expressed were that it was unclear what was really being measured and thus that the data are difficult to interpret. For example, do the estimates for building maintenance include or exclude window washing? We were told that these details are not always specified in the currently available industry standard data. Even when they are, it is often impossible to verify that participating firms are following those reporting guidelines. In such cases, benchmarking can suggest areas for more detailed analyses. Some firms join benchmarking networks with similar firms to try to control for some of the measurement issues, and consultants provide benchmarking services that include more careful attention to exactly which types of activities are being measured.[5]

Given the difficulty of choosing the right set of metrics to reflect the buyer's priorities, we were not surprised to hear that many times providers help shape the list of metrics that are used to manage performance. They view this as another opportunity to draw on their breadth of experience to add value to their buyer relationships. When asked, one provider offers a "laundry list" of possible metrics as a starting point for buyers to consider. In some cases, we heard that an initial set of metrics is chosen after a contract is awarded, once both the buyer and provider have a better understanding of the buyer's needs.

Buyers and providers told us that the set of metrics (and associated goals) used to manage performance tends to evolve over time. Buyers' needs and priorities change as corporate emphases evolve. For example, a firm will have different facilities and food services needs during a period of growth than it does during a market downturn when it is slashing costs in an attempt to remain competitive. Similarly, facilities portfolios or usages can change over time with mergers and divestitures. In addition, one buyer told us that process improvements could lead to shifts in choices of metrics and goals. In each of these cases, metrics evolve to continually align provider actions with buyer needs.

One contract indicated that the "development and refinement of measures is an ongoing responsibility mutually shared by both parties" (i.e., buyer and provider). According to one provider, even when contracts include an initial set of metrics, metrics may evolve outside the contract vehicle. In sum, many examples suggested that performance metrics are negotiated throughout the life cycle of the contract.

Communication. While metrics are a key component of managing the performance of facilities and food services (for both the buyer and provider), another important component is open, frequent communication between the buyer and provider. Two-way communication, informed by performance metrics, is required to con-

[5]See Baldwin et al. (2000) for more information.

tinually maintain alignment between the buyer's needs and the provider's actions. Communication also serves to build partnerships and trust, which in turn improve the management process and service outcomes.

Buyers and providers distinguished between two types of communication: informal discussions and formal reviews. Informal communication occurs daily or weekly. Managers and/or technical experts from the buyer and provider organizations discuss the status of daily activities, new problems, progress toward addressing previous problems, and upcoming needs for the buyer. One buyer also told us that provider representatives attend some of the buyer's internal management meetings, bringing additional opportunities to exchange information. These types of informal discussions facilitate a constant exchange of information that helps improve performance and build a strong partnership across the buyer and provider organizations.

Formal performance reviews occur less frequently. Firms described monthly and/or quarterly meetings for facilities services where metrics, performance trends, new issues, and resolutions of past issues are discussed.[6] One buyer and one provider described detailed monthly reports (based on the mutually agreed-upon metrics) that are inputs for the reviews. Metrics and/or their goals may be revised based on these discussions. Typically, a relatively small number of individuals (i.e., approximately three to six members from each organization) participate in these meetings. The senior site managers for the buyer and provider are key participants; financial, human resources, and technical experts may also attend as needed.

Annual or semiannual performance reviews are also common. Long-term strategic goals, rather than short-term issues, are discussed at these meetings. It is also likely that higher-level managers from both the buyer and provider organizations will participate. One provider indicated that the participation of senior leaders, who have broad experience and are several steps removed from daily activities, is beneficial for solving problems.

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[6]The food services provider indicated that less frequent meetings (approximately every six months) are sufficient.

Buyers and providers sometimes share performance data online, which forms the basis for reviews. This facilitates communication because all parties have access to the same data at the same time. In addition, a common database provides a simple way to broadly communicate any changes in service expectations discussed in reviews. For example, customer call center databases can be updated to reflect new response goals for certain types of work requests.

Interviewees indicated that the buyers' preferred communication strategy depends on the relationship they have with their provider and the types of services they are purchasing.

Because of the costs associated with preparing for formal performance reviews, buyers and providers strive to have as few meetings as possible, while still sharing information in a timely way. A buyer and provider may decide to reduce the frequency of meetings as they establish a successful, long-term relationship. The longer the relationship, the better the provider understands the needs of the buyer. In addition, longer relationships lead to better comprehension of working styles across the organizations.[7]

The complexity of the service also influences the frequency of meetings and other types of communication that occur between buyers and providers. Providers of food and janitorial services reported that they talk less and use fewer metrics to communicate performance than do providers of more complex types of services such as plant operations and maintenance.

