**COMPLICATING ISSUES IN ADOPTING COMMERCIAL**

**CONTRACTING PRACTICES IN DEFENSE ACQUISITION**

By Michael E. Heberling and Mary E. Kinsella

In an era of decreasing military budgets and changing enemy threats, there has been a change in

the priorities associated with defense acquisition. During the Cold War, the emphasis was on

high performance and schedule. Today, the focus is increasingly directed at affordability. Although the military acquisition budget is down 70 percent from its 1985 peak, the Department

of Defense (DoD) continues to have requirements for new systems and upgrades to old ones. By

necessity, the DoD is turning to the commercial market. The emphasis both within and outside

the Defense Department is to use more commercial products and commercial practices in

meeting military requirements. This acquisition strategy is seen as a way to reduce costs and

shorten lead times. In addition, the problems associated with a decreasing defense-industrial base

become less acute if there is a strong and willing commercial base to draw on.

Many of these goals have been facilitated with the passage of the Federal Acquisition

Streamlining Act (FASA), the Federal Acquisition Reform Act (FARA) and the current

preference for performance and commercial specifications over military specifications

(MIL specs). While these reform activities have made both major and positive changes to the

government's procurement system, a number of complicating issues remain.

We must recognize that the much maligned defense procurement system, in part, differs from its

commercial counterpart because it addresses a number of legitimate, government-unique

concerns. Many of the solutions to real problems of the past now serve to inhibit the adoption of

commercial practices today. As we continue with acquisition reform, several fundamental

questions need to be asked:

1. Have we forgotten why we have government-unique practices in the first place?

2. If not, have the underlying conditions necessitating unique government practices actually

changed?

3. Are there systemic differences that complicate or preclude the full adoption of commercial

practices?

4. Can these differences be overcome, or at least mitigated?

Unless we have satisfactory answers to these questions, we may be expecting more from

acquisition reform than is realistically possible.

**COMPLICATING ISSUES**

Much has been written about the differences between government contracting and the

commercial counterpart. However, little has been written on why those differences exist.

If the government simply wanted the best quality products and services and was willing to pay

the prevailing market price, acquisition reform would be a relatively easy task.

Unfortunately, there are a number of underlying issues, (systemic, cultural, and product) which

complicate the adoption of a commercial procurement system by the DoD.

**SYSTEMIC AND CULTURAL DIFFERENCES**

***The Use of Taxpayer Money.*** Personnel in Government have the responsibility to protect the

public trust. Part of this trust is fiduciary that leads to DoD procurement practices that allow

close scrutiny by Congress, oversight agencies, the media, and watchdog interest groups. The

need for strict accountability of federal funds has resulted in a number of practices very much at

odds with that found in the commercial world. While the private sector finds US currency

acceptable for all debts, public and private, the DoD ironically does not. The DoD has a different

"color of money" depending on what it is buying. One type will be for R&D, another type for

production, one for construction and another for operations and maintenance. This "stove-piping"

of money at the Congressional and Pentagon level provides a control mechanism that minimizes

the misuse of funds. Unfortunately, this process also takes flexibility away from the lower

execution levels of management which complicates DoD procurement.

In addition to the "color of money" issue, DoD money will "expire" after a certain period of time,

if it is not used. This situation leads to a great deal of volatility in the defense procurement

process with a massive surge in buying at the end of the fiscal year. The goal is to spend to the

pre-established yearly funding profile. Under running may even have negative consequences.

The frugal organization that has funds left over at the end of the fiscal year may not only lose

those surplus funds but find its budget decreased (by that same amount) in the following year as

a reward. The DoD's procurement system operates in a "public administration” environment. In

contrast, the commercial sector operates in a "business administration” environment, where

under running is both encouraged and rewarded.

***Fairness.*** As a result of numerous abuses in the past, the Government has a noble objective to be fair in all of its dealings with suppliers. Unfortunately, this objective frequently becomes

counter- productive. For example, in the interest of fairness, the government allows any

“interested party" to protest. This outgrowth of fairness permits a stream of protests that

frequently result in a costly paralysis of the procurement system.

