

---

# Public/Private Competition

**T**raditionally, logistics managers in the Department of Defense have assigned depot-level workloads either to a public depot or to the private sector.<sup>1</sup> Competitive bidding, when it has occurred, has been primarily among private firms for work assigned to that sector. DoD has had some experience, however, with competition between public and private producers. The public/private competition program originated with the 1985 Defense Appropriations Act, which required the Navy to test the effectiveness of competition for assigning overhauls of its ships.<sup>2</sup> The Congress later extended public/private competitions to naval aviation, the Army, and the Air Force. As of December 31, 1993, the military services had awarded 300 maintenance workloads with a value of approximately \$3 billion using public/private competition.<sup>3</sup>

The primary goal in those competitions has been to get a good price for specific depot-level tasks. Some advocates of public/private competition, however, suggest that DoD could use an expanded program to determine the overall roles of the public and private sectors in maintenance at the depot level.

DoD could simply set up a level playing field for the competitions and then allow the invisible hand of market forces to resolve the difficult issue of roles. Proponents of that approach might argue that it offers fair, efficient outcomes and at the same time frees DoD and the Congress from having to make explicit decisions about how many and what kinds of depot facilities DoD should maintain.

The proposal, however, runs counter to the current trend in DoD policy, which promotes the use of public depots to ensure minimum maintenance capabilities for essential equipment rather than least-cost production. In May 1994, then Deputy Secretary of Defense John Deutch discontinued public/private competition, stating that in the near term, "databases and financial management systems in the military services are not capable of supporting the determination of actual cost for specific workloads." Yet even if DoD's accounting systems were improved, the Congressional Budget Office finds a number of reasons, based on the nature of public and private production, that competition would be unlikely to provide a good solution to the question of appropriate roles.

- 
1. In many instances a service will divide a task (such as the overhaul of a particular airframe or repair of a particular component) into two workloads, assigning one to a DoD depot and the other to the private sector.
  2. Department of Defense Appropriations Act, 1985; 98 Stat. 1907.
  3. Statement of Donna M. Heivilin, Director, Defense Management and NASA Issues, National Security and International Affairs Division, General Accounting Office, before the Subcommittee on Readiness of the House Committee on Armed Services, published as General Accounting Office, *Depot Maintenance: Issues in Allocating Workload Between the Public and Private Sectors*, GAO/NSIAD-94-161 (April 12, 1994), p. 10.

---

## Inherent Difficulties in Public/Private Competition

One fundamental difficulty is that public/private competition can be used to determine public- and private-sector roles only if DoD and the Congress

adopt a hands-off policy that permits shifts in workload in response to competition. Such a policy may be possible only as long as the competitions do not have a significant impact on the level of work at any particular public depot.

Large public depots are important local employers, and the allocation of work to the various depots and to the public and private sectors is a matter of Congressional interest. Thus, as a practical matter, the decision to close or reduce the size of a public depot must be made in a political as well as an economic forum.<sup>4</sup> Unless DoD closes public depots that cannot compete, shifting workloads to the winners of individual competitions may simply reduce the base against which the public depots allocate their fixed overhead and increase the apparent cost of the workloads that remain. DoD estimates that the fixed overhead costs for one of its depots typically range from \$50 million to \$100 million annually.<sup>5</sup>

Another difficulty is that one of the most important advantages of in-house production for government enterprises--avoiding the costs of the contracting process--is lost when the choice between in-house and contract sources involves a formal competition. As noted in the previous chapter, in-house production of goods and services for use by the government is most likely to be cost-effective when contracting proves difficult or costly (because outputs are ill-defined, quality is difficult to specify or monitor, or requirements change frequently). It would be self-defeating to use formal competitions that require clearly written contracts to allocate work in those situations. To identify the appropriate sector for those tasks, DoD may need to conduct explicit analyses that compare the costs and benefits of in-house production with those of the contract process and private production.

Public/private competition might raise costs in the private sector over the long run by encouraging an adversarial rather than cooperative relationship between DoD and its suppliers. In the private sector,

such cooperative, long-term relationships encourage suppliers to invest in specialized capital assets (for example, fixtures that are designed specifically to support F-15 airframes during overhauls) that reduce the cost of production. The desire to protect a long-term relationship can also discourage suppliers from taking advantage of the purchaser in the short term (for example, by demanding large payments for any modification to a contract). Some officials within DoD as well as in industry believe that direct competition between DoD depots and private firms will damage those valuable relationships because of the private firms' fears that DoD will favor its own depots unfairly.<sup>6</sup> Those fears may be accentuated by the differences in the accounting systems and the incentives of public and private producers. Irrespective of whether competitions are fair, the belief of industry officials that they are not could have a negative impact on DoD's long-term relationships with its suppliers.