Contract examples provided by interviewees indicated that the communication plan between a buyer and provider may or may not be described in the contract, and when it is, the amount of detail varies. Some contracts contain very specific instructions about communication schedules, meetings, and information that the provider is required to share at those meetings. For example, one contract states that the provider "shall submit to [buyer] by the 10th

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[7]There are potential costs associated with long-term relationships, such as costs that rise above industry trends and/or performance that falls below industry trends because of the reduced threat of competition. To offset these risks while still benefiting from the low-risk nature of a good long-term relationship, buyers can continue to monitor best practices and industry costs and offer incentives for their providers to continue to emulate those.

day of each calendar month, or the next business day if applicable, preliminary financial data for the preceding calendar month, including variance explanations, for each of the . . . Facilities summarized by state . . . [The provider] shall simultaneously send a copy of each monthly report to . . . . The monthly report must be submitted on letter size paper (8.5" by 11") and must be in a three (3) ring binder. . . . The monthly report shall include the following sections and information . . . ."

In other cases, contracts do not detail how the buyer and provider will communicate. If anything, there may be a reference to conducting periodic performance reviews. For example, "[p]ositions will be reviewed after 6 months during a team meeting."

In sum, all the firms we spoke with agreed about the importance of communication; however, the chosen strategy and the amount of detail conveyed in the contract varied across relationships.

Incentives. The third component of performance management is the use of incentives. We found mixed opinions on the use of incentives among firms in our sample. Interviewees discussed the use of several types of incentives within the context of their facilities and food service contracts. There were examples of both formal (i.e., contractual) incentives and informal incentives. We first characterize formal incentives and then turn to informal incentives.

Interviewees discussed the use of two types of contractual incentives. The first type links the quality and/or cost of services to the provider's level of compensation. One buyer has agreements with several of its service providers to share 15–20 percent of any documented cost savings associated with their contracts; one provider described similar arrangements with its buyers. However, a provider of janitorial and engineering services told us that the profit margins are already so low for these services (due to intense competition) that it would be uninterested in pursuing savings opportunities that would be shared with its customers. In some other cases, the provider's fee is tied to measures of cost and/or quality of services, e.g., amount over or under the operating budget, safety, and customer satisfaction.[8] The portion of the fee that is at risk varied. In one case, the provider's profit margin could go up or down by 0.5 percent (approximately $25,000), depending on performance. In another case, up to 50 percent of the fee was tied to performance. One facilities management provider described a hybrid arrangement in which it guarantees a buyer that it will achieve a specified level of savings, based on an initial assessment of the facilities. If costs are actually lower, the buyer and provider share the savings. If costs are higher, the provider's fee is reduced. We also learned that buyers sometimes specify that the service workers receive part of the incentive compensation. One described a janitorial contract in which the janitors were given bonuses for good performance.

The second type of contractual incentive links the length of the contract to the provider's performance. Interviewees told us that cancellation for convenience or cause clauses are standard. The buyer or provider can cancel the contract with a certain amount of notice (e.g., a 30-day convenience clause is common). Providers indicated that buyers exercise these clauses if they are repeatedly unhappy with providers' performance.

The provider of facilities management and food services said that it is common to see some form of contractual incentives in facilities service contracts and that incentives are becoming prevalent in food service contracts as well, particularly when food service is a key contributor to the buyer's mission. However, two of the firms we interviewed had reservations about the use of certain types of contractual incentives. One buyer does not tie compensation to its provider's performance for fear of unintended consequences associated with misaligned incentive criteria. In particular, this buyer does not like shared savings incentives because it perceives that the provider will become focused on cost rather than service quality. This concern was echoed by one of the providers we interviewed. Another provider expressed a strong dislike of incentives tied to performance metrics. The provider indicated that such incentives lead to additional non-value-added oversight.

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[8] One provider cautioned that it is important to balance the different dimensions of performance, including both qualitative and quantitative aspects, when structuring incentive fees.