The preoccupation with competitive fairness hinders the use of innovative long-term supplier

partnering arrangements. In the commercial sector, the prevailing attitude is:

*Who said business was fair?* A private firm can choose with whom it wants to do business, to

what degree, and for how long. Consequently, the private sector rarely has to deal with protests

as the DoD does. A commercial supplier knows better than to protest. To do so will result in their being "blacklisted" throughout the industry.

***Conflicting Goals.*** The objective of the Defense procurement system goes beyond simply

buying goods and services for the military. The procurement system is frequently used as a

vehicle to further federal social and economic policy. It is used to promote US businesses over

foreign businesses and small businesses over large businesses. These and other secondary socioeconomic goals are costly in terms of the government infrastructure necessary for administration and because of the premium prices that frequently result.

The commercial marketplace is a complex mix of both domestic and international participants.

Consequently, when a commercial firm seeks a world-class supplier, the really important

considerations include quality, performance, price, delivery, capacity, and assurance of supply. If

the supplier can meet these requirements, it really does not matter what size the company is,

where it is located, or who owns it.

If our national leaders feel that these secondary goals are a desirable function of the defense

procurement system, they should also realize that trade-offs will have to be made in order to

achieve them. Given these constraints, it will be more difficult for the defense procurement

system to mirror the economies and efficiencies of a market driven procurement system.

***The Defense Department is a Final Consumer.*** The defense market is very different from its

commercial sector counterpart. Unlike commercial firms, the DoD is often the only customer for

a product. Also, since the DoD is a final consumer, it does not buy-to-sell a product or service to

raise revenues as do all commercial firms. In addition, DoD agencies are non-profit, and with

few exceptions, have continuous operations. The DoD does not have the threat of bankruptcy to

force efficiencies into the procurement process.

As a result, the DoD sector has fewer market forces at work on its procurement system.

The commercial sector has a built-in mechanism that prevents it from paying too much for goods

and services. It is called international competition. If they do not buy wisely, the market place is

unforgiving. In the defense sector, there is no such price control mechanism. The DoD is an

ongoing entity, no matter how inefficient it is. Under these conditions, the objective is to find a

way to control cost in a system where there is no fatal penalty for poor procurement practices.

The Truth in Negotiations Act (TINA) and the government Cost Accounting Standards (CAS) sought to address this inherent problem. TINA and CAS, in essence, serve as surrogate

market forces for the defense sector. Unfortunately, most commercial firms want no part of

TINA or CAS. They view cost and pricing data as proprietary and key to their competitive

advantage. Commercial firms see CAS as a redundant government accounting system that

requires a costly infrastructure to install and maintain.

***A Different Culture.*** If the DoD is to fully capitalize on the extensive acquisition reform that

has taken place, there must be a matching cultural change in the contracting work force.

Unfortunately, this prerequisite for reform has been very slow in coming.

The Defense acquisition practices and culture have been evolving apart from the commercial

sector for decades. The experience, training, and unique skills of defense procurement officials

can serve as obstacles to the acceptance of commercial items and practices. Under the current

system, acquisition personnel frequently need to know more about how to apply the regulations

than about the products they buy (that is, market forces, unique features, quality levels, etc.).

Unfortunately, this situation leads to a more conservative acquisition approach that hampers

innovation and reform.

Mistakes made in the defense procurement system are newsworthy. Unfortunately, isolated

incidences frequently result in "punishment of the innocent" laws to make sure these mistakes

never occur again. This potential for post-mortem second guessing by oversight agencies and the

media makes it safer to err on the side of conformity than to show initiative in adopting cost

saving commercial practices. The Defense Department by no means has a monopoly on mistakes

and poor judgment. The major difference between the two systems is in the way they resolve

mistakes. In the private sector, mistakes are corrected internally without fanfare. The opposite is

true in the DoD. If the DoD is to move from a risk averse to a risk management procurement

system there must be an incentive to do so. The two major drivers for change in the private

sector are financial reward and survival. These two incentives are, for all practical purposes,

absent from the DoD procurement system.

