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THE DOD'S USE OF LOWEST PRICE TECHNICALLY ACCEPTABLE (LPTA) PRICE SELECTION

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Executive Summary

Budgetary constraints, the resulting increase in the number of bid protests, and an insufficient acquisition workforce have seemingly conspired to propel the use of lowest price technically acceptable (LPTA) evaluation criteria by the Department of Defense (DoD). Under LPTA, the government agency awards the contract to the offeror submitting the lowest price proposal that meets the technical requirements.

Its expanded use has been met with opposition from segments of the contractor community, particularly those that provide high-end, complex services for which a thorough examination of "trade-offs" between cost and non-cost factors is often more suitable. These contractors assert, and rightly so, that they are offering better value to the government—which may come at a higher price.

The use of LPTA can be inappropriate at times, especially when the technology in question is complex or unprecedented, or when lives are at stake. However, LPTA has also been recently subjected to undue criticism. LPTA has been used successfully in the past, under the right circumstances—that is, when the requirement is clearly definable and when the risk of unsuccessful contract performance is minimal. For instance, LPTA is often used to acquire interchangeable commodities. In addition, LPTA is used when higher performance would add little value and is believed to be unnecessary, often resulting in little added value.

LPTA and the trade-off source selection process are both used to leverage competition among firms and to select the best-value provider. The trade-off process provides agencies the capacity to choose a contractor by comparing the competing offerors' different combinations of quality and price (Edwards, 2006). Under LPTA, however, trade-offs are explicitly impermissible. Once all proposals have been evaluated to ensure that they meet the identified technical requirements, the agency is required to choose the vendor solely on the basis of price competition.

LPTA is defined by the Federal Acquisition Regulation (FAR, 2013) as an appropriate approach when the acquisition requirements are "clearly definable," and the "risk of unsuccessful contract performance is minimal." There are four distinct benefits associated with LPTA, including the potential for lower costs, its use of simpler and more objective evaluation criteria, the lower likelihood of a bid protest, and the clarity of decision justifications.

However, there is a growing concern, often voiced by industry, that the pressures of price minimization will result in the reduction of quality delivered to government. Industry reports have emphasized that over-reliance on an LPTA approach can compromise success, especially for complex mission services. The National Defense Industrial Association (2012) named improper use of LPTA sourcing as one of its "top issues" of 2012, while the Professional Services Council (PSC)) called monitoring the frequency and misuse of LPTA a "2013 Policy Priority" (PSC & Grant Thornton, 2012).

Perhaps unsurprisingly, government acquisition executives have a different point of view; according to a recent PSC survey, the majority tend to believe that the technical requirements of most LPTA solicitations are set high enough to ensure that the best performers are all viable competitors (i.e., the poor performers cannot meet the threshold requirements; PSC & Grant Thornton, 2012).

Some believe that the problem is overstated or that attention is being diverted from the underlying issues. It has been suggested that heightened competition is the greater concern (i.e., more contractors competing for fewer contracts) or that the real blame lies not with the LPTA mechanism itself, but with the government's ability to follow procedures correctly. There is no doubt, however, that LPTA has been used to successfully acquire products and services, though these are typically commoditized, commercial, and/or non-complex goods and services; examples include dining services, janitorial services, and snow removal.

However, given the current budgetary environment, and prevailing incentives, there is more concern than ever that the government is awarding contracts to the lowest bidder, even if that bidder is unable to deliver an acceptable product or service—let alone the best value. This is especially worrisome now that LPTA source selection has been expanded to the procurement of complex hardware and high-knowledge-content professional services.

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Recently, LPTA was used to acquire the Air Force's new refueling tanker, resulting in a more objective and simpler evaluation, at least compared to the prior competition (which was canceled after the GAO sustained a bid protest by one of the offerors). It is true that the use of LPTA is simpler. Indeed, many described the initial solicitation as unwieldy. But it remains to be seen whether or not reliance on LPTA will result in best value.

There are reasons to believe that the best value was not achieved. For instance, the Air Force determined that the aircraft proposed by the losing party would perform more effectively during wartime. However, the winning party's aggressive bid was low enough to overcome this advantage.

