

# Procurement Competition at Work: The Manufacturer's Experience

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This decade has seen an unprecedented amount of legislation in the area of federal defense procurement; legislation that covers a broad spectrum of issues involving the Department of Defense (DOD) weapons acquisition system. In 1988 alone, Congress passed eight laws<sup>1</sup> embodying fifty-four separate provisions<sup>2</sup> affecting the system. The reforms were in response to what is often described as a failed acquisition system.<sup>3</sup>

William Burnett and William Kovacic examine procurement reform in great detail and with considerable insight. They conclude that the "new" emphasis on competition in the acquisition of major weapon systems is the most significant of all the regulatory reforms enacted by Congress in the past decade. They argue that efforts to introduce competition have resulted in the use of dual-sourcing as the preferred acquisition technique and note that the teaming of rival contractors in early design phases permits subsequent competition in follow-on procurements.

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1. Anti-Drug Abuse Act of 1988, Pub. L. No. 100-690, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 4181; Business Opportunity Development Reform Act of 1988, Pub. L. No. 100-656, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 3853; Department of Defense Appropriations Act, 1989, Pub. L. No. 100-463, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 2270; Major Fraud Act of 1988, Pub. L. No. 100-700, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 4631; National Defense Authorization Act, Fiscal Year 1989, Pub. L. No. 100-456, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 1918; Office of Federal Procurement Policy Act Amendments of 1988, Pub. L. No. 100-679, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 4055; Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 1107; Prompt Payment Act Amendments of 1988, Pub. L. No. 100-496, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 245.

2. See B. Manship & A. Chvotkin, *Legislated Procurement Policy Initiatives* (Nov. 1988) (unpublished document available from the National Security Industrial Association).

3. Burnett & Kovacic, *Reform of United States Weapons Acquisition Policy: Competition, Teaming Agreements, and Dual-Sourcing*, 6 YALE J. ON REG. 249 (1989).

This Comment provides an assessment of Burnett and Kovacic's views from the perspective of practitioners. In our view, some reform legislation, regulations, and practices have introduced into the present procurement system needless adversarialism, additional complexities, and greater inefficiencies. Part I of this Comment addresses Burnett and Kovacic's failure to differentiate among the acquisition phases<sup>4</sup> that are the subject of the current emphasis on competition. It also cautions against increased Congressional regulation of the military procurement process. Part II discusses the advantages and disadvantages of competition to manufacturers. Part III warns that policymakers must be wary of overemphasizing the value of price competition. This Comment concludes that policymakers should continue to formulate policy not just by focusing on dollars saved, but on how to achieve our overall national objectives of a strong industrial base to provide for the country's long-term defense needs.

## I. General Comments

### A. *Methodology*

Burnett and Kovacic focus on four programs that they characterize as being typical of those incorporating DOD's new procurement policies.<sup>5</sup> However, these programs are so large that they are not truly representative of the totality of acquisitions affected by the reform efforts.<sup>6</sup> They constitute only a relatively small portion of DOD's total procurement budget.<sup>7</sup> The new DOD

4. DOD Directive 5000.1 prescribes four acquisition phases: (1) concept exploration/definition; (2) concept demonstration/validation; (3) full-scale development and, as appropriate, low-rate initial production; and (4) full-rate production and initial deployment. Thereafter, the Directive requires periodic review of the acquired product. U.S. DEPT OF DEFENSE, DIRECTIVE No. 5000.1, at 3-4 (Sept. 1, 1987) [hereinafter DIRECTIVE No. 5000.1].

5. The four programs are the Advanced Tactical Fighter, the Advanced Tactical Aircraft, the Light Helicopter Experimental, and the V-22 Tilt-rotor Aircraft.

6. We see no methodological problem with this analysis; we make this distinction, however, because regulatory reform, in its totality, involves project procurements that in many ways differ greatly from the new, very large, aerodynamic weapon systems discussed in the article.

7. These four programs constitute less than 7% of the estimated costs, and 4% of the 99 unclassified major programs being reported to Congress under the Selected Acquisition Report (SAR) system. See *Pentagon Summarizes SARs for Dec. 31, 1988*, 149 AEROSPACE DAILY 421, 421-22 (1989) (percentages calculated using DOD tabulation of SARs of major weapon systems).

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procurement regulations and procedures go considerably beyond the category of major weapon systems<sup>8</sup> examined by the authors.

