DoD Should Maintain Both Organic and Contract Sources for Depot-Level Logistics Services

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The continuing need to downsize the Department of Defense (DoD) and the defense industrial base that supports it provides an opportunity to reassess how DoD should obtain logistics services. Currently, DoD relies on both contract and organic organizations to provide logistics services. Some have argued that DoD should perform more of these services in-house to make better use of existing government assets and to ensure access to support in wartime. Others have argued that DoD should contract out more of this workload to support the commercial defense industrial base as DoD spending drops.

This Issue Paper raises points that DoD should consider in deciding where to obtain the logistics services needed to support the force—whether to "make" in-house or "buy" from contractors. Although our discussion tends to focus on depot-level maintenance, our arguments apply to the full range of depot-level support activities.

Make-or-buy decisions should depend primarily on the effectiveness and costs of organic and contractual options. Any particular decision should reflect the specifics of the case in point. Keeping in mind the diversity of logistics support activities and hence the importance of case-by-case assessment, we can make four broad points relevant to make-or-buy decisions:

- DoD could significantly improve the performance of contractors by using new criteria to choose and reward them.
- Effective, continuing competition among potential sources should simplify efforts to contract for logistics services.
- Federal policy governing source selection and contract content and management should be changed to allow greater reliance on contractors.
- Even with such changes, a fundamental review of DoD's contract-organic split is likely to find support for continuing a significant organic logistics capability.

Each of these points is discussed in detail below.
Using More Effective Criteria Should Improve Contractor Performance

Current business practices in the private sector suggest that five criteria should be important to DoD logistics activities:

- Responsiveness—the ability to surge or respond to new workload requirements.
- Cost—the monetary price or demands on internal resources.
- Cycle time—the time from request to delivery of service.
- Quality—the likelihood that the logistian will properly handle the problem that has precipitated a demand on the logistics system.
- Continuous improvement—better performance over time against the four criteria above.

With the possible exception of the last criterion, none of these is controversial in DoD. In fact, DoD managers typically discuss the logistics system in terms of the first four. The fifth is a relatively new idea associated with the private-sector movement toward improved quality. It reflects the fact that improvements over time can be far more important to an organization's long-run success than its ability to satisfy the first four criteria. The movement toward improved quality challenges buyers to motivate a source to improve and to predict its ability and willingness to improve. On its face, this challenge is no different for DoD than for private firms.

But the contracting environment in DoD differs profoundly from that in the private sector. Where private firms tend to emphasize responsiveness, cycle time, quality, and, increasingly, ability to improve, DoD and the rest of the federal government emphasize cost, especially in competitions for commercial-industrial activities such as logistics operations. And DoD often defines cost in an artificially narrow way that does not reflect the full resource effects on DoD. Formal policy does not explicitly require this emphasis but often contributes to it in unforeseen ways. Further, cost is the easiest criterion to measure and hence easier to compare across alternative sources. Professional ethics among contracting officers also give it disproportionate importance in their management of source selections and continuing contracts. Until DoD can find concrete ways to give noncost criteria the emphasis they receive in private-sector contracting, it will have difficulty finding contractors that it can rely on with the same confidence it has in its own inhouse activities.

Over the long run, DoD should seek ways to give greater emphasis to continuous improvement, internally and in its contractual relationships. A continuing relationship with a private firm can motivate continuous improvement within that firm; to motivate improvement in their own external sources, private firms rely on long-term relationships with them. Over a period of time, a buyer and seller can mutually benefit from learning about one another's needs and capabilities, thereby promoting improvement. Conversely, long-term relationships are more likely to succeed and persist where improvement continues. Although DoD could benefit from imitating private-sector practices, it will have difficulty doing so, as we discuss below.