In another example, the Navy sought to create a single, functionally secure, enterprise-wide network (NGen) in order to support connectivity between onshore activities and at-sea operations (Slabodkin, 2012). Despite the technical complexity and size of the project, LPTA was used for the source selection. The challenges associated with the project were widespread, from project delays, to customer dissatisfaction with the product, to questions about long-term performance. Recently, the Navy announced it would delay the previously scheduled contract award from February to May, due to the complexities of the NGen requirements, leading one to question the wisdom of using LPTA.

The use of LPTA for contracts related to embassy security has also come under fire as of late. In 2007, the U.S. Department of State awarded a private security contract, on an LPTA basis, to Armor Group North America (ANGA), to protect the U.S. Embassy in Kabul, Afghanistan. The five-year contract was valued at \$189 million (Schulman, 2009). The runner-up, Wackenhut Corp of Arlington, VA, presented a bid that was \$80 million more expensive. Over the next two years, the project was plagued with cost-overruns, mismanagement, and security failures (Weckstein & Delgado, 2012).

Findings

The DoD can anticipate declining budgets for the next several years. Accordingly, there is everincreasing pressure to find cost savings, with the potential that acquisition officials will continue

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to rely on LPTA in order to save money. It is therefore imperative that officials learn to leverage LPTA effectively and only when it is appropriate. In the following list, we provide some guiding rationales that government acquisition officials should consider in deciding upon a source selection process.

• LPTA can be overused.

The overuse of LPTA by the government carries its own set of unique risks. If the trend toward greater reliance on LPTA continues, then there is a worry that industry will react by more closely adhering to the letter of each and every contract. As a result, government acquisition officials will have to spell out all requirements, including the smallest details— details that may have gone unspecified in the past—in order to ensure that the needed requirements, as envisioned by the government, are fully met.

• LPTA reduces the incentive to innovate.

Increased reliance on LPTA may deprive the government of the innovative services and products to which agencies are accustomed and upon which their missions rely. Reducing the demand for new innovation could potentially weaken America's economy and national security posture.

• Aggressive cost cutting can impact quality and value.

The expansion of LPTA to higher risk acquisitions not only creates controversy, but may deprive the government of quality and value, and, in the end, may cost more. In a number of instances, government contract administrators have been required to choose the lowest priced option over one that they believed would provide the best value to the government.

• LPTA can lower investments in human capital.

The constrained budgetary environment and the increased usage of LPTA may lead (and has already led some) incumbent firms to cut the salaries of their workforce in order to retain their vendor position against lower bids. Those costs can cut incumbent workforce salaries by 15–20% or result in staff layoffs. This can result in "a race to the bottom."

Recommendations

The LPTA approach often reduces the cost of acquisitions, but the savings typically only provide short-term relief, which often comes at the expense of long-term risk mitigation, better quality, and greater innovation. Some changes could provide improved usage of LPTA, without stifling innovation and risking project completion. We provide the following recommendations.

• Use LPTA only when "technically acceptable" can be fully defined and the risk is low.

Consensus from industry leaders in the contracting space is that when the government asks for goods and services that are "technically acceptable," it receives just that: a product that is minimally acceptable, but in no way superior. This is a result of a perception that delivery above "acceptable" must inherently mean more costly, or "gold plated," but this is not necessarily true. Even when lower risk, higher performance, and greater reliability come at a higher cost, the added value is often worth it.

• Incorporate past performance.

Past performance should be used as an evaluation factor in the LPTA process, especially when acquiring complex mission support services. There is no reason that past performance cannot be assessed on a graduated scale. Government agencies could still award contracts to the lowest price, technically acceptable offeror, provided that the offeror earns a past performance confidence assessment rating of "substantial confidence."

• Reduce potentially inappropriate use of LPTA.

The FAR states that LPTA usage is limited to incidents where service requirements are "clearly definable" and "the risk of unsuccessful contract performance" is not "minimal." Complex and professional services are rarely "clearly definable" and the government deserves something better than minimally acceptable in what it delivers to the warfighters and the taxpayers. There is value in providing solutions above what is prescribed by

contracting officers, including industry-based innovation, improved accuracy in schedule and delivery, and most importantly, long-term cost reductions.

• Improve government-vendor communications.