Although the authors correctly assert that the new emphasis on competition is a significant factor in DOD's procedure for acquiring major weapon systems,<sup>9</sup> they do not clearly explain at what stage of the process this change in emphasis is taking place. Competition in the pre-full-scale development (FSD) phase of the acquisitions process clearly existed prior to the recent reform movement. In fact, its use in the early stages of project development is no more pervasive today than it was in the 1960s and 1970s.<sup>10</sup>

The significant change in the new procurement regulations concerns competition during the production phase. Burnett and Kovacic correctly identify competitive teaming, dual-sourcing, and source breakout as procedures employed in the later stages of the acquisition process to attain increased competition for major weapon systems. As the authors explain, in many instances, neither Congress nor DOD has properly evaluated the risks of teaming and dual-sourcing. Weaknesses in the institutional processes that develop and apply competition strategy are likely to result in failure to consider alternative approaches for accomplishing competition-related objectives. Such failures can be costly. New policies and procedures associated with all large-systems contracts, not just major weapon systems, must be evaluated regularly.

### B. *Congressional Oversight*

Burnett and Kovacic conclude that substantial, continuing government intervention and Congressional oversight is necessary for successful implementation of acquisition reform.<sup>11</sup> No one would argue that DOD's expenditure of federal funds should not

8. The generally accepted definition of a major weapon system is one that is estimated to exceed \$200 million in costs for research, development, tests, and evaluation, or \$1 billion in production costs. See DIRECTIVE No. 5000.1, *supra* note 4, at 4.

9. See Burnett & Kovacic, *supra* note 3, at 252-54, 260-61.

10. Alternative competitive approaches for conceptual designs of new systems, along with competitive demonstration and validation of the winning concepts, were employed in the McNamara era of the 1960s. Subsequently, in the 1970s, David Packard, who was serving as Deputy Secretary of Defense, further developed procedures that require competition. For a compilation of the criteria to be considered in developing appropriate strategies in the current acquisition process, see DIRECTIVE 5000.1, *supra* note 4, at 5-6.

11. See Burnett & Kovacic, *supra* note 3, at 304-05, 307-10.

be subject to Congressional oversight. However, one of the most significant problems with the weapons acquisition process is that no specific person or body is given sole responsibility; individual accountability is almost always lacking.<sup>12</sup> Congress traditionally oversees the implementation of the law through hearings, reports, GAO studies, and staff investigations. Yet, in light of allegations of mismanagement in the acquisition process, and a growing impatience with the slow pace of self-initiated reform by acquisition managers, Congress has assumed a hands-on approach in this area of regulatory reform. It has manifested a preference not only for prescribing the objectives sought, but also for enumerating in detail the processes and procedures whereby these objectives are to be accomplished.<sup>13</sup>

By adopting this regulatory approach, Congress may have inadvertently immersed itself in the procurement process to a disproportionate degree, focusing more on practices and procedures than on the broader policy goal of satisfying the country's national defense requirements. Procurement by prescription inevitably circumscribes the exercise of essential managerial judgment and limits the ability of the professional work force to tailor acquisition strategies to meet the multifaceted needs of individual projects. Congress's propensity to measure "improvement" in quantitative terms, such as the percentage of procurement dollars subject to competition, has resulted in a procurement strategy that overemphasizes the attainment of goals and milestones instead of qualitatively assessing whether reform measures improve national defense capabilities in a cost-effective manner. While Congressional oversight of the acquisition process and its management is both desirable and essential, this regulation should not supplant the responsibility of the procurement work force to exercise discretion in making daily decisions on a case-by-case basis.<sup>14</sup>

12. The participants who share in responsibility for the acquisition process include many committees of the Congress; competition, streamlining, and small business advocates; staff elements; and other special interest groups.

13. One of the first expressions of Congress's hands-on approach is the Competition in Contracting Act of 1984, Pub. L. No. 98-369, 1984 U.S. CODE CONG & ADMIN. NEWS (98 Stat.) 1175 (codified as amended in scattered sections of 10, 31 & 41 U.S.C.). Every year since 1984, similar legislation has been passed that collectively resulted in sweeping procurement reform. *See supra* note 1.

