PROJECT AIR FORCE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

Jump down to document ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

Purchase this document
Browse Books & Publications
Make a charitable contribution

For More Information

Visit RAND at www.rand.org
Explore RAND Project AIR FORCE
View document details

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents.
This product is part of the RAND Corporation monograph series. RAND monographs present major research findings that address the challenges facing the public and private sectors. All RAND monographs undergo rigorous peer review to ensure high standards for research quality and objectivity.
Air Force Service Procurement
Approaches for Measurement and Management

Laura H. Baldwin, John A. Ausink, Nancy Nicosia

Prepared for the United States Air Force
Approved for public release; distribution unlimited
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–
“MG-299.”

UC267.B35 2005 358.4’16212’0973—dc22 2004028312

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2005 RAND Corporation
All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2005 by the RAND Corporation
1776 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
RAND URL: http://www.rand.org/
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002; Fax: (310) 451-6915; Email: order@rand.org
Summary

To satisfy requirements in the fiscal year 2002 National Defense Authorization Act (U.S. Congress, 2001) to improve the acquisition of services by the Department of Defense, the Air Force established a Program Executive Officer for Combat and Mission Support (AFPEO/CM) who is responsible for management and oversight of a well-defined portfolio of Air Force services acquisition activities. This office is the single point of contact for Air Force services acquisition inquiries and is also responsible for developing long-range plans for cost-effective acquisition of services.

To fulfill its responsibilities, the AFPEO/CM needs metrics to help it monitor compliance with statutory requirements, needs to respond to congressional inquiries about specific acquisitions, and needs to effectively manage Air Force services acquisition activities and organizations. RAND Project AIR FORCE was asked to help develop a portfolio of “overarching” measures that will allow the AFPEO/CM to assess the health of Air Force acquisition activities, diagnose problems, and target improvement efforts. This report describes our recommendations.

To help develop this portfolio of metrics, we considered the experience of commercial firms, which have long had a “strategic” view of purchasing direct materials (goods) because they are direct inputs to production, but have only recently explored applying such approaches to purchasing services. Through interviews with well-respected chief purchasing officers and other executives involved in service acquisitions, through conference participation, and through a
review of the business literature, we found that commercial firms are beginning to manage their service acquisitions in a manner similar to their acquisition of direct materials. That is, commercial firms are increasingly making use of commodity councils (cross-functional teams) to develop purchasing and supply management strategies for services and are developing and using performance metrics, similar to those used for goods, to manage their purchased services and their purchasing organizations (pp. 11–12).

**Purchasing and Supply Management Strategies**

Ideally, corporate objectives flow down through the purchasing organization and are supported through formal strategies for individual commodity groups, as well as personnel incentives. Strategies are based on intensive market research and assessments of internal demands for services. Because of the many facets of purchasing and supply management strategies, commodity councils typically include a variety of experts such as representatives of user groups, experts in purchasing/acquisition, and experts in the particular service industry. Industry experts or other stakeholders, rather than procurement personnel, may be tapped to lead commodity councils (pp. 11–17).

**Commercial Approaches to Metrics**

Commercial firms rely on results-oriented metrics that focus on how acquisition activities support corporate objectives to manage their service acquisition activities. The categories of results-oriented metrics that appeared most often in our research include cost, quality, supplier satisfaction, implementation of new initiatives, and special interest items. In addition to these results-oriented metrics, commercial firms indicated that management metrics that track internal customer satisfaction, personnel training and retention, and ethics violations are also important. Selected metrics are reported to top-level executives on a regular basis (pp. 19–35).
Developing a baseline for these metrics and then tracking them over time present challenges for many firms. Some firms have adopted new management information systems to collect and organize the data for their service acquisitions and have implemented surveys to collect additional data such as supplier satisfaction and customer satisfaction with purchased services, the purchasing organization, and its processes (p. 34).

**Recommendations for the Air Force**

While not a commercial firm, the Air Force can learn from commercial firms’ experiences in managing its service acquisitions. We recommend a balanced portfolio of performance metrics for the AFPEO/CM based on the six major categories of metrics discussed above (pp. 37–50). These metrics are listed in Table S.1.

As with commercial firms, populating these metrics will be challenging for the Air Force. Some of the required data, such as contract costs, exist in Air Force contracting data systems. However, we have concerns about the integrity of these data and their usefulness in determining what services the Air Force purchases (Dixon et al., forthcoming). The Air Force will need to implement new data collection procedures for many of the required data, particularly supplier and customer satisfaction data (pp. 38–50).

Because of commercial sector successes and limited federal government experience with centralized purchasing strategies, we recommend the Air Force adopt a centralized, strategic approach linked to Air Force objectives for managing its purchased services. Proposed Department of Defense–wide commodity councils for selected categories of services are a step in this direction. Given the diversity of service users and their requirements, it will be important to include all-important user groups in the process of developing strategies for categories of services. Other key stakeholders such as small business advocates should be included in the process as well. The Air Force will need to reinforce these efforts with leadership support and incentives that are aligned with Air Force objectives (pp. 50–54).
### Table 5.1
**Proposed Portfolio of Metrics for the AFPEO/CM**

<table>
<thead>
<tr>
<th>Metrics Category</th>
<th>Potential Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>Change in costs versus change in market index</td>
</tr>
<tr>
<td></td>
<td>Actual versus projected post-study costs for recently completed A-76 studies</td>
</tr>
<tr>
<td></td>
<td>Procurement return on investment</td>
</tr>
<tr>
<td>Quality</td>
<td>Customer satisfaction with purchased services</td>
</tr>
<tr>
<td></td>
<td>Reliability or continuity of services</td>
</tr>
<tr>
<td>Supplier satisfaction</td>
<td>Supplier satisfaction with doing business with the Air Force</td>
</tr>
<tr>
<td>New initiatives</td>
<td>Process and outcome metrics for specific initiatives, which may include</td>
</tr>
<tr>
<td></td>
<td>• purchasing and supply management</td>
</tr>
<tr>
<td></td>
<td>• management and oversight of acquisition of services process</td>
</tr>
<tr>
<td></td>
<td>• customer education</td>
</tr>
<tr>
<td>Special interest</td>
<td>Compliance</td>
</tr>
<tr>
<td></td>
<td>• Percentage of service dollars and contracts awarded to different categories of small businesses</td>
</tr>
<tr>
<td></td>
<td>• Percentage of service contracts that are performance based</td>
</tr>
<tr>
<td>Other</td>
<td>Percentage of A-76 studies or slots that were successfully competed within the required time frame</td>
</tr>
<tr>
<td></td>
<td>Number of protests resulting from A-76 awards</td>
</tr>
<tr>
<td></td>
<td>Percentage of key staff for A-76 studies that remain in their jobs throughout those studies</td>
</tr>
<tr>
<td></td>
<td>Percentage of provider personnel that remain in their jobs for a given period of time</td>
</tr>
<tr>
<td>Internal management</td>
<td>Internal customer satisfaction with the Air Force purchasing process and personnel</td>
</tr>
<tr>
<td></td>
<td>Percentage of dollars associated with purchases executed outside the Air Force’s preferred strategy (i.e., maverick buying)</td>
</tr>
</tbody>
</table>