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DOCUMENTED BRIEFING

A Gap Analysis of Life Cycle Management Commands and Best Purchasing and Supply Management Organizations

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Summary

In recent years, the Army has faced several budgeting challenges. These have been posed by the need to transform how it fights, to continue operations in Iraq and Afghanistan while maintaining readiness for other contingencies, to regenerate and modernize its force, and to improve how it does business and integrates with others (e.g., coalition partners, other services, and suppliers).

Efforts to address any budgeting challenges must focus on the Army's purchases of weapons, goods, and services, which comprised 58 percent of the budget in fiscal year 2006. How the Army procures supplies and manages its external suppliers of goods and services is critical to improving support to the soldier and lowering total costs.

Innovative commercial enterprises are increasingly focused on managing their suppliers, supply base, and supply chains through emerging best purchasing and supply management (PSM) practices. These practices include rigorously analyzing spending, markets, and the supply base to develop enterprise-wide supply strategies linked to strategic goals for every major spending category. The resulting tailored supply strategies often lead to consolidating requirements and multiple contracts and partnerships with selected providers for improved quality and delivery as well as lower total costs.

Many best practices are applicable to the Army's mission and structure. Indeed, the Army has already taken steps to implement several such practices. This includes the writing of longer-term contracts, sharing demand forecasts with selected suppliers, and development of cross-functional supply teams. At the same time, current administrative processes and results, including long lead times that lead in turn to high inventory requirements, show that further improvements are possible.

To help it improve its implementation of best purchasing and supply management practices, the Army asked RAND Arroyo Center to compare the

implementation of these practices by the Army Materiel Command (AMC) to those of leading commercial enterprises. We then identify areas where AMC can expand its implementation of best purchasing and supply management practices.

To do this, we first reviewed and synthesized the academic and business literature on best purchasing and supply management practices, compiling a list of key characteristics, activities, and practices for each step in the evolution toward best practices. We then categorized what we found into four somewhat overlapping organizational dimensions: functional attributes, activities, practices, and time allocation. We placed each into one of five stages ranging from reactive tactical buying to world-class purchasing and supply management practices. Second, we analyzed Army contracting data on the number of contracts, suppliers, and contract length. Third, we interviewed selected leaders and personnel at each of the Army's Life Cycle Management Commands (LCMCs)—those for Aviation and Missiles (AMCOM), Communications-Electronics (CECOM), and Tank-automotive and Armaments (TACOM)—to gauge the implementation of best practices, judging these on a five-point scale. From this, we identified areas where AMC could improve its implementation of best practices.

Findings

Since the terrorist attacks of September 11, 2001 against the United States, and the subsequent Army actions in Afghanistan and Iraq, the number of contracts, dollars, and suppliers for the LCMCs has increased. Most contracts are still short-term (i.e., less than two years) and for relatively low values, with the LCMCs spending most of their time and resources on a small portion of their expenditures. Dollars per contract and supplier and contracts per supplier are approximately where they were in 2001 and previous years. Contracts per supplier are approximately the same across all LCMCs.

The average number of National Item Identification Numbers (NIINs) per contract is also relatively low, indicating that there may be opportunities to

increase the number of NIINs per contract and realize some contracting efficiencies as well as enable improved supplier management. These opportunities will vary; the average number of NIINs per contract and supplier, for example, is higher in CECOM than in the other two LCMCs.

In our interviews, we found that all three LCMCs are using some cross-functional teams to develop acquisition plans. Not all these teams are permanent; some come together only for specific procurements. These teams are organized primarily by weapon system, which limits opportunities for sourcing improvements across systems. The plans are seldom based on rigorous analyses of spend, suppliers, supply market, risks, or total costs, and instead are constrained in their scope by the time or resources personnel have to perform these analyses. Much of this time, of course, is constrained by the need to quickly establish a contract to meet a customer's required delivery date. The LCMCs are moving to longer-term contracts, but as our data showed, most contracts remain short-term ones.

LCMC leaders are placing a greater emphasis on education of their personnel, requiring degrees for new hires. A number of experienced personnel are also pursuing advanced degrees while they work. Leaders are also placing a greater emphasis on training. New hires are given extensive training during their first two years, and forty hours of annual training is required for all contracting personnel. Nevertheless, more experienced personnel have trouble finding the time or travel resources for their training or to provide mentoring to new hires.

The LCMCs have started to share requirements forecasts with key suppliers, although efforts to date have been limited to a few suppliers. In some cases, only repair-depot requirements, and not field-level demands, are shared. The LCMCs also provide monthly, and not "real-time," data to their suppliers. The LCMCs have or are planning to acquire a Logistics Modernization Program, but they have encountered challenges using this software.

The LCMCs also lack a comprehensive set of supplier performance metrics, including ones for delivery and quality, which are critical to good

supplier management. One LCMC does invite its top suppliers to a biannual meeting with the commanding general, focusing on supply chain issues and what suppliers and the LCMC can do to improve. LCMC personnel also report attending industry days such as those hosted by the Defense Logistics Agency.

Conclusions and Recommendations

Leading enterprises report reducing their total costs and improving supplier performance, including development, quality, and delivery of products, by implementing best purchasing and supply management practices. These include reorganizing and upgrading purchasing and supply management organizations and investing in personnel and technology. Because many best purchasing and supply management practices are synergistic, the greatest benefits are obtained when these practices are implemented enterprise-wide.

The Army and, especially, AMC could see many improvements through implementation of best purchasing and supply management practices. In particular, implementation of such practices is likely to reduce total weapon system and sustainment costs and to improve delivery and quality.

Overall, the LCMCs and AMC are making progress toward implementation of best purchasing and supply management practices. They have adopted most leading practices to some degree, but their implementation is not widespread. Some practices, such as sharing forecasts and meeting with suppliers, need to be implemented more broadly.

AMC has made good progress on personnel training and education as well as on moving to longer-term contracts. It lags in such areas as rigorous analysis of spend, markets, risks, and total costs associated with supply resource management. AMC and the LCMCs need to develop their own capabilities to analyze spend from the perspective of the LCMCs, the Army, and the Department of Defense as a whole.

AMC also needs to improve its supplier analyses and ensure that resources are available to properly measure and manage supplier performance and assess supply markets. Such efforts would benefit from the development of supplier

teams. If Army spending with a specific supplier is only at one LCMC, then that LCMC should lead the team, otherwise, team leadership should be with the LCMC with the most spend with the supplier or with AMC headquarters. Such teams should examine contract consolidation possibilities, particularly on sole-source contracts, development of supplier scorecards to assess performance, and possibilities for joint collaboration, planning, and forecasting.

Similarly, AMC should develop councils for its key category groups. These teams would aggregate competitive requirements across weapon systems, rationalize suppliers, and standardize categories wherever possible. Many suppliers and products are used across weapon systems, dictating the need for supplier or category teams that span weapon systems rather than the present purchasing focus by weapon systems.