14. Procurement reform is ultimately dependent on the quality and judgment of the procurement work force. As Burnett and Kovacic point out, Congress and DOD should commit themselves to "raising the capability of DOD's acquisition personnel." *See* Burnett

## II. Competition, Dual-Sourcing, and Teaming

As Burnett and Kovacic indicate, competition through dual-sourcing and teaming has advantages that improve the defense acquisition process in a number of ways. But competition also has important disadvantages. This Part first discusses some of competition's advantages, and then explains several disadvantages that are often overlooked when assessing the net benefits of a competitive acquisition process.

### A. *Advantages of Competition*

Burnett and Kovacic provide an excellent discussion of the advantages of competition for the government. For example, competitive bidding on contracts can save an average of twenty-five percent of the initial purchase price of many items.<sup>15</sup> In addition to paying lower prices, the government frequently realizes other important returns from competition in the acquisition process. These include broadening the industrial base, increasing manufacturing efficiencies through the sharing of managerial and technical expertise, resolving scheduling and technical problems, enlarging market shares for efficient producers, and restoring public confidence in the acquisition process. It is important to recognize that, to a significant degree, advantages accruing to the government from a competitive process also benefit suppliers and contractors.

#### 1. *Broadening of the Industrial Base*

The transfer of technical knowledge and expertise among companies participating in dual-sourcing, in leader-follower arrangements, or in joint development ventures facilitates the growth of new capabilities and new sources of supply. This contributes to a wider industrial base available to meet future

& Kovacic, *supra* note 3, at 306.

15. Martin Marietta now expects similar savings through competitive bidding of its subcontracted components. However, these savings are not life cycle savings. The savings associated with production unit prices comprise only one aspect of a multidimensional cost model. For example, cost models should include added costs for in-service supply and maintenance of units manufactured by more than one manufacturer, increased investments for production tooling, and added costs caused by delayed procurement associated with the qualification of second sources. These and other factors that add costs are discussed in Part II.B.

government needs.<sup>16</sup> For example, the existence of multiple producers enhances the military's surge capability, thereby making possible a rapid increase in the rate of production of essential supplies and materiel in the event of a national emergency or mobilization. Furthermore, multiple-sourcing increases the country's security by making the interdiction of delivery of essential goods and services more difficult in times of war. During peacetime, there exists a similar benefit to having more than one current supplier in place, given the potential for strikes, acts of God, or other incidents that can disrupt the production of essential spare parts or other supplies necessary for operational readiness.

## *2. Efficiencies Through Shared Managerial and Technical Expertise*

Dual-sourcing and teaming provide an opportunity for defense contractors to share managerial and technical expertise. This increases the economies and efficiencies of most business operations, and it can improve significantly both the technical excellence and operational suitability of manufactured systems. For example, two of Martin Marietta's most prominent dual-sourced programs are the Army Hellfire missile<sup>17</sup> and the Navy Vertical Launching System.<sup>18</sup> In the case of the Hellfire missile, Martin Marietta and Rockwell International each initially designed and manufactured a subassembly. Upon the Army's initiative, each firm cross-trained the other to manufacture its subassembly so that both companies could manufacture the entire missile. Since then, the two firms have competed against each other on a yearly basis for the larger share of the succeeding year's production.<sup>19</sup> The history of the Vertical Launching System is similar to that of the Hellfire Missile. The Navy paid Martin Marietta to transfer

16. Recent data indeed suggest that the country's military supplier base is decreasing. According to the Pentagon, the number of companies providing products to DOD has shrunk from 118,000 firms in 1982 to fewer than 40,000 in 1987. See Blackwell & Gaffney, *Save the Military-Industrial Complex*, Chi. Tribune, Mar. 22, 1989, § 1, at 13, col. 2.

17. This antitank missile system is launched by helicopter.

18. The VLS is a shipboard weapon system that houses and launches air defense, antisubmarine, and surface-to-surface missiles.

19. The results presumably have pleased the Army. The nation now has two exceptionally well-qualified sources, and the reliability and quality of missile rounds are superb. All 111 Martin Marietta production lot missiles that were fired and scored have performed successfully. See MARTIN MARIETTA CORP., 1988 ANNUAL REPORT 12 (1989) [hereinafter 1988 ANNUAL REPORT].

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design and manufacturing plans to the FMC Corporation to establish a production phase competitor.<sup>20</sup> Both companies now produce the launching system. In addition, the Navy has "broken out" one major subassembly for manufacture by a third party.

### *3. Resolution of Technical and Scheduling Problems*

By providing an incentive to solve problems as they arise, competition helps increase efficiency by inducing solutions to technical and scheduling problems in existing programs. In the absence of competition, sole-source suppliers may curtail service.