Regardless of whether contractual incentives are used, buyers and providers told us that the benefits associated with a good company reputation provide a strong informal incentive for facilities management and food service providers to meet and exceed their buyers' expectations. Buyers who are pleased with their providers' performance may grant contract renewals and/or scope expansions without going through formal recompetitions. In addition, good reputations allow providers to grow their business through new client relationships.

The buyer that does not use formal compensation incentives (discussed above) believes that informal incentives are adequate to motivate the provider to keep costs low while maintaining performance. The provider that does not find value in incentives tied to metrics told us that the best way for buyers to encourage improvements is to treat their providers as true partners. The partnership relationship itself will create the appropriate motivation.

Chapter Four

IMPLICATIONS FOR THE AIR FORCE

In this research, we have examined whether and how well-respected commercial firms apply performance-based practices within their facilities and food services contracts. Although we have gathered some information about Air Force experiences applying performance-based practices in installation support contracts, we have not studied these in a systematic way. In this chapter, we discuss commercial practices that we believe can offer benefits within the Air Force context and thus are worth additional consideration.

AIR FORCE EXPERIENCE TO DATE

The new PBSA practices the Air Force is asking its services acquisition workforce to implement differ fundamentally from the way the Air Force has traditionally approached contracting for installation support services. In the past, these contracts provided explicit instructions about how services should be performed, which then necessitated detailed oversight to ensure that providers were following those instructions. Few contractual incentives were used, and providers were often selected on the basis of cost, reducing the power of informal incentives.

Implementing this degree of change in service acquisition practices has naturally led to challenges for the affected workforce, including the technical experts (referred to as functionals) who help define the Air Force's service needs and the contracting officers who design and oversee contracts. However, interviews conducted during 2001–2002 at an Air Force Test Center, an Air Logistics Center, and an Air Force Product Center suggest that the Air Force is beginning to use performance-based approaches in contracts for installation support services (Ausink et al., 2002).[1] Selected newer contracts are seeking to emulate many of the best commercial practices discussed in this report. Those involved would likely agree that these efforts have met with mixed success to date, but it is important to highlight these examples.

Each of these Air Force organizations offered examples of service contracts in which the Air Force is trying to tell providers only what it needs, not how providers should fulfill those needs. Requirements to follow official Air Force Instructions (AFIs) are being reduced or eliminated from these statements of work. However, we have been told that this is a difficult transition for some functionals, especially those who remember negative experiences with providers that led to inclusion of the detailed instructions in past contracts. Although progress is being made, it is a continuing challenge.

Performance management for a large, multiservice installation support contract at the Test Center is based on a series of metrics that highlight different dimensions of the included services. At the time of our interview, the center was tracking approximately 200 performance dimensions; however, it was in the process of trimming these metrics, with input from the provider, to focus on a smaller set of high-level measures, with secondary metrics that could be used to illuminate the source of any problems.

This same Test Center contract has an incentive fee based on objective and subjective measures of the performance dimensions. We learned about other examples of contractual incentives at the Air Logistics Center and Product Center. One contract has an award fee based on both quality and technical performance of the provider. In another case, the award fee is based on the provider's ability to manage the workload, its technical performance, and its ability to control costs. In addition, these organizations are providing informal incentives to their providers by taking past performance into account in their source selections.

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[1]See also Ausink et al. (2001) for a discussion of interviews with installations that identified themselves as successful early adopters of PBSA.

SUGGESTIONS FOR THE FUTURE

To help build on current Air Force implementation efforts, we summarize and reemphasize here a number of practices that our interviewees identified as key contributors to their successful facilities and food service contracts. To our knowledge, none of the practices discussed here is inconsistent with the Federal Acquisition Regulations or Air Force policy.

First, communication between buyers and providers is critical, at different levels of their organizations and throughout the sourcing process and resulting relationship. Air Force buying organizations already communicate with their providers both informally and formally, but the types of communication described in the previous chapter generally differ from current practice in their direction and intent. Rather than the buyer communicating to the provider the requirements and then monitoring compliance with those requirements, commercial best practice suggests that communication should go in both directions so that the buyer and provider work together to meet the buyer's needs.

Visits to prospective providers' current customers' sites and discussions during the proposal process can help buyers better understand their needs and the ability of prospective providers to meet them. The cost of site visits may exceed the limited travel budgets of many Air Force buying organizations (especially in today's fiscally constrained environment); however, this type of relatively small investment can yield great benefits down the road, particularly for large, complex contracts.