Acquisition reform and a switch to commercial practices represent a significant (and for some,

an unwelcome) change. Ironically, the adoption of commercial practices and the seeking of more

commercial sources is a far more labor intensive form of acquisition (relative to pre-reform

days). The acquisition and contracting people will now need to develop solicitations based on

detailed market research and on actual commercial practices which vary significantly from

industry to industry. No longer will one size fit all. The burden of being able to accommodate

terms and conditions shifts from industry to the government. This will require a great deal of

homework on the part of the defense procurement community.

Market research is time consuming and requires extensive technical understanding of products,

services, and industries. For those who have spent their career mastering the government-unique

procurement system, learning to buy as the commercial sector is a daunting task. Also, given that

the size of the defense procurement work force has dropped at a faster rate than the workload, the

question needs to be asked: *Where is the incentive for cultural change?*

***Reluctance of Commercial Firms.*** Many commercial firms are fully capable of meeting

military requirements. However, for a number of reasons, many commercial firms are reluctant

to do business with the DoD. Defense work comes with a reputation for excessive oversight,

compliance, and reporting requirements. Although these companies are willing to provide

commercial products to the DoD on normal business terms, they are unwilling to change their

internal operations to produce small quantities of military "commercial-like" products.

For commercial firms, competitive markets are the driving force leading to efficient internal

operations. It is rare for one customer to dictate terms and conditions that change the internal

operation of another firm. On occasion, suppliers will make special arrangements for preferred

customers (that is, those that show a significant long term commitment). However, few

commercial firms would put the DoD in this preferred category.

Typically, these commercial firms manage successful businesses without DoD customers.

Also, since DoD business is not viewed as a big money-maker, these commercial firms are not

motivated to pursue DoD work. In spite of the extensive acquisition reform that has taken place,

many commercial suppliers still see the DoD as a difficult customer. In addition, the instability

of requirements and budgets, the government’s right to terminate contracts at will, the potential

for a protest, and the penalties that result from failing to comply with a government procurement

regulation are all reasons that many companies avoid DoD business. In fact, many commercial

world-class manufacturers do not even read the Commerce Business Daily (CBD) when seeking

new work. To overcome these barriers (real and perceived), the DoD must work very hard to

become a "world-class” customer. To accomplish this goal, the DoD must establish its own "past

performance” track record as a trusted and reliable customer.

**PRODUCT DIFFERENCES**

Besides the systemic and cultural differences that exist between the defense and commercial

procurement systems, there are significant product issues as well. Military products differ from

commercial counterparts primarily in terms of performance requirements, quantities, and in their

service life.

***Higher Performance Requirements.*** The commercial approach is to design for a narrower

operating environment. The smaller the operating band, the lower the cost will be for that item.

In contrast, military requirements cover greater operating environments. A system must be able

to operate in Antarctica one day, in the deserts of the Middle East the next, and in the humid

jungles of central Africa on the following day. Commercial products are often too generic and

frequently not suited for defense systems with high performance requirements.

Unique military requirements exist because a particular component may need to work under

greater extremes of temperature or vibration than are necessary in the commercial environment.

The more the requirements deviate from commercial versions, the more costly and less likely

there will be a commercial solution (see Figure 1). This reality suggests that the establishment of

military requirements needs to go hand in hand with a thorough understanding of the capabilities

and limitations of commercial products and technologies. It is becoming increasingly impractical

to design systems that operate at the most extreme environmental conditions (that is,

temperature, humidity, shock and vibration). The trend, to date, suggests that we need to have a

three-way tradeoff in the requirements generation process between: performance, cost, and

commercial availability.