### *4. Increased Market Share for Efficient Firms*

Competition can increase a firm's revenue by providing it with market shares in a product it may not have had if the system were sole-sourced. For example, Martin Marietta currently is involved in three programs that are being modified from sole-source procurements, in which Martin Marietta was not involved, to dual-source arrangements.<sup>21</sup> Martin Marietta teamed with the initial design firms in the development or manufacture of equipment as a prelude to competition for future production runs. If these competitions are won, Martin Marietta will receive shares of the respective markets for these three items that it would not have had under the sole-source arrangement.

### *5. Restoration of Public Confidence*

The use of competition can help restore public confidence in the procurement process since many people prefer competition to sole-source contracts. Therefore, a procurement strategy that employs competition in all possible situations is seen by the media, the public, and Congress as superior to one that uses competition less frequently. Although this perceived superiority is questioned in some situations, competition has value both to government agencies and to industry suppliers that use public funds.

20. This product was designed and developed by Martin Marietta after a competitive selection process.

21. The three dual-source programs in which Martin Marietta is involved are the MK-50 Torpedo with Honeywell; the Consolidated Automatic Support System with General Electric; and the Advanced Anti-Tank Weapon System—Medium with Texas Instruments.

## B. *Disadvantages of Competition*

Despite the advantages of competition, experience has revealed some of the paradoxes that result from competitive strategies. Although competition fosters near-term economies of scale and efficiencies, it can also have detrimental effects that ultimately add costs that normally are not considered when assessing savings realized from a competitive procurement.<sup>22</sup> These include destroying supplier relationships, disrupting the development of new systems, deterring investments in plant and equipment, producing at uneconomical rates, diminishing design-agent responsibility, preventing economies of scale, and lowering rates of return to unacceptable levels.

### 1. *Destruction of Supplier Relationships*

Competition has the potential to destroy supplier relationships. Supplier loyalties stemming from good relationships provide inestimable benefits to all buyers of goods and services. Dr. W. Edwards Deming, a quality control expert and management consultant, recommends that to build efficiency, the Pentagon should "settle on one supplier and build long-term relationships."<sup>23</sup> He specifically scorns many of the features of competitive bidding in favor of cooperative working relationships. Unfortunately, relationships between the federal government and its prime contractor suppliers are more strained today than ever before. Although competition is not the sole reason for this problem, its extensive use is one of the contributing factors.

We have found that suppliers with whom we have established good working relationships often have performed far beyond

22. Assistant Secretary of the Navy, Everett Pyatt's excellent critique of Burnett and Kovacic's article presents a strong case for weapon systems competition. See Pyatt, *Procurement Competition at Work: The Navy's Experience*, YALE J. ON REG. 319 (1989). The savings demonstrated by the Navy's increased efforts to obtain competition are impressive. However, there are many hidden costs that do not show up in reduced purchase prices for weapon systems as shown in some of the Navy's examples. This does not mean that the Navy programs he discusses should not have been competed. Rather, we believe there are costs to competition that are not now adequately revealed, assessed, or weighed in the current defense acquisition system.

23. Speech by Dr. W. Edwards Deming to Pentagon Officials (May 24, 1988) (unpublished speech on file with authors).

expectations.<sup>24</sup> Frequent competitions and low bidder awards greatly disrupt these relationships, and hence, in the long run, may not truly be cost effective. A dramatic case, illustrating a similar type of relationship, occurred in 1982 when a bank with which Martin Marietta had a long association stood by the company during an attempted hostile takeover.<sup>25</sup> If the bank had not supported the corporation, it is likely that ownership would have changed, and the effectiveness and vitality of the firm would have diminished.

### *2. Disruptions in the Timely and Efficient Development and Production of New Systems*

In order to achieve effective competition, the government must first articulate its requirements in a manner that communicates to all prospective offerors what is required under the contract. The compilation of an effective and comprehensive solicitation package for a weapon system is a time-consuming, expensive, and labor-intensive process. The same may be said of the proposal evaluation and source selection conducted both by the prospective contractors and by the government. Protracted procurement lead time inevitably adds to the costs incurred by the competing offerors, which in turn increases the price of the contracted-for items. To the extent that this time-intensive effort delays the transition from development to production for the incumbent contractor, there may well be added risks and costs for the military branch that needs the item. As in any business undertaking, committing finite resources to such ongoing efforts can result in lost opportunities and a lower commitment of resources to other potential contracts.