Communication is a tool that benefits the government's acquisition teams and program managers, and it should not be impaired by fear of protest. Perhaps this is understandable in light of recent high-profile cases (for example, the GAO upheld Boeing's tanker protest, in part, because the Air Force engaged in "unequal discussions"; GAO, 2008). In order to reduce bid protests based on unequal communication, a greater effort must be made to improve communication between acquisition personnel and government contractors. Restricting communication out of fear of protest will, in all likelihood, lead to a greater number of "unequal discussions" and, worse still, misunderstandings of the government's needs.

• Invest in the government acquisition workforce.

In order to effectively develop the required human capital for the modern acquisition environment, the DoD must enhance its recruitment processes, improve the hiring process, strive for quality not quantity, provide competitive wages, incentivize employees for improved performance, and provide continuing training and education. Only a highly trained workforce can determine if the LPTA is appropriate in the first place. Moreover, in instances when LPTA use has been criticized, it is sometimes unclear whether the LPTA mechanism itself is to blame, or if the problem lies with the government's inability to adequately identify and articulate the required minimum requirements. In order to maximize the effectiveness of source selection processes, LPTA or otherwise, we must invest more in the acquisition workforce.

The inappropriate use of lowest price technically acceptable source selection is on the rise, particularly in areas of professional services, complex services, and IT. However, consideration must be given to non-cost factors when appropriate, and awards should not be shoehorned into an LPTA source selection as a means of avoiding potential protest or expediting the award. LPTA source selection can support the DoD, but only if it is used judiciously.

I. Introduction

Since 2009, the federal government has incurred annual deficits of over one trillion dollars. Efforts by the White House to reduce these deficits by increasing taxes have been met with resistance from Congress, which has sought to decrease the deficit through reduced spending. In 2013, the failure to reach a budget compromise triggered automatic across-the-board spending cuts, known as the sequester. The consequences are far reaching. For instance, the Federal Aviation Administration had to resort to reducing the hours of its 47,000 employees, while the National Institutes of Health will issue approximately 700 fewer competitive research project grants.

The Department of Defense (DoD) will be hit the hardest. Frank Kendall, under secretary of defense for acquisition, technology, and logistics (AT&L), estimated that the sequester would lead to a nearly 10% reduction at the program, project, and activity level, spanning roughly 2,500 DoD undertakings (Miller, 2013). In May 2013, many of the DoD's 700,000 civilian employees began two-day-a-week furloughs.

It is against this backdrop that the DoD is working to maximize the effectiveness and efficiency of its investments (i.e., achieving "best value") in order to continue to meet its operational requirements as well as modernize for the future.

Because the DoD spends more on goods and services than any other federal department approximately \$400 billion annually—its acquisition and procurement strategies are subject to both internal and external review and criticism. In response, the DoD has attempted numerous reforms. For example, in 2010, the Pentagon introduced its Better Buying Power (BBP) initiative, which provides guidance aimed at cutting acquisition costs by \$100 billion over a fiveyear period. Under BBP, the military services and defense agencies have reduced requirements creep, mandated affordability as a requirement, established higher standards for leadership positions, and increased the use of performance-based budgeting.

Although BBP does not specifically advocate one set of contract evaluation criteria over another, the Services and Agencies have responded to the budgetary pressures by increasing their reliance

on lowest price technically acceptable (LPTA) criteria in assessing offerors' submissions. For any given solicitation, the decision to use the LPTA source selection process is identified in the request for proposals. The DoD is then bound to award the contract to the vendor that offers the lowest evaluated price—provided that the proposal meets established technical threshold requirements. The second iteration of Better Buying Power (BBP 2.0) was released in November 2012. The new guidance suggests that when LPTA is used, "technically acceptable" must be better defined in order to ensure needed quality (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics [OUSD(AT&L)], 2013).

The expanded use of LPTA criteria has been met with opposition from segments of the contractor community, particularly those that provide high-end, complex services for which a thorough examination of "trade-offs" between cost and non-cost factors is often more suitable. These contractors assert, and rightly so, that they are attempting to offer best value to the government—which may come at a higher price.