Buyers and providers find value in working together to more fully define the buyer's service needs and develop a small set of metrics that captures the important performance dimensions. Although it was not discussed in our interviews, this suggests that buyers may also benefit from seeking input from providers on the potential effectiveness of different types of incentives in aligning provider activities with buyer goals. The buyer still makes final decisions about the nature of its needs and how it wants to manage the performance of its provider, but insights from the provider can help the buyer make better, more informed decisions, minimizing unintended consequences.

Frequent face-to-face discussions provide the foundation of successful performance management during contract execution. The Air Force should not place too great an emphasis on metrics, to the exclusion of all else, in its implementation of PBSA. Although good metrics are important inputs to buyer-provider discussions, they do not replace the need for two-way communication about the details of performance. In addition, the participation of senior leaders and managers of both organizations will help ensure that providers continue to support the primary objectives of their buyers.

Second, buyers benefit from encouraging their providers to identify and implement process improvements to increase the quality of services and reduce costs. Focusing on the desired outcomes, rather than the processes used to provide the services, in statements of needs and contracts gives providers opportunities to draw on their varied experiences and expertise to develop the best way to meet those needs. And, as discussed above, managing performance through communication based on information captured by performance metrics rather than a management layer to oversee the details of provider activities (called "shadow management" by one of our providers) also supports provider efforts to innovate and reduces management costs for both parties.

Third, when selecting metrics for performance management activities (and perhaps incentives as well), buyers and providers find it useful to focus on a relatively small set that reflects the most important aspects of the service so that providers' activities are properly aligned with their buyers' needs. Each measure should contribute relevant information to justify the data collection costs and management attention devoted to it. Interviewees also found it useful to incorporate qualitative as well as quantitative data on service quality and cost into these metrics. The Air Force already has a metrics-oriented culture; the challenge will be to include more of the qualitative dimensions of performance such as customer satisfaction (which has received relatively less emphasis in the past) and select only a few key metrics for each service that are most closely aligned with the buying organization's priorities and needs.

Several firms noted that participation in benchmarking activities, either in-house efforts across sites and divisions or with other firms, helps buyers better evaluate performance information in prospective providers' proposals as well as during a contract. These firms also noted the challenge of controlling for differences across firms and time. Comparing performance of similar services at similar facilities owned by the same buyer (e.g., building maintenance cost per square foot at different branches or franchises) is one way to control for potential variation. However, other factors such as regional cost differences must be taken into account as well. The Air Force may find it beneficial to begin benchmarking the cost and performance of installation support services within and across its major commands. These efforts could then be expanded to other military services and commercial firms, as the Air Force feels more confident in its ability to interpret information from these exercises. The Air Force may face challenges associated with obtaining the level of detailed data needed to support benchmarking. However, this can be addressed through special data collections in the short run and through new Air Force and/or provider data systems in the longer run.

Fourth, a number of different types of incentives may be effective for facilities and food services contracts, including both contractual and informal, i.e., "reputation," incentives. Our interviews suggest that buyers choose incentives based on the difficulty of capturing all of the performance dimensions that are important to them. When there are a few key performance dimensions that can be captured in a set of mutually agreed-upon metrics, the Air Force would likely benefit from expanding its efforts to tie fees to performance.[2] In addition, award term contracts provide a relatively new tool the Air Force can use to tie contract length to performance;[3] however, changing military requirements and market conditions suggest that periodic recompetition (e.g., every 10 years or so) would be beneficial to the Air Force. Regardless, the use of past performance in source

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[2]Tony Freeman notes that even in a changing environment, buyers and providers "can work together in an open collaborative manner" to adjust incentive targets.

[3]An award term is similar to an award fee in that the provider earns additional contract years (without competition) rather than additional fee. An award term plan describes the performance criteria and process used to make award term decisions. See U.S. Air Force (2003) for more details. The Service Contract Act places a five-year limit on the length of service contracts. Each option is considered as a new contract for this criterion (U.S. Air Force, 2003). Thus, the total contract length can exceed five years as long as neither the basic contract nor any of the options exceeds five years.

selection decisions provides a powerful incentive for providers to meet Air Force buyers' needs.