24. Martin Marietta specializes in "system integration" work involving skillful blending of technical and managerial skills of large numbers of suppliers. The best teams are formed by careful selection—not by full and open competition. We have found that with most team members, strong subcontract management relationships and cooperative efforts in resolving technical problems and lowering prices are often more effective than open competition designed to do the same thing.

25. For a discussion of the role that banks played in Martin Marietta's hostile takeover defense, see generally A. SLOAN, *THREE PLUS ONE EQUALS BILLIONS: THE BENDIX-MARTIN MARIETTA WAR* 150, 170-81 (1983).

### *3. Deterrence of Investments in Plant and Equipment*

A prospective contractor not only must be responsive to a solicitation, but also must have the resources and capabilities to perform immediately. Because of the lead time necessary to acquire personnel, tools, plant, equipment, and resources to meet prescribed delivery schedules, a contractor must commit resources in advance of the contract award, often at the expense of alternative uses. In the present climate of budgetary and fiscal uncertainty, there is reduced confidence both that the program will be awarded and that, even if it is awarded, the planned quantities will be procured and not delayed or partially terminated. The cumulative effect of this uncertainty is the additional risk borne by prospective contractors that such costs will not be recouped, through no fault of the contractor. In a competitive market, these costs are not borne exclusively by the successful competitor, but by all offerors and ultimately the federal government.

### *4. Production at Uneconomical Rates*

Because of the high cost of sophisticated military hardware and the constraints on DOD's budget, the total quantities planned for procurement often do not represent the optimal number in terms of minimizing acquisition costs. Similarly, weapon systems often are not procured at rates that permit the exploitation of available economies of scale. This inefficiency is exacerbated when the estimated quantity to be produced is divided between two concurrent production lines, at least one of which often must be maintained at a minimally efficient production rate. Neither producer may be able to produce at an optimal rate at any given point in time. Even the potential for competition may discourage incumbent contractors from making further investments in labor and cost saving capital items for fear that such resources may become excess or idle; should there be less or no follow-on business due to competition, the allocation of these costs to future contracts is prohibited.<sup>26</sup>

26. See 48 C.F.R. § 31.205-23 (1987).

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### 5. *Diminished Design-Agent Responsibility*

On the basis of past experience, it is safe to generalize that the last item produced rarely replicates in its entirety the first item produced.<sup>27</sup> This phenomenon is due in large part to constantly evolving technology, knowledge gained from the use of delivered items, changes in design to decrease manufacturing cost and to improve reliability and maintainability, and the shifting perception of potential military threats. The evolutionary development of a weapon is not easily accomplished if the developer responsible for its design is no longer involved in its production. There is no assurance that the development contractor will be awarded a subsequent contract for production. Dual-source competition is predicated on two primary considerations: price and ability to manufacture. Little or no weight is assigned to the potential capability of the successor contractor to redesign, enhance, or modify the product being produced to meet new and more stringent requirements. Frequently, the presence or retention of such resources makes the design agent relatively less price competitive than successive offerors who are required to have only those capabilities essential to build-to-print.

### 6. *Unachievable Economies of Scale for Vendor/Subcontracted Items*

As shown by the problems that plague the acquisition of spare and replenishment parts, the nonrecurring costs of tooling, plant rearrangement, and production set-up constitute a significant portion of any subcontracted item's price. The inability to acquire

27. The Titan family of space launch vehicles is an example of excellent product growth that is possible when one design agent can remain fully committed to a program. The Titan program started in the mid-1950s with the Titan I Intercontinental Ballistic Missile. Now, 30 years after the first launch, a much larger and more capable Titan IV is being produced to meet the nation's requirements for a heavy, expendable launch vehicle during the 1990s. The Titan IV, the 14th model, is the latest in a progression of models with a greatly expanded capability flowing from the initial basic design. Also, the Titan space launch vehicles have had an enviable 96% operational success rate over their 23 year history. See 1988 ANNUAL REPORT, *supra* note 19, at 4. We believe that the original source can handle both product growth and reliability better than second or alternate sources.