***Buying in Small Lot Sizes.*** The Cold War defense market was geared to a high performance,

high cost, low-volume production environment. Today, when the DoD turns to the commercial

sector, it finds a market that largely focuses on moderate performance, low cost, and high

volume production. We are entering a new era of lean and flexible manufacturing. This allows

companies to economically manufacture their products in small lot sizes. Unfortunately,

producing the items in small lot sizes is only half the problem. The other half is to be able to buy

the parts *that go into the products* in small lot sizes. While commercial firms do produce in small

lot sizes, they produce *many* small lot sizes. This equates to cumulative large volumes that

minimizes the parts buying problem. However, in the case of military products, the total volume

is small. Many commercial parts suppliers have minimum orders. If the order is under this

amount, these firms will either not sell their products or they will charge a premium for the low

quantity.

***Cost and Pricing Issues.*** For commercial items, it is assumed that market forces will ensure a

fair and reasonable price. Under these conditions, the DoD benefits from a very competitive

domestic and international market. However, when the DoD turns to the commercial sector to

meet its military-unique requirements, pricing becomes a major challenge that severely

complicates access to the commercial sector. DoD buyers, in many respects, have a more

difficult pricing task than their commercial counterparts. While there are many pricing tools

available, most are based on some type of comparison (similar items in catalogs or with a

standard market price). These comparison pricing techniques are not readily adaptable to

military-unique or even "commercial-like" items made in small quantities. As stated earlier, the

more divergent the military item is from commercial item, the more difficult the pricing

problem. Price analysis places more responsibility on the contracting officer relative to cost

analysis. Without supplier provided data, the onus for determining a fair and reasonable price

now lies with the government buyer. Certified cost and pricing data will no longer be there to

provide cover for the contracting officer's decision. In addition, price analysis is less concrete

and more susceptible to second guessing when compared to cost analysis.

FASA and FARA greatly expanded the definition of what constitutes a commercial item.

Many in the acquisition community are having second thoughts over this particular reform

initiative in view of the increasing number of procurement horror stories reminiscent of the 80s.

Their concern is misplaced. We have a pricing problem, not a definition problem. Simply calling

an item "commercial" does not absolve responsibility for determining that the price is fair and

reasonable. It is incumbent upon the contracting officer to take steps to verify that the price is, in

fact, fair and reasonable. There is no turning back to the days when suppliers provided reams of

cost and pricing data to support their offer. Unlike the defense industry, commercial firms are

unwilling to comply with DoD cost or pricing disclosure requirements. They view such

information as proprietary and key to their competitive advantage. They do not want to provide

this kind of data to accommodate what may well be a *small*, one-time customer like the DoD.

***Liability.*** In the commercial sector, it is common practice to include the liability risk in the price

of the product. This is spread over thousands, hundreds of thousands, or even millions of units.

The liability associated with small quantities of military products is less defined and brings

potentially higher risk for the commercial firm. The increasing use of performance specifications

as opposed to MIL specs shifts the liability issue away from the DoD to the (less than

enthusiastic) commercial designer and producer.

***Supportability/Obsolescence.*** The supportability of commercial products in defense systems

has become a serious concern. If the commercial sector continually abandons older products as it

moves toward newer designs, how will the military provide logistical support when the

commercial products are no longer produced? The technology in many commercial fields,

especially electronics, is changing rapidly. The use of commercial components presents

significant unanswered questions about supportability, especially when new generations of

components appear so quickly.

Commercial firms must deal with the obsolescence issue as well. This situation become a

problem (for both the commercial and military sectors) when the subsystems evolve at a faster

pace than the platforms. In the automobile industry, the problem goes away with a hardware

change that incorporates the latest technology. So while the subsystems rapidly change, the

hardware "leapfrogs" to catch up. We may be talking about a time lag of three to five years. In

contrast, it typically takes DoD ten or more years to develop or upgrade systems. In addition,

military hardware could be around for possibly 30 years. In fact, a recent congressional study found that the Air Force will need about 66 B-52s through the year 2030. This represents 70 years of service.