For instance, under LPTA, there is no need to perform trade-off analysis or to compare the specific technical solutions provided by multiple vendors. As a result, when using LPTA as the source selection criteria, there is a greater risk that the selected vendor may not provide the best-value service or product to the customer. Consequently, the adage "you get what you pay for" applies. Firms offering lower prices may have fewer, or less experienced, employees; unreliable supply chains; or less effective quality control processes—factors that may not be evident in the proposal, and, even if they are, such factors are typically excluded from consideration under LPTA.

The current budgetary environment has also affected defense firms' business decisions and strategies. Hoping to get a larger piece of the decreasing budgetary pie, firms have initiated more bid protests over the last decade, particularly in high-visibility, high-value acquisitions. In fact, there is a belief that the increasing number of bid protests has unduly pressured federal agencies to rely more heavily on LPTA—and its clear-cut criteria—so as to avoid drawn-out, and sometimes costly, bid protests. This belief appears to be valid. Although precise numbers are difficult to obtain, it is possible to draw some inferences. Figure 1 indicates that the total number

of bid protests filed by private industry is steadily increasing. Yet, the number of protests filed when LPTA was used for source selection has remained a tiny fraction of the total.



Note. The information for this figure came from GAO, n.d.

The lack of an adequately trained acquisition workforce may have led to the recent increase in the use of LPTA. It has also been well documented that the DoD's acquisition workforce has significant shortcomings in both total numbers and experience levels. Major reductions in the civilian acquisition workforce (a decrease of almost half over the last 20 years) and recent furloughs have reduced the DoD's capacity to adequately conduct complex source selections. Moreover, aging personnel (in 2005, "Baby Boomers" and "Silent Generation" employees made up roughly 76% of the acquisition workforce) are retiring at an ever-increasing rate. And newer personnel often do not have the experience and judgment necessary to make the cost–performance trade-offs. Frequently described as a "bathtub" situation, there is an acute shortage of acquisition personnel that have between five and 15 years of experience (Nackman, 2010). In fact, today, 55% of the DoD acquisition workforce have fewer than five years of experience.

Budgetary constraints, the resulting increase in the number of bid protests, and an insufficient acquisition workforce have seemingly conspired to propel the use of LPTA evaluation criteria by the federal government. Indeed, its use can be inappropriate at times, especially when the

technology in question is complex or unprecedented, or when lives are at stake—cases that we examine in Section III. However, LPTA has also been subjected to undue criticism. "Would you select your doctor based on lowest price?" is a common rejoinder among LPTA critics. Indeed, you just might if his/her qualifications are truly indistinguishable from others' or if it is a matter of a simple, routine procedure. Indeed, LPTA has been used successfully in the past, under the right circumstances—that is, when the requirement is clearly definable, and the risk of unsuccessful contract performance is minimal.

Report Roadmap

As LPTA procurements are used more frequently, they are likely to create more controversy. There is concern that the use of LPTA source selection will increase to the point where mission effectiveness may be threatened. At the same time, some of the concern is unwarranted and can be attributed to an inaccurate understanding of the LPTA process. In this report, we describe these concerns and examine different cases in order to outline a desirable balance between the use of LPTA and other source selection processes. We begin with a brief background of source selection criteria and highlight some of the concerns regarding the increased use of LPTA. Next, we examine appropriate and questionable uses of LPTA. We then summarize our findings. In the final section, we list recommendations and provide concluding remarks.

II. Background

The trade-off source selection process (wherein cost and performance can be "traded off) and the LPTA process are the two frequently employed processes designed to leverage competition among firms. In the following sections, we describe in more detail the trade-off and LPTA source selection processes. Then, we discuss some of the concerns regarding LPTA usage.

Trade-Off Source Selection

Authorized by FAR 15.101-1, the trade-off process provides agencies the capacity to choose a contractor by comparing the competing offerors' different combinations of quality and price (Edwards, 2006). In different types of acquisitions, the relative importance of cost or price may vary. For example, where requirements are clearly defined, and risks generally appear minimal, cost may be the most important criteria in evaluating trade-offs. Conversely, if requirements are less defined and the scope of work is more complex with considerable risk involved, past performance and technical capability grow in importance as criteria for source selection. According to the FAR, this process permits trade-offs among cost or price and non-cost factors and allows the government to accept higher priced proposals. The FAR also states that the perceived benefits of the higher priced proposal must merit the additional cost, and the rationale for trade-offs must be documented in the file in accordance with FAR directives.