Of course, the Titan program is not unique. All three of the military branches have major programs that have been retained in the past by original sources with beneficial results. We are concerned, however, that in the new drive to develop second sources and gain competition, acquisition strategy planners will overlook this very important aspect of product growth flowing from initial design and manufacturing teams.

vendor and subcontracted items, particularly when such acquisitions are for items unique to the weapon system in question, adds to their procurement costs. There is uncertainty and program instability even for weapon systems for which competition is either no longer feasible or planned due to potential program stretch-outs or cancellation. When coupled with the uncertainty of the remaining quantities to be produced, prime contractors are understandably reluctant to order subcontracted items beyond those required to perform under the instant contract. The government often will not cover expenses associated with acquiring items in advance or in excess of immediate needs; these near-term expenses must be financed by the contractor.<sup>28</sup>

### 7. *Low Rates of Return*

Martin Marietta's Hellfire missile project is a good example of the way competition can result in perilously low levels of return for defense contractors.<sup>29</sup> Internal rates of return for this program are insufficient by most private sector business standards.<sup>30</sup> From a prudent business perspective, it is difficult to justify producing the missile either on the basis of profit on investment or profit as a percentage of either costs or selling price.<sup>31</sup>

28. Interest cost is not an expense that may be allocated against government contracts. See 48 C.F.R. § 31.205-20 (1987).

29. On the Hellfire project, we cannot speak for our competitor, but it is reasonable to believe that they are experiencing similarly low returns. The potential problem generally faced by the industry as a whole is indicated by one analyst who "forecasts a 25% drop in earnings for the aerospace group by 1991 based on current spending trends and the assumption that most of these cash-squeezing policies will persist." Wall St. J., Apr. 14, 1988, at 14, col. 3. Don Fuqua, President of the Aerospace Industries Association, discussed these low rates of return in a recent address to the Association. He noted that "so-called procurement reforms threaten [the aerospace] industry with substantially increased risk and sharply reduced profits." Address by Don Fuqua, Aerospace Industries Association Year-end Review and Forecast Luncheon (Dec. 13, 1988), reprinted in 2 KEY SPEECHES 1, 4 (1989). He stated that the rate of return on defense business had been reduced on some projects to less than half of what analysts consider acceptable. *Id.*

30. Pretax return on sales for Martin Marietta's Electronics and Missiles segment averaged 9.69% during the years 1986-88. 1988 ANNUAL REPORT, *supra* note 19, at 36-37. Current return on the Hellfire project is approximately one-fourth of this average.

31. In the long run, no firm regardless of size can operate under free market conditions for capital formation and at the same time sell its products in a monopsonistic market at prices that do not result in competitive rates of return. One or two programs typically can be carried in this manner as long as the average return for a firm meets essential "hurdle" rates, but there is clearly a limit to this type of pricing. The sole justification for continuing to produce such items is the return of good will and reputation.

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It is commonly claimed, by those who as a matter of principle defend competition for all weapon systems, that defense contractors are not forced to bid prices that will yield inadequate returns. However, defense contractors face constraints caused by unilateral customer requirements and decisions that firms in other industries normally do not face. Military suppliers provide a unique product that fulfills national security objectives. As a result, their discretion to discontinue unprofitable programs is constrained severely.

In addition, because the federal government is the sole domestic purchaser of most of a defense contractor's output, defense contractors face many of the same problems that plague suppliers in any monopsonistic market.<sup>32</sup> Existing investments in plant and equipment require distribution of costs on a sufficiently broad base to insure that programs are competitively priced. This sometimes requires the bidding of pivotal programs at low margins. In addition, contractors must bid on some programs without adequate levels of return to keep technical teams together for future work.

Low returns on programs can lead to problems that would not otherwise occur. In an effort to increase the rate of excessively low returns, management may combat costs in such a way that the end product suffers, including reducing research expenditures and investment in productivity.<sup>33</sup> When this occurs, the "lowest cost" and the "best product" are not necessarily synonymous.

### III. Excessive Emphasis on Policy Initiatives

On occasion, DOD and some Congressional committees and members overreact to policy initiatives. Examples in military procurement are the multiple-incentive contracts in the 1960s, total package procurement in the late 1960s and early 1970s, and

32. For a discussion of monopsony and the problems of pricing at levels insufficient to meet the marginal cost of production, see E. SHOVS & R. BURTON, *MICROECONOMICS* 435-38 (1972).

