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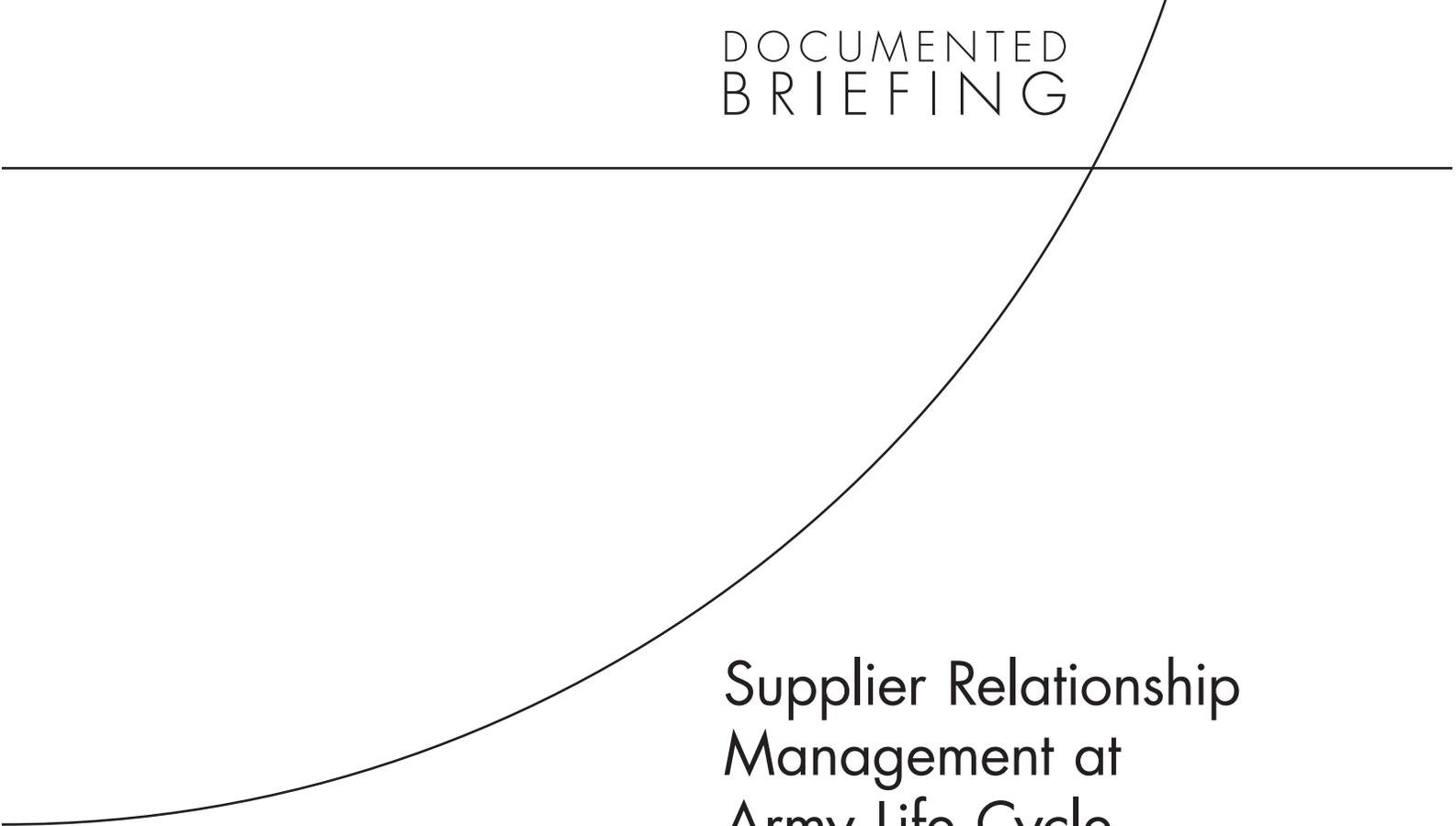
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BRIEFING



Supplier Relationship Management at Army Life Cycle Management Commands

Gap Analysis of Best Practices

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Summary

Purchases of weapon systems and other goods and services constitute a large portion of the Army's budget. Purchases surpassed 50 percent of the Army's total budget in fiscal year (FY) 2003 and reached 65 percent in FY 2007. As a result, improving the Army's performance and reducing costs rests in large part on improving its approach to supplier relationship management (SRM).