Using Effective, Continuing Competition Should Improve Contracting

Competition improves a buyer's leverage. This lesson is well understood in DoD and the private sector. A classic example is the Great Engine War, in which the Air Force funded General Electric and Pratt and Whitney to develop alternative engines for the F-15 and F-16 and split its annual purchases of engines between them, depending on the relative terms that each offered each year. Air Force officials close to the competition noted not only continuing improvement in the prices of both engines but remarkable responsiveness by both contractors in many dimensions. They found far less responsiveness in these engine companies' other (noncompetitive) contracts with the Air Force or in Air Force relationships with other contractors. Such responsiveness occurred because competition continued through the production stage of the procurement into the development and production of the follow-on engines.

Competition is not without cost. DoD must make initial investments in each competitor that participates—in the case above, investments in developing new engines—and must maintain duplicate assets at each facility. These costs can easily overwhelm any benefits from improved responsiveness, price, and so on. But we should not overemphasize the importance of duplicate assets. Effective, continuing competition has the potential to promote enough continuous improvement in all sources to justify duplicate assets, even if the benefits are not apparent in the early years of the competition.

The costs of maintaining additional competitors point to the desirability of some form of managed competition of a small number of sources, perhaps only two. Private firms today work harder with fewer

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alternative sources to get the advantages of both multiple sources and long-term relationships with each source. Such an approach contradicts the federal government’s current commitment to free and open competition but may be necessary for the government to get the benefits of continuing competition for logistics activities.

One attractive way to maintain such competition in the support of a major DoD system is to use the original equipment manufacturer of the item as one source and an organic DoD source as the other. The original equipment manufacturer is typically the only contractor qualified to support technically sophisticated systems such as avionics and engines; an organic source would provide an alternative and training for DoD personnel who can later oversee the contractor-provided support.

Although DoD often splits its logistics workload for a particular item between the original equipment manufacturer and an organic capability, it rarely requires them to compete directly against one another. Rather, it loads the organic source as heavily as possible and relies on the contract source for excess capacity; a similar practice is common in the private sector.

More active competition could occur if DoD ensured a level playing field. This would require three changes in DoD practices. First, DoD would need to find a way to compare the two sources on a common basis in terms of cost, performance, and so on. Fundamental differences in DoD and private-sector accounting and incentive systems make this a serious challenge. Giving one source a fairly level workload and using the other for excess capacity also seriously complicate comparison. Second, DoD would need to commit itself not to favor one side or the other as circumstances change; that is, it could neither ensure full use of organic capacity nor provide full support to the commercial defense industrial base. Third, DoD would need to separate its source selection and contract oversight functions from its provision of organic logistics services.

Changes in Federal Policy Should Make Contracting More Effective

The formal policies governing contracting are expressed primarily in the Federal Acquisition Regulations (FARs), but additional service-specific policies and unformalized beliefs in the contracting community are also important. The discussion above has already identified a number of ways in which existing policies complicate DoD’s make-or-buy decision. These and other difficulties associated with procurement policy include the following:²

- Current federal policy emphasizes cost over other factors in competitions for logistics support, whereas private firms increasingly emphasize factors other than cost.
- Federal policy promotes free and open competition, whereas private firms find that more restrictive competition, coordinated with policies that promote long-term relationships with suppliers, leads to higher performance.
- Federal policy limits flexibility in the negotiation of a work scope during the opening stages of a competition in ways that private firms avoid; this allows an organic source to be more responsive to a DoD buyer than a contract source, chosen via competition, can be.
- Federal policy discourages the use of information on potential sources’ past performance; private firms routinely use such information to choose among sources.
- Federal policy on cost accounting for organic activities and contractors complicates the maintenance of a level playing field between the two.
- By constraining the interactions between federal officials and the contractors they oversee, federal contracting officials effectively reduce the responsiveness of contractors relative to an organic logistics activity.

In general, federal policy limits a DoD agency’s flexibility in dealing with contract sources. As new business practices in the private sector find ways to expand and benefit from flexibility in relationships between buyers and sellers, current federal policy looks more archaic and costly.

Unfortunately, federal efforts to limit flexibility have not been imposed arbitrarily. They represent the cumulative response to a long history of efforts, by government employees and private contractors, to abuse the federal procurement process. Because recent procurement scandals are fresh in our minds, revisions in federal procurement policy and cost accounting will not be easy. But we should be aware of the unintended costs they impose. One important cost is that they limit DoD’s ability to get the services it might want from private-sector sources and hence forces continuing reliance on organic sources, even when better options are available.