---

## Using Public/Private Competition Appropriately

The difficulties noted above apply to proposals to use public/private competition as a routine measure to determine the overall roles of the public and private sectors. They do not rule out benefits from public/private competition on specific occasions. For example, competition between the sectors might be useful in specific situations that involved specialized skills or capital and in which the choice was between public/private competition or no competition at all. Such a situation might occur if DoD had the right to operate its own repair facility using technical data provided by the original equipment manufacturer but was unable to purchase the data rights needed to set up dual private sources. In other cases, public/private (and public/public) competition for particular workloads might encourage individual depots to reduce their costs.

---

4. That difficulty also limits the department's ability to close depots in response to public/public competitions.

5. Office of the Under Secretary of Defense for Acquisition and Technology, *Report of the Defense Science Board Task Force on Depot Maintenance Management* (April 1994), p. 17.

---

6. Toyota is one of several Japanese firms that abandoned competition between in-house and contract sources because of the negative effect that competition had on their long-term relationships with suppliers.

## Interpreting the Results of Competitions

Despite the constraints that restrict the ability of public producers to manage resources effectively, public depots have won just under half of the workloads that DoD has allocated through competition and more than half of the dollar value of that work.<sup>7</sup> But how should that evidence be interpreted? Does the fact that each sector wins some competitions mean that the competitions are fair? Is something about depot-level maintenance unique, so that even in a competitive environment, a large role for public production can be justified on the grounds of cost?

### A Level Playing Field

Some observers suggest that a level playing field for public and private bidders is possible provided that public and private bids each consider the same cost elements and both sectors use accounting rules that evaluate costs in the same way. In an effort to level the playing field, DoD distributes its *Cost Comparability Handbook*, which spells out the adjustments that public depots need to make to render their costs comparable with those of private firms. The adjustments that the handbook addresses (such as adding unfunded civilian retirement and subtracting the value of the time that military personnel spend on nondepot duties) typically account for a small percentage of the total amount of bids.

Yet the DoD handbook fails to deal with some of the most important differences between public and private costs. It takes account of depreciation, for example, but does not require public depots to consider the cost of taxes or the cost of having resources tied up over time (that is, a market rate of return on capital). If a level playing field is one on which competition will identify the producer (public or private) that produces with the mix of resources that is least costly to the government as a whole, then public depots should include income taxes and a return on capital in the bids they prepare. DoD logistics managers

do not ordinarily consider those costs, but ultimately the taxpayer must pay for them.<sup>8</sup>

The extent to which omitting taxes and a return on capital leads DoD to understate the cost of maintenance in public depots depends on the current value of DoD's depot facilities. DoD's estimate of the value of its depots was roughly \$32 billion in 1991, a figure apparently based on historical acquisition costs. But that estimate could far exceed the current value of those assets. A more conservative and potentially more realistic estimate is on the order of \$8 billion to \$10 billion. (That estimate is based on DoD's investment pattern from 1986 to 1993 with an allowance for depreciation.)<sup>9</sup> If one uses an economywide nominal pretax rate of return on capital of 10 percent, the resulting calculation suggests that DoD understates the cost of the maintenance performed in public depots by almost \$1 billion annually.<sup>10</sup>

An even more basic problem is that public producers may have a much greater incentive than private producers to bid below their actual costs. If a private firm underbids on a contract and wins it, stockholders and, indirectly, the management of the firm suffer a real loss. A public manager, however, may be more concerned about maintaining levels of production or employment than about covering costs with receipts. Even with the current revolving fund, if a depot's revenues fall below its costs, the solution

8. The Federal Reserve takes those factors into account when it sells banking services in competition with private providers by including a pretax rate of return on capital (equal to 8.6 percent in 1993).

9. From 1986 to 1993, DoD invested approximately \$5 billion (in 1995 dollars) in buildings and equipment for its depots. Investment in depot buildings averaged approximately \$200 million annually, and investment in depot equipment averaged \$350 million. To estimate the current value of DoD's depot assets, the Congressional Budget Office assumed that those figures reflected DoD's historical investment pattern. Annual expenditures of \$200 million per year on buildings, assuming straight-line depreciation over 50 years, would lead to a steady-state building inventory with an estimated value of \$5 billion. Annual expenditures of \$350 million per year on equipment, assuming 20-year straight-line depreciation, yield a steady-state inventory of equipment of \$3.5 billion. Those estimates exclude the value of land and the value of special tooling paid for with procurement dollars.

10. Jane Gravelle, *The Economic Effects of Taxing Capital Income* (Cambridge, Mass.: MIT Press, 1994), pp. 294 and 295. The author estimates that the real pretax rate of return on capital in the United States is approximately 7 percent. If inflation is figured at 3 percent, the nominal pretax return is then 10 percent.

7. Statement of Donna M. Heivilin, April 12, 1994.

will be either additional appropriations to cover the shortfall or a general increase in prices spread over the services' revolving fund as a whole.