Note that within the context of source selection, "trade-off" is often used synonymously with another term, "best value." Such usage is erroneous, however, and implicitly suggests that in order to obtain the lowest price (the stated objective under LPTA), "value" must be sacrificed. In fact, according to FAR 15.101-2, LPTA may be used only "when best value is expected to result from selection of the technically acceptable proposal with the lowest evaluated price." Unfortunately, even in the recent BBP 2.0 guidance, the term "best value" is used in opposition to LPTA.

LPTA Source Selection

When using LPTA, trade-offs are explicitly impermissible. Once the proposals that meet or exceed the technical requirements have been identified, the source selection authority is required

to select the vendor solely on the basis of price competition. The source selection authority is not avoiding trade-offs entirely—instead, the trade-offs are meant to occur through market research and development of the program's requirements, even before RFPs are released.

LPTA is defined by the FAR as an appropriate approach when the acquisition requirements are "clearly definable," and the "risk of unsuccessful contract performance is minimal." There are several benefits associated with LPTA source selection.

- *LPTA can lower costs:* The current fiscal and budgetary climate has prompted acquisition and procurement personnel to find ways to cut costs, which has resulted in the increased usage of LPTA. Potentially, LPTA source selection can reduce costs while providing the government with the best-value solution.
- *Simpler source selection:* Contracting officers evaluate technical acceptability of proposals and award the contract to the lowest bidder without having to analyze cost–performance trade-offs.
- *Less likely to prompt a legal fight:* Awards made via LPTA are price-based decisions and generally are more difficult to challenge because there are less subjective source selection criteria.
- *Clarity of decision justifications:* Trade-off judgments must be well-documented and explained during the debriefing process, after an award is made. If lowest cost is deemed the primary metric of evaluation during the cost/non-cost trade-off process, then justifying the decision is simple.

Concerns Over LPTA Usage

There is a growing concern, often voiced by industry, that the pressures of price minimization will result in the reduction of both quality and performance delivered to the government. The National Defense Industrial Association named improper use of LPTA sourcing as one of its "top issues" of 2012; while the Professional Services Council (PSC) called monitoring the frequency and misuse of LPTA a "2013 Policy Priority." Stan Soloway, PSC president and CEO, noted, "There is a strong consensus that LPTA source selection strategies have essentially become the

default ... approach, almost regardless of the nature of the requirements involved" (as cited in Weigelt, 2012a).

In a recent PSC survey, respondents acknowledged that the selection decision criteria should better reflect the nature of the solicitation. According to one respondent, "LPTA is okay for commoditized services like janitorial services and ground maintenance. But with complex services like IT, they have to be more performance-based or at least best value [i.e., based on a trade-off analysis]" (PSC and Grant Thornton LLP, 2012).

Another private defense contractor, TASC Inc., released a report warning of the risks of lowest price acquisition approaches, including posing unnecessary contractual risks, budget overruns, delivery delays, and, in the worst cases, mission failure (TASC, 2012). The report emphasized that over-reliance on an LPTA approach can compromise success, especially for complex mission services, and, therefore, recommended avoidance of the LPTA source selection method for such contracts, as well as for other professional services.

During a recent interview, the CEO of a midsize firm that provides systems engineering and technical assistance (SETA) services to government customers asserted that competition under LPTA is driving his company's profit margins into single digits (often below 5%). As a result, his firm has begun to ignore LPTA solicitations. Indeed, LPTA solicitations have a tendency to attract SETA and other service providers whose employees have less experience. Though these firms may have the minimum requisite technical expertise, at least on paper, their personnel may be of a lower technical caliber. The CEO of the firm in question made the following observation: "When I see hourly rates for experienced engineers and program managers with advanced degrees ... that are less than what car mechanics earn at Jiffy Lube, then you have to say that something isn't right. We are in the wrong business for this period of time."

Perhaps unsurprisingly, government acquisition executives have a different point of view. In the 2012 PSC survey referenced previously, acquisition executives were asked to read two statements regarding LPTA and then to select the one that is closer to their view. The two statements read as follows:

1. "Company bids do not get adequate credit for innovation, performance, history, or investments in people, technology, and overall excellence."