Finally, devising a flexible contract in terms of the description of service needs, metrics, pricing, and other terms and conditions can help a provider better meet its buyer's needs. A buyer's requirements for facilities and food services often change over time, sometimes in unpredictable ways. New budgetary pressures can lead buyers to cut or reduce service levels, facilities portfolios can expand or contract, and utilization of existing facilities can change. Flexible contracts allow provider activities to be easily adjusted over time to match changing buyer needs. While potentially providing more protection against possible underperformance or cost increases, detailed service descriptions and/or firm fixed-price contracts (which are encouraged within the Department of Defense for many commercial-like activities) can cause buyers to devote scarce management resources to contract modifications over time. As a public agency, the Air Force will likely not find it desirable (or perhaps possible) to build as much flexibility into its service contracts as some private-sector firms do; however, it is important to understand the potential benefits of flexibility so that any perceived risks can be appropriately evaluated and addressed.

Appendix A

INTERVIEW PROTOCOLS

This appendix contains the questionnaires that we used to guide our interviews with buyers and providers of facilities and food services. Questions were provided in advance of our discussion to ensure that the appropriate people were available to answer our questions.

BUYER QUESTIONNAIRE

Topics for Performance Management Discussion for Buyers of Facilities and Food Services

Background

- Kinds of services purchased by your organization
- Types of contracts used; contract lengths
- Corporate goals for these contracts, e.g., cost savings, standardization and/or improvement of performance

In the context of specific contracts or relationships with providers:

Application of Performance-Based Practices

- Statement of work/statement of objectives
  - — Output- or process-oriented
  - — Performance metrics

    - Ties to performance management plan
- Process used to develop the performance management plan
- Details of the performance management plan, i.e., how you evaluate provider performance and continually align provider activities with your needs
    - Tools used, e.g., metrics, inspections
    - Communication with the provider
    - How performance information is used by you and the provider
    - How problems are addressed
    - Incentives for improved performance
    - Tailoring the performance management approach to characteristics of the services purchased or the relationship with the provider
    - Information contained in the contract
- Organization used to manage performance
    - Personnel involved
    - How performance management activities fit into their overall duties
- Documents that describe your service needs and your performance management approach

Lessons Learned

- How your approach to statements of work and performance management has changed over time
- How you would like to see these change in the future

PROVIDER QUESTIONNAIRE

Topics for Performance Management Discussion for Providers of Facilities and Food Services

Background

- Kinds of services provided by your organization
- Types of contracts used; contract lengths

In the context of specific contracts or relationships with buyers:

Application of Performance-Based Practices

- Statement of work/objectives
  - Output- or process-oriented
  - Performance metrics
  - Ties to performance management plan
- Participation in the development of the performance management plan
- Details of the performance management plan
  - Tools used, e.g., metrics, inspections
  - Communication with buyer
  - How performance information is used by you and the buyer
  - How problems are addressed
  - Incentives for improved performance
  - Tailoring the performance management approach to characteristics of the services purchased or the relationship with the buyer
  - Information contained in the contract
- Organization used to manage performance
  - Personnel involved

- Performance management processes used for your internal management purposes
- Documents that describe the buyer's service needs and/or your and the buyer's approaches to performance management

Lessons Learned

- How approaches to statements of work and performance management have changed over time
- How you would like to see these change in the future

EXAMPLES OF PERFORMANCE METRICS

In this appendix, we list examples of facilities and food services performance metrics used by four firms that participated in this study.

PROVIDER A

Plant Operations and Maintenance Key Performance Indicators (KPIs)

Metrics:

- Percentage of work orders that are preventive maintenance
- Percentage of work orders that are corrective or repair
- Percentage of work orders that are for safety
- Percentage of each category of work orders closed in same week
- Percentage of work orders open more than 10 days (mission critical and nonmission critical)
- Customer satisfaction

Goals:

- Backlog of no more than 10 business days on maintenance work orders

- 100% of critical building systems preventive maintenance actions performed each month
- 60% of noncritical preventive maintenance actions performed each month

Custodial KPIs

- Customer satisfaction
- Percentage of on-time preparation for office moves

Mail Services KPIs

- Volume of incoming mail
- Volume of junk mail
- Customer satisfaction

Reprographics KPIs

- Customer satisfaction (goal of 95% rating 4 and above on a scale of 1 to 5)
- Retention of records/month (goal 100%)
- Digital retention for color copies (goal 100%)

Chemical Storage KPIs

- Daily ordering tickets vs. time entered
- Accuracy of inventory (95% goal)
- Customer satisfaction