DoD Should Retain Some Inhouse Capability

As noted above, make-or-buy decisions should depend on how organic and contractual options compare in specific cases. Case-by-case assessments in

²Kelman, op. cit.
the private sector reveal empirical patterns that may help inform DoD's approach to the make-or-buy decision.

For example, private firms tend to retain activities inhouse for any of five reasons:

- When an uncertain environment and complex technology require close control and coordination of a logistics activity.\(^3\)
- When few outside firms are available to support a customized technology or process.\(^4\)
- When important elements of the activity are too hard to measure objectively to satisfy contractual standards.\(^5\)
- To train managers to oversee work performed by contractors.\(^6\)
- To provide competition to enhance the services received from both contract and organic sources.\(^7\)

These reasons for retaining inhouse capabilities are also important to DoD. DoD relies on a support apparatus that must be ready to operate in one of the most uncertain environments of all—combat. It relies on complex technologies and processes whose effective use requires close coordination. DoD often relies on state-of-the-art technologies and methods to ensure U.S. combat superiority. Often, the only external source that can support a DoD system is the contractor that designed, developed, and manufactured it; without alternatives, DoD can easily find itself at the mercy of such a contractor. And the environment in which DoD operates is so complex and uncertain, especially during wartime, that it is impossible to foresee all the contingencies that might arise and the measures that might be used to judge performance in them. Direct command and control allow quick and decisive response to surprises in a way that contracts, which may have to be renegotiated, cannot manage as easily.

Note that all of these considerations are relevant even if we believe that the private sector is inherently more efficient than government. Such a judgment favors contracting but does not remove the importance of these factors to the choice between contract and organic alternatives.

DoD does not always have a choice between contract and organic alternatives. For example, interim contractor support exists in part to stabilize the maintenance procedures that an organic facility will use; the organic option is simply not feasible until stability occurs. Where a real choice exists, however, these insights from the private sector suggest that a fair assessment of contract and organic alternatives in particular circumstances is likely to encourage the armed services to continue favoring an organic logistics capability in a fairly wide variety of circumstances. Even when contractors perform as well or somewhat better than their organic alternatives, a continuing organic capability can protect DoD from depending on a single source in the private sector or can provide a training ground for the DoD personnel who will oversee contract sources.

**Conclusions**

The principal challenge for DoD today is to find better ways to fairly assess contract and organic alternatives. In part, this requires changes in policy that promote a level playing field when selecting alternatives or splitting workload between contract and organic sources. It also requires changes in policy to make contract sources a more viable alternative to their organic counterparts than they are today. DoD can promote this goal in three ways.

First, it can reorient the emphasis in competitions from relative cost to the relative ability of potential sources to respond to unexpected circumstances, to provide short cycle times and high-quality service, and to improve performance relative to these criteria over time. Private firms have found that these factors are far more important to their long-term success with suppliers than cost is; DoD is likely to find the same thing.

Second, DoD can find better ways to promote and maintain continuing, effective competition among sources for the logistics services on which it relies. Such competition should improve the relative desirability of contract sources by improving DoD's leverage over them when unexpected circumstances arise. It should also promote continuing improvement of both organic and contract services over the longer run.

Third, DoD can reorient federal procurement policy and cost accounting to allow greater flexibility in procurement. Without such flexibility, DoD cannot benefit from increased contracting as private firms have by using innovative contractual arrangements. If DoD policy does not change, the private sector will continue to improve its performance over time and DoD will find it harder to benefit from that improving performance.


\(^{5}\) Ibid.


Even if DoD can do all of these things, choices between contract and organic options will not be easy or obvious. They will vary from one part of the logistics system to another. Specific choices will be most effective if supported by empirical assessment of the options. Once made, these decisions should continue to be assessed over time to ensure that DoD's mix of contract and organic sources respond to changing circumstances. Quick decisions based on simple arguments by advocates of either source could substantially degrade DoD's support capabilities.