SRM is the process by which an organization works with its suppliers to accomplish common goals or objectives. Recent research identifies several means through which enterprises accomplish SRM, particularly to improve supplier performance and reduce total costs. These include the following:

- Rationalizing the supply base—that is, identifying a limited number of preferred suppliers and working with them to establish metrics for assessing their performance. Many performance metrics that commercial firms use to rationalize their supply base are available for the Army as well. Effective performance metrics can be one of the key contributors to SRM.
- Developing cross-functional teams with problem-solving skills that can work with suppliers to identify and eliminate problems. Regular, structured communication is critical with both teams and suppliers to identify and eliminate problems as well as to develop means for continuous improvement.
- Proactive development of supplier relationships, including establishing incentives and penalties for supplier performance.
- Integration of suppliers in new product development.
- Working throughout the supply chain to improve performance among lower-tier suppliers.

Because SRM is so important, U.S. Army Materiel Command (AMC) asked the RAND Arroyo Center to assess how it could improve its supplier

management and development to reduce total costs and improve performance. To this end, we investigated current Army SRM practices and what can be done to improve them, identifying commonly accepted best practices and comparing them to Army practices. The resulting analysis also drew on AMC order and contract data and interviews with top AMC headquarters and Life Cycle Management Command (LCMC) leadership.

Current Army SRM Practices

Current Army practices reflect some research-supported SRM best practices. However, such practices are not always widespread, and others are not used at all.

With regard to supply-base rationalization, the *Army Source Selection Guide* (Assistant Secretary of the Army, 2001) identifies market research as a first step in an acquisition plan, details source selection plans, and requires past performance as a criterion for selecting suppliers. This sequence of steps would enable the Army to rationalize its supply base, yet none of the LCMC staff with whom we spoke reported pursuing supply-base rationalization. AMC also has several constraints to improving supply-base rationalization. For example, the separation of acquisition and sustainment processes in the Army limits the search for competitive suppliers willing to provide both in a single contract. Available data limit efforts to establish supplier performance metrics to assess suppliers. Requirements for competition and socioeconomic goals also limit supply-base rationalization.

AMC has seen its numbers of contracts and suppliers increase sharply in recent years: between 1995 and 2007, the number of LCMC suppliers increased from 1,616 to 7,614, while the number of contracts increased from 4,297 to 26,288. Most Army contracts remain short-term (i.e., less than two years long) for relatively small amounts and a low number of different items, although our interviews suggest some growing use of long-term contracts. Overall, the quantitative data suggest—given a likely decreasing number of contracting personnel over time—that Army staff must spend increasing

amounts of time on contract administration rather than on broader strategies for rationalizing the supply base or otherwise improving SRM.

With regard to supplier development and helping suppliers improve, the Army has implemented very few SRM best practices. U.S. Army Materiel Command (1998) recommends building relationships and joint problem solving, as well as continuous communication with suppliers. However, the LCMCs do not currently have cross-functional teams that perform on-site risk assessments, and they only rarely seek to work with suppliers to eliminate their deficiencies. Such efforts may be better targeted at smaller suppliers than larger ones; while federal policy seeks to develop smaller suppliers, the larger ones may already be leaders in their field and need no development support from federal purchasers.

Regarding proactive development of suppliers, the LCMCs reported some limited application of SRM best practices but little or no application of others, in part because of a lack of available data. The LCMCs have worked to establish some open relationships with their suppliers through performance feedback and information sharing, but they have instituted few rewards or penalties for supplier performance. Our interviews indicated that penalties were more common than rewards, and that there was little or no use of supplier scorecards or recognition for outstanding performance. We also found no systematic supplier development by LCMCs, in part because they do not have access to AMC-wide—much less Army-wide or U.S. Department of Defense (DoD)—wide—data on suppliers. Some interviewees reported sharing aggregate, long-term forecasts with suppliers but little sharing of detailed, short-term forecasts or any systematic activities. All this prevents efforts to build, much less maintain, momentum in supplier development, including ongoing analysis of performance and continuous improvement activities. Indeed, virtually all LCMC contracts are for a firm, fixed price, with very few incentive-based ones (e.g., cost-plus-incentive-fee, cost-plus-award-fee, fixed-price-incentive-fee, fixed-price-award-fee). This may limit leverage with suppliers, particularly those

with performance problems—and underscores the importance of improving SRM practices.