Safety KPIs

- Recordable accidents and lost workday case rates (mid-year and year-end)

- Lab hood test with percentage working properly, percentage needing repair/ adjustment (annually)
- Training of appropriate staff (100% goal)

Food KPIs

- Customer satisfaction
- Percentage of time food was ready and available within desired time frame

PROVIDER C

Facilities Management (General)

- Customer service rating
- Number of calls for service
- How quickly calls were answered
- Time to dispatch
- Time to call back (to check on service)
- Percentage of work orders generated by customer vs. provider

Custodial

- Cleaning cost per square foot (sqft)

BUYER A

Facilities Management Services (General)

- Cost per sqft

Reprographics

- Volume of copies
- Cost per copy
- Cost per employee

Special Projects

- Cost vs. estimated budget
- Completion date vs. estimated schedule

BUYER B

Facilities Management (General)

- Number of technicians per sqft
- Number of sqft per outsourcing employee
- Number of sqft per facility manager
- Number of facilities per facility manager
- Number of sqft per onsite technician
- Number of properties per roving technician
- Number of facility managers per regional manager
- Number of calls per customer service representative per day
- Cost per sqft (by type of area—landscapable vs. cleanable)
- How quickly service center calls were answered
- Occupancy $ per sqft
- Occupancy $ per full time equivalent
- Occupancy expense per company expense
- Occupancy expense per company revenue
- Sqft per full-time equivalent

- Number of invoices per accountant per year
- Number of invoices per clerk per year

Real Estate Management Services

- Average number of leases per lease administrator
- Percentage of space that is vacant
- Sqft disposed of vs. target disposed of

Appendix C

REPORTED USE OF PERFORMANCE-BASED PRACTICES

CONVEYING SERVICE NEEDS

Buyer A

- Defines desired level of service by comparing itself to firms with similar services.
- Looks to provider to define how to do the work.
- Uses the proposed approaches, including staffing levels, as inputs to the source selection process. Uses BOMA and other industry standards to help evaluate bids.
- Uses flexible contract language; details are negotiated at the local level.

Buyer B

- Describes very general, “big picture” expectations in the contract.
- The contract is not used to manage the provider on a daily basis.
- Discusses frequencies and other details outside the contract. Manages these with the provider to meet budget pressures and other changes that occur over time.

- Tailors service needs to individual locations.

Provider A

- Sees two approaches to statements of needs: general and detailed.
- General: works well for complex services where it is difficult to anticipate exact needs up front, e.g., plant operations and maintenance. Easier to accommodate changes (which are inevitable) over time, leading to a better ability of the provider to meet buyer needs. The contract may ultimately contain information on metrics.
- Detailed: clearly defines scope of work and performance metrics. Works for simple services such as housekeeping. Some buyers hire consultants to help them do this based on industry standards for services.
- Some buyers include minimum required staffing levels in their statements of needs. Provided example for custodial and materials management.

Provider B

- Almost always sees frequencies of services specified in contract language.

Provider C

- Description is more detailed for buyers that have had bad experiences in the past. They ask for more details from the providers as well.
- Prefers buyers to express their real needs and let the provider figure out how to satisfy them. Works with buyers to tease out the real needs.
- Performance-based cleaning example: agree on definition of clean, and let the provider decide how often things need to be done to meet that definition.

Provider D

- One client does specify required staffing levels and labor rates and benefits.

USE OF METRICS

Buyer A

- Main categories are customer satisfaction and cost.
- Customer satisfaction survey for custodial services and reprographics is performed online twice a year.
- Normalize cost metrics to measure savings over time (cost per copy, cost per employee for reprographics, cost per sq ft for custodial).
- Customer tracks cost and provider tracks other metrics (e.g., volume for copies).
- Metrics must be aligned with customer objectives.
- Difficult to find good metrics for construction—you never know what you're facing in advance, so it relies on communication mainly. May look at whether the project was completed on schedule and within budget.
- Uses BOMA's benchmarking metrics.

Buyer B

- Primary objectives are to reduce costs and improve customer service/satisfaction.
- Internal benchmarking is difficult due to major differences in labor and other costs across locations.
- Tracks number of technicians per sq ft to ensure that staffing isn't excessive (linked to fee).