Weaknesses in DoD's current accounting methods accentuate the incentive problem. Because DoD cannot identify the total costs of individual workloads, no reliable way exists to determine whether managers' bids are realistic. Even after a depot completes a task, there is no way to know whether it met its cost targets through real economies or simply shifted costs to other workloads. When Navy depots won a competition for maintenance on some of the service's F-14 fighters, not only were costs higher than projected but the accounting system indicated that costs for the F-14s that were part of the competed workload were 21 percent lower than costs for other F-14s--even though the depots performed the maintenance for all of the aircraft in the same repair lines, sharing the same resources.

DoD could certainly overcome the weaknesses in its accounting systems, and it could include an allowance for income taxes and profits in its *Cost Comparability Handbook*. But the differences in the incentives faced by public and private producers probably cannot be overcome without destroying the fundamental differences between the two modes of production. Moreover, the ability of both public and private bidders to win competitions based on cost is not necessarily evidence that the playing field is level. It might indicate instead that the expected advantage of the private sector in cost-effective production is sometimes more than offset by an uneven playing field.

### Advantages of the Public Sector

Although in general the results of public/private competitions are suspect, public depots are currently able to perform some tasks for a lower cost than either the original equipment manufacturer or private firms that specialize in repairs. The Air Force's program for replacing the center wing box on C-141 aircraft is one such example. The accounting firm of Coopers & Lybrand, in reviewing that program, concluded that however misleading the bid estimates may have been, the public depot that won the compe-

tion was, in fact, the least-cost source. That finding raises some legitimate questions about differences in the costs of public and private production. Why and in what situations might public facilities produce at less cost than private ones?

Because experience with a particular maintenance task can result in lower costs, the public sector is likely to have an advantage, at least in the near term, for tasks that in the past have been done only in that sector. Coopers & Lybrand, in explaining why the Air Force depot was the least-cost source for the C-141 wing box replacement, cited the inherent advantage that arose from having responsibility for C-141 maintenance for over 20 years.<sup>11</sup> Similarly, a review by the General Accounting Office of competitions for work other than ship repair found that the private sector won 10 of 15 workloads that had originally been performed in that sector and the public sector won 28 of 41 that had originally been done in that sector.<sup>12</sup>

Public depots may also have an advantage because they are large, integrated facilities that in some cases have the latest and most specialized repair technologies. That notion is consistent with the economics literature, which suggests that in-house producers of a good or service will typically use more highly specialized capital and production processes than do other suppliers. (Those suppliers in many instances try to reduce their risk by using general industrial assets and processes that may be less efficient but have more alternative uses.)<sup>13</sup>

In the case of depot maintenance, DoD's policies appear to accentuate that difference between in-house and other suppliers. For items that are repaired in both sectors, DoD's practice is to fill the public de-

11. Coopers & Lybrand, *Preliminary Case Studies of Public Versus Private Competition* (Washington, D.C.: Coopers & Lybrand, July 1994), p. 1.
12. Letter from Donna M. Heivilin, Director, Defense Management and NASA Issues, National Security and International Affairs Division, General Accounting Office, to Daniel K. Inouye, Chairman, Subcommittee on Defense of the Senate Committee on Appropriations, GAO/NSIAD-93-292R, September 30, 1993, p. 11.
13. Oliver E. Williamson, *The Economic Institutions of Capitalism* (New York: Free Press, 1985), p. 32. Of course, failing to consider the full cost of capital might encourage DoD depots to carry investment beyond the point where it is cost-effective.

pots first and then contract for the overflow work. For many of those workloads, DoD uses contracts for indefinite quantities, including so-called requirements-based contracts, that permit it to vary the quantity of work over a wide range. Such variable workloads might not justify specialized investment regardless of the sector that handles them. Today, relatively few repair firms in the private sector approach the DoD depots in levels of employment and specialized assets. But a private sector characterized by larger firms with better facilities would be likely to emerge if DoD decided to contract for its largest, steadiest maintenance tasks.

Public depots may gain another advantage from their large, steady workloads. In many cases it is cost-effective to carry out modifications and routine depot-level maintenance at the same time. Because the services keep routine maintenance for many systems in the public depots, assigning modifications to the depots as well is sometimes the most cost-effective

approach. That factor suggests that allocating individual workloads to the sector that can handle them for the least cost today will fail to identify the most cost-effective roles for the public and private sectors over the long run. That premise applies whether the current least-cost producer is identified through formal competition or through analysis.

In looking at the long run, the appropriate question may not be whether public depots currently have the most experience and the best facilities (or perhaps the only facilities) for particular kinds of work. It may be better to ask whether private industry or mixed enterprises, working with DoD in a long-term relationship, might be able to develop even less costly production processes for many maintenance tasks and still provide the quality and responsiveness essential to the military. Neither the mechanistic calculations underlying DoD's core policy nor the invisible but uneven hand of public/private competition addresses that difficult question.