At a time when more and more companies are no longer manufacturing military components,

one needs to ask an additional question. How supportable are existing defense systems (that is,

those not using commercial parts)? In other words, the DoD has a serious supportability problem

whether it uses defense technology or commercial technology. The real issue is whether the

supportability problem of commercial products is more severe than the supportability of military

products.

***Warranties.*** A warranty of three years or thirty thousand miles is appropriate for an automobile.

What should the warranty be for an aircraft? The DoD would obviously like a longer warranty.

However, such a warranty would run counter to common commercial practice. Therefore, even if

the DoD was willing to pay a premium for such a warranty, commercial firms may be unwilling

to accommodate. This leaves the DoD with two less than desirable alternatives. The first is to

accept the limited commercial warranties even though this will only cover a fraction of the

expected life span of the weapon system. The other choice is to upgrade the systems at a rate that reflects changing commercial technology

and standard practice for warranties.

**ACQUISITION REFORM IS FAR FROM COMPLETE**

This article is by no means meant to criticize the acquisition reform community. More has been

done in the last two years than in the previous twenty. The major players in acquisition reform:

William Perry, Paul Kaminski, Steven Kelman, Colleen Preston, Gilbert Decker, Art Money, Darleen Druyun, and Eleanor Spector are to be commended for their efforts. The preceding discussions are simply meant to highlight the enormity of the task. It would be a tragedy to declare victory on acquisition reform given the number of very difficult issues that still need to be resolved.

Full implementation and acceptance of acquisition reform will take a very long time. So far, the

ability to effectively measure this change process has been elusive. The efforts to quantify

acquisition reform should go beyond such activities as counting the number of pages in a

proposal. While it is true that reducing the number of pages by 50 percent is phenomenal by DoD

standards, this approach misses the point. The measure of success should not be *by DoD*

*standards.* Simply meeting commercial firms halfway is not enough. The DoD is becoming a

small customer. A different set of metrics is needed, one that measures how similar, or dissimilar, the DoD is relative to other commercial customers. Along these lines, some important

questions to ask might include:

• Do DoD proposals reflect industry practices using "their” terms and conditions?

• Are the world class commercial firms seeking defense work?

• Do these commercial firms even read the Commerce Business Daily?

• Do world class firms refuse DoD business, even when actively sought?

• Why are firms, such as Motorola, terminating their existing military operations and refusing

 to take on defense work?

• What can be done to bring them back?

• Is the DoD viewed as a preferred customer? If not, is the basis one of fact, or simply

perception?

• What does the DoD need to do to become a "world class” customer?

• Does the DoD care how it is viewed as a customer (the customer is, after all, always right)?

Answers to the above questions should be objectively analyzed. If the facts warrant, this

information should be used to help shape future DoD acquisition policy, practices, and

regulations.

**THE REAL GOAL: A *COMMERCIAL-LIKE* PROCUREMENT SYSTEM**

In order to expand, the defense industrial base to include purely commercial firms, the DoD must

continue its efforts to be *commercial-like* in its procurement practices. The goal of future acquisition reform is to establish a defense procurement system that:

1. Remains sensitive to the fiscal and ethical responsibilities inherent in government Procurement;
2. Facilitates the production of both commercial and military-unique products in a single business unit without altering either their accounting systems or management practices;
3. Gives proper consideration to the customary commercial practices of commercial firms when developing acquisition strategies and contracting arrangements. This includes adopting industry standards to define requirements and the adoption of a design-for- manufacturability philosophy; and finally,
4. Encourages a cultural change that focuses on risk-management rather than on risk aversion. This will require management support at all levels and better training of the acquisition workforce in market research, pricing, and other commercial procurement practices.

If we fail to recognize and address the inherent differences that exist between the two procurement systems, the current emphasis on commercial practices and products could be short-lived. A rash of procurement horror stories involving "commercial items” could abruptly end (or

even reverse) the accomplishments of acquisition reform to date.