2. "The technical requirements of most solicitations are set high enough to ensure that the best performers are all viable competitors."

An overwhelming 78% held that the second statement was closer to their personal view. Clearly, there is a disconnect between industry and government regarding the appropriateness of LPTA solicitations.

Some executives believe that the problem is overstated or that attention is being diverted from the underlying issues. Ray Bjorklund (2013), vice president and chief knowledge officer at Herndon-based Deltek Inc., stated that, based on his analysis, while the use of LPTA is rising, it was appropriately used in most of the cases he examined (i.e., the requirements were clearly defined, and the risk of unsuccessful performance was minimal). But even by his count, between 2011 and 2012 uses of LPTA in situations Bjorklund considered "questionable" doubled (albeit from 63 instances to 126). However, this increase still represents a small percentage of all LPTA solicitations during this time period (in numbers, not necessarily dollar value). According to Bjorklund (2013), heightened competition is the greater concern, at least from industry's point of view. In his view, the real problem is that "the same number of contractors [are] competing for fewer dollars." LPTA contracting, it might be assumed, has been unfairly cast as the scapegoat.

Daniel Gordon, former Administrator for Federal Procurement Policy in the Office of Management and Budget (OFPP), and current associate dean for government procurement law studies at George Washington University Law School, believes the real problem is whether the agency generating and soliciting the contract "followed the evaluation scheme, fairly and reasonably evaluated the competing proposals, and documented its decisions" (Nash & Schooner, 2012). In other words, he believes the real blame lies not with the LPTA mechanism itself, but with the government's ability to follow procedures correctly. Similarly, there is reason to believe that if government could better identify and articulate its minimum needs, then LPTA would prove more suitable.

III. LPTA in Practice

LPTA should only be used when the best value is expected to result from selection of the technically acceptable proposal with the lowest evaluated price (FAR 15.101-2). The LPTA process, then, is most appropriate for the acquisition of services or supplies, the requirements for which are clearly defined and can be achieved at minimal risk. Indeed, LPTA is often used to successfully acquire commoditized, commercial, and/or non-complex goods and services; examples include dining services, janitorial services, and snow removal.

Fuel supply and management is one area where the use of LPTA contracts is on the rise. According to a 2010 GAO report, Defense Logistics Agency (DLA) officials have moved from trade-off source selection to LPTA for most fuel purchases in low-risk markets. Exceptions include areas where the DLA has minimal knowledge about vendors' past performance or that require technical capabilities in high-risk situations, such as war zones or regions of natural disasters. The DLA has increased the use of LPTA in other areas, too. Between September 2009 and May 2013, the DLA awarded an unprecedented nine LPTA contracts, totaling almost \$5.6 billion, including awards for forklifts for the Navy (\$22.5 million), industrial hygiene services for a health clinic (\$4.8 billion), and warehousing and logistics services for a defense distribution center (\$2.2 million)—all of which seem to be in keeping with the intended usage of LPTA.

But given the current budgetary environment, and prevailing incentives, there is more concern than ever that the government is awarding contracts to the lowest bidder, even if that bidder is unable to deliver an acceptable product or service—let alone the best value. This is especially worrisome now that LPTA source selection has been expanded to the procurement of complex hardware and high-knowledge-content professional services. This concern is not altogether new; famed NASA astronaut Alan Shepard was once asked by reporters what he thought about as he sat atop the Redstone rocket, waiting for liftoff. Shepard replied, "The fact that every part of this ship was built by the low bidder" (Kranz, 2009). In the next section, we examine instances in which the decision to use LPTA source selection is questionable.

U.S. Air Force's KC-X Program

The Air Force's fleet of refueling tankers is critical to the effectiveness of the U.S military. The current Air Force fleet of 531 tankers (KC-135s), now average well over 40 years in age. The other tanker aircraft, the KC-10A, although newer, have been in service about 20 years on average. The expense and time required to maintain aging tankers have increased significantly in recent years. Maintenance per aircraft is growing at an annual compound growth rate of 6.1% for the KC-135E, 6.6% for the KC-135R, and 13.4% for the KC-135T (Gansler & Lucyshyn, 2006).