- Customer survey targets several levels: buyer divisions, retail customers, "retail" facilities, corporate facilities, tenants/subleases.
- Participates in benchmarking studies led by a consultant.
- Changing facilities complicates benchmarking. Identified a "stable" portfolio for this. Measures cost per sqft by types of facility within this portfolio.
- Performance database contains expectations for levels of performance for different services.
- Metrics evolve over time as needs change, processes change.

Provider A

- All their buyers use performance measures.
- Quality and cost measures are common. How they are measured varies.
- Likes to work with buyers to define metrics, figure out what should be in the contract.
- Metrics are often included in contracts (although they may be added after the contract is in place).
- For food services, there are two primary metrics: customer satisfaction and availability. Metrics aren't typically in the contract unless food is important to the buyer.
- For facilities services, there are usually between 2–3 and 6–7 key performance indicators (KPIs) for each service. More than this is hard to manage. These can be developed in the early stages of the relationship.
- There may be underlying metrics for each of the KPIs. The buyer and provider agree on these, but they may not be in the contract.
- Buyer's ability to cancel at will makes it unnecessary to put the metrics in the contract.
- Uses a third party to conduct customer satisfaction surveys for food services.

- Buyers may use third parties to conduct facilities audits.
- Uses BOMA and IFMA measures for benchmarking, but recognizes shortcomings of these. No equivalent source for food services.
- Performs internal benchmarking across buyers.

Provider B

- Need both qualitative and quantitative, nonfinancial and financial metrics.
- Metrics are rarely written into contracts.

Provider C

- Sees cost metrics, operational metrics.
- Metrics are tailored to what buyers care about.
- One buyer wants provider to get customer feedback on every service call.
- Gathers satisfaction data through call backs and cards left on employees' desks.
- Uses web-based survey to get customer feedback at various organizational levels (usually performed by the provider).
- Some buyers perform periodic random inspections and audits (facilities and financial).
- Metrics may or may not be written into the contract. When they are, they may evolve outside of the contract.
- Has an automated tool to collect a variety of performance data and manage work orders and preventive maintenance activities. Uses bar coding for all equipment. Wants to use these data for internal benchmarking purposes.
- There are issues associated with interpreting BOMA benchmarking data.

Provider D

- Scorecards are not useful to evaluate performance for either janitorial or engineering services. Results are too dependent on the time of day inspections are performed, the behavior of buyer employees.
- If inspections done, use experienced person associated with the facility, e.g., building manager.
- Typically, 10–15 percent of space is randomly selected by the buyer for inspection each week.

COMMUNICATION

Buyer A

Informal

- Daily interactions with providers and service users, qualitative feedback.
  - Includes service managers.

Formal

- Quarterly reviews for reprographics: discuss metrics, set performance and cost targets for future.
  - Includes service managers from both sides and senior management.
- Other services may have formal reviews at the local level.

Buyer B

Informal

- Interact a lot, at various management levels.
- Work out problems in real time through communication.
- Provider attends some buyer management meetings.

Formal

- Detailed monthly report is discussed in person. Covers KPIs for cost and customer service.
  - Includes provider and buyer facilities services management team.
- Quarterly and annual reviews based on higher-level scorecard that tracks performance: teaming, skill level, weakest links, customer surveys. Set targets for the future.
  - Includes same staff as monthly, plus higher-level management of buyer and provider.

Provider A

Formal

- Facilities management (FM): Monthly and quarterly meetings are common. Discuss metrics, thresholds, performance trends, new goals, not strategic issues.
  - Includes primary contacts, relevant technical experts, provider manager and regional manager.
- Food: Twice a year is sufficient. Performance goals are stable unless there are corporate changes, e.g., layoffs.
  - Includes provider's local manager and boss, buyer user representative, contracts specialist.

Provider B

Informal

- Daily feedback from customer.
  - Includes local managers.

Formal

- Monthly reviews: in person, discuss budget and qualitative data, pressing issues, monthly accomplishments.

- — Includes local managers, regional managers, subject experts.
- Quarterly and annual reviews: more formal, broad range of performance topics.
  - — Also includes more senior attendees.
- Contract defines meeting frequencies, types of reports required, broad types of topics.
- Works with client to define details of communication process.

Provider C

- Should not have more than one point of contact for each major service area (or technical area) on the buyer side managing the provider.

Informal

- Typically meet 3–4 times a week.