With regard to development of suppliers by tier, we found that such activities are rare or do not occur among the LCMCs. Working with lower-tier suppliers occurs only rarely, although our interviews indicated that some interaction is developing. At this point, the Army—like most commercial enterprises—has not established a thoroughly integrated supplier network that includes ongoing improvement.

Challenges to Adopting Best SRM Practices

Our research points to several key challenges for SRM success. First, the Army lacks detailed, enterprise-wide data on supplier performance. This limits both possible analyses and the ability of leaders to have a DoD-wide perspective on supplier management.

Second, LCMCs, as noted, have limited access to the data that do exist. Seeing only their own contracts with suppliers limits the perspective of LCMCs, as well as their opportunities to increase leverage. It also limits the ability of leaders to gain a broader perspective on supplier management.

Third, the Army has numerous organizational stovepipes, limiting efforts to gain a global perspective on suppliers and impeding the creation of cross-functional teams. Contracting officers often become specialists on a given system or at a given location and do not work with the same supplier for other systems or at other locations. As a result, multiple, distinct relationships are established with suppliers, even if those systems were provided by the same contractor. The specialization that the Army has instituted to increase efficiency may be obstructing effective management of suppliers, and the efficiencies that it provides, especially that requiring development of smaller suppliers to serve broader needs.

Fourth, the separation of acquisition from sustainment also prevents the formation of cross-functional teams and severely limits opportunities for

continuous process improvement. This separation has produced a large number of sole-source sustainment suppliers and limits leverage over them.

Fifth, as noted, LCMC staff may spend much of their time processing contracts and have little time for broader initiatives. Some of this processing focus may be the result of policy requirements, including those for full and open competition and limited terms of contracts that may interrupt the development of supplier relationships and that require LCMC staff to compete, process, and manage multiple contracts. Socioeconomic goals, such as small business preferences, may also lead to a higher number of suppliers and contracts than would be ideal from an SRM standpoint.

Sixth, our interviews indicated that the degree to which AMC and LCMC leaders understood SRM principles varied. Government contract personnel are typically not supply chain managers, and consequently are focused on procurement regulations and policies.

Conclusions and Recommendations

Our research suggests a number of steps for improving Army SRM. First, AMC should develop systematic AMC-wide supplier management policy and guidance. This, in turn, could increase the effectiveness of managing suppliers that provide products and services across multiple LCMCs and multiple weapon systems. Many long-term suppliers have their own effective SRM programs that AMC may wish to leverage in creating and measuring the performance of new programs.

Second, AMC should centralize the storage and analysis of information on suppliers in order to better manage them. Integrating data systems would also enable more detailed measures of supplier performance and allow AMC to better share information. Such information sharing would need to be frequent and detailed and include information on overall Army- and supplier-specific forecasts as well as supplier performance. This would create a more complete picture of supplier relationships than is currently available. Ideally, integrated data would eventually extend across DoD.

Third, AMC should link acquisition and sustainment contracting. This could increase competition for sustainment items and help reduce costs and improve performance.

Fourth, AMC should leverage integrated data to conduct Army- and DoD-wide analyses. This could help the Army rationalize its supply base and identify suppliers on which it should focus its SRM efforts (e.g., those receiving more dollars or those with more problems).

Fifth, AMC should develop and adopt new measures of supplier performance. Supplier performance data are limited in accessibility and scope. Consistent measures of quality, delivery time, and cost are needed to compare suppliers' performance over time and with each other. While focusing on past performance can identify some issues that need to be addressed for improving future performance, it is not likely to include all indicators of innovation and financial health.

Finally, these data should be collated in a single brief summary, such as a supplier scorecard, that allows AMC to systematically manage its supply base. Clear and consistent scorecard data would enable efficient management of overall supplier performance and of individual contracts, identify areas for improvement, and allow ranking of suppliers for supply-base rationalization as well as for recognition or improvement efforts.