33. For example, a firm's top talent generally will not be used on a project that does not earn adequate profits, unless the project returns are so low that they threaten the solvency of the corporation. In addition, efforts to save money by applying reduced design talent, reduced grade levels in manufacturing, and shortcuts in testing often are counterproductive.

fixed-price development contracts in the 1980s.<sup>34</sup> Unfortunately, the same kind of overreaction to policy initiatives that plagued past acquisition strategies are being repeated today with the increased emphasis on price competition alone.

There are understandable and defensible pressures to award contracts at the lowest possible purchase price. Budgetary shortages and a fundamental need to buy the most suitable article at the lowest price dictate emphasis on such considerations. The overreaction to which we refer, however, is a tendency when selecting a competitor for contract award to overemphasize price, contractor investment in design and development, and contractor willingness to surrender rights in technical data.

This tendency exists because factors such as price and investment are more easily quantified and, hence, are more defensible than factors such as past performance records and expected product quality. Micromanagement from above, public criticism, and a lack of trust between buyers and sellers have reduced the flexibility of decisionmakers' judgment that is so important for an efficient and effective production process. Government and industry should work diligently to overcome this problem. Evaluation of the technical excellence of proposals along with estimates of long-term costs of competing systems and assessments of the past performance records of contractors on similar requirements are important factors for source selection in addition to those currently used.

Although competition is important to the acquisition process, there should be less competition for competition's sake. Both the administrative process for justifying and obtaining authority for sole-sourcing large procurements (including major weapon systems) and the use of arbitrary goals for competitive awards have greatly eroded the quality of the selection process. In a significant number of current defense procurement programs,

34. The total package procurement concept of the 1960s generally was discredited in the 1970s, but fixed-price development contracts coupled with priced-production options used in the 1980s frequently have had the same fundamental effect as total package procurement. Also, some observers of the Navy's shipbuilding business predict a repeat in the 1990s of the procurement problems of the 1970s, due in no small degree to a repetition of the same factors that caused earlier problems.

little of substance has been added by mechanically focusing on competition.<sup>35</sup>

Competition for government contracts should be predicated on the positive expectation that overall system performance, including cost, will be enhanced by the competitive process.<sup>36</sup> An acquisition strategy that focuses on price alone is unacceptable. More comprehensive evaluation of nonpecuniary factors is needed before awarding a contract on the basis of lowest cost, or when deciding whether to award the contract on a competitive basis at all. Among the most important factors that should be considered are the disruption of changes in managerial and employee structures, increased instability in the procurement process, and the performance history of the incumbent contractor.<sup>37</sup>

## Conclusion

Burnett and Kovacic have written a valuable analysis of weapons acquisition policy. Its publication comes at a particularly important time since many view the current acquisition system as seriously deficient. The Bush Administration, in examining the effects of the reform efforts of the past eight years, should consider Burnett and Kovacic's many insightful recommendations to improve the weapon procurement process.

35. This conclusion is shared widely today by knowledgeable participants in both government and industry. "We are seeing today the same sorts of acquisition policy mistakes that characterized the enthusiasm for total package procurement in the 1960s . . ." Letter from D. Packard to President Reagan 3 (July 10, 1987) (discussing PRESIDENT'S BLUE RIBBON COMM'N ON DEFENSE MANAGEMENT, A QUEST FOR EXCELLENCE—FINAL REPORT TO THE PRESIDENT (1986)) (copy of letter on file with authors).

36. Mark Lumer, Chief of the Compliance Branch, Procurement Directorate, U.S. Army Communications, Electronics Command, does not feel that Congress, DOD, or the defense industry has properly studied the ramifications of our competition policies.

In some cases, in our rush to embrace the concept of competition, we may have forgotten the common sense test that used to work 99 percent of the time . . . Competition has worked well in many ways, and where it succeeds, it has done so extraordinarily. But what must be kept in mind is that DOD, as the world's largest customer, should have in the forefront of its charter the protection of the United States. [Competition] may not even be cost effective. Compete where it makes sense

. . . .  
Lumer, *The Hidden Cost of Competition*, CONT. MGMT. MAG., Jan. 1989, at 16, 16-17.

37. With regard to current sole-source contracts that are being recompeted or "broken out," factors other than price must be taken into consideration. Resulting losses in performance and management efficiency may well outweigh any potential monetary savings effected by a lower unit price. See Address by Donald Hicks, 1988 Air Force Competition Advocate Conference (former Under Secretary of Defense for Research and Engineering), reprinted in Canan, *Competition Is a Mixed Blessing*, AIR FORCE MAG., Apr. 1989, at 66, 66-67.