Formal

- Monthly written reports (financial and other information) and meetings.
  - — Includes buyer and provider managers only.
- Quarterly or tri-annual meetings to discuss work in detail.
  - — Includes higher-level management.
- All buyers have some structured system for communication, but they differ in terms of how often.
- Formal communication may be described in the contract, e.g., frequency of reviews.

Provider D

Informal

- Typically brief for janitorial services.

- Weekly meetings to discuss level of usage of facilities, cleanliness factors. The goal is to establish expectations about service quality.

Formal

- Quarterly meetings to talk about more strategic issues, e.g., whether to move toward touchless bathroom technology.
  - — Includes service manager, higher management for both firms.
  - — Beneficial to have higher managers involved. They can easily resolve problems.

USE OF INCENTIVES

Buyer A

- Uses incentives and penalties, but focuses on positive reinforcement.
- Most fees are a percentage of the budget.
- Reprographics contract has fee linked to customer satisfaction (.5–.75 percent of total contract [$5M] is tied to meeting a customer satisfaction hurdle).
- Reprographics contract has a shared savings incentive as well.
- Sometimes use shared savings in construction contracts (e.g., 20 percent of savings). In one case, this clause was added after the bid was in. If the contractor anticipates this, extra scrutiny is needed to evaluate the bid to ensure that it is not artificially inflated.
- May offer incentives tied to construction schedule if that is important.
- No contractual incentives for custodial, but contract often renewed without competition if pleased.
- Terminate contract (30 day out clause) or don't renew if not satisfied.

Buyer B

- No formal performance or savings incentives in the contract. Difficult to balance appropriately to reduce risk of distorted efforts. Instead, convey priorities at all interactions.
- Fee is a percentage of salaries and fringe benefits, not reimbursables. Benchmarks and models of labor usage are used to ensure that staffing is appropriate. Can draw on diverse data acquired through mergers. Worries about staffing levels, not pay and benefits.
- If fee were fixed, would have to change it every time facilities needs changed.
- Option years awarded based on assessment of performance via performance scorecard.

Provider A

- For FM, contractual incentives are common. Moving this way in food contracts as well.
- Cost-based contracts have fixed fees or fees that are a percentage of costs.
- Fees may be linked to quality (e.g., customer satisfaction goals), cost (e.g., budget over/under runs), or both.
- In one example, up to 50 percent of the provider's earnings are tied to incentives, based on safety, customer satisfaction, and the operating budget, with acceptable ranges and threshold targets for these. Employees share in rewards. Targets are set jointly each year.
- Fixed price: risky for buyer (pay too much) and provider (underestimate cost), but you can build in relief valves through scope thresholds (e.g., amount of snowfall).
- Cancellation for convenience clauses are common.
- A balance of cost and performance/quality incentives is typical for FM (and moving in that direction for food) and important.
- There are shared savings/cost over runs.

- For quality, typically establish a baseline and range and then adjust fee according to how well provider did, with a min/max amount of fee at risk. Measures vary, but typically involve customer satisfaction.
- Some buyers automatically renew contracts unless they are unhappy.

Provider B

- Should be based on value-added, and reflect a balance between qualitative and quantitative, nonfinancial and financial performance.
- Pure cost-based incentives move the relationship away from a partnership.
- Gave example of fee tied to achieving X percent savings, plus other performance dimensions.
- Sees fixed fees.
- Sees fees tied to labor costs.
- There are strong informal incentives to perform well to get expanded and new business.

Provider C

- Benchmark contracts have shared savings clauses; fee is reduced if costs are higher than estimated.
- Relief valves are built in to adjust for unanticipated circumstances, e.g., increase in utility costs above a certain level, snowfall greater than a certain level.
- Fee does not grow linearly with growth in scope/budget.
- Informal incentives are strong: to build a good reputation so that it can increase the scope of its business with clients.
- Many buyers renegotiate without competition if they are happy with the service.

- 30-day termination for cause clause is common.
- For cleaning, worked with unions to establish bonuses for workers based on good performance.

Provider D

- Incentives do not add value. They add extra work because both the buyer and provider must have additional oversight to implement them.
- Shared savings are not desirable since margins are so low already. Not willing to make any further investments to lower costs if have to share the rewards of those investments.
- Partnership relationship provides the most effective incentives. Work together to find opportunities to improve, meet budget reductions.
- Informal incentives based on reputation are powerful.

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