The acquisition of new tankers to replace the ageing fleet has proved challenging, to say the least. In 2001, Congress authorized the Air Force to lease 100 new KC-767 tankers from Boeing for six years, starting in 2006 (GAO, 2003). However, this agreement was cancelled amidst allegations of improper dealings between Boeing and Air Force officials, and led to the conviction of the former principal deputy under secretary of the Air Force for acquisition (Branstetter, 2005).

The Air Force then decided that it would purchase the aircraft outright. The RFP, released in 2007, informed offerors that factors including mission capability, proposal risk, and past performance factors were more important than cost/price—though price was still a factor—and that these would be assessed on a trade-off basis. A measure of wartime effectiveness, the Integrated Fleet Aerial Refueling Assessment (IFARA), also figured into the evaluations. Figure 2 lists these factors is order of descending importance.

Mission Capability				
	Key System Requirements			
	System Integration and Software			
	Product Support			
	Program Management			
	Technology Maturity and Demonstration			
Proposal Risk				
Past Performance				
Cost/Price				
Integrated Fleet Aerial Refueling Assessment (IFARA)				
Cost/Price Integrated Fleet Aerial Refueling Assessment (IFARA)				

Figure 2. Evaluation Factors (GAO, 2008)

With regard to the first of these factors, mission capability, the contractor was assigned a color rating (e.g., blue for outstanding, green for acceptable, red for unacceptable) in each of five related areas: key system requirements, system integration, product support, program management, and technology maturity (see Figure 2; GAO, 2008).

In addition to these factors, the RFP identified several key system attributes (KSAs) related to aerial refueling, airlift, survivability, and operational utility, among others (GAO, 2008). There were also numerous non-KPP/KSA factors that were desired but not required. These factors were considered part of the offerors' design trade space, where modifications could be made by contractors to achieve the maximum balance between cost, performance, and schedule. Offerors were encouraged to satisfy as many of these tradespace requirements as possible.

However, with regard to the nine key performance parameters (KPPs; see Figure 3), the solicitation explicitly stated that "no consideration [would be] provided for exceeding KPP objectives" (GAO, 2008).

KPP	Parameter	Required Performance
1	Tanker Air Refueling Capability	Air refueling of all current and programmed
		fixed wing receiver aircraft
2	Fuel Offload and Range	Fuel, offload, range chart equivalent to KC-135
3	Communications, Navigation,	Worldwide flight operations at all times in all
	Surveillance/Air Traffic	civil and military airspace
	Management	
4	Airlift Capability	Carry passengers, palletized cargo, and/or
		aeromedical patients on entire main deck
5	Receiver Air Refueling Capability	Refueled in flight from any boom-equipped
		tanker aircraft
6	Force Protection	Operate in chemical/biological environments
7	Net-Ready	Meet enterprise-level joint critical integrated
	-	architecture requirements
8	Survivability	Operate in hostile environments (night vision
		and imaging systems, electromagnetic pulse,
		defensive systems: infrared detect and counter,
		radio frequency detect, no counter)
9	Multi-point Refueling	Multi-point drogue refueling

Figure 3. Key Performance Parameters (GAO, 2008)

Two firms, Boeing and Northrop Grumman/EADS (NGE), submitted proposals, with each based on existing aircraft (NGE's was based on an Airbus from EADS). The two proposals received nearly identical evaluation ratings. Each received the same five color ratings for mission capability factors and the same grade for past performance. The evaluated costs were also very similar. Boeing's proposal came in at \$108.044 billion and NGE's at \$108.010 billion (GAO, 2008).

After lengthy discussions with both firms and a protracted evaluation period, the Air Force awarded the contract to NGE. Its decision was purportedly based on NGE's strengths in the areas of mission capability, past performance (for which equal color scores were given to both firms), and cost/price (which included cost risk, for which Boeing received a slightly worse score).

Given the value of the contract, the costly proposal preparation, and near-identical evaluation scores, the award was bound to incite fierce reaction. Boeing submitted a bid protest shortly after the contract was awarded, asserting that the Air Force failed to evaluate the proposals in accordance with the stated criteria. Boeing contended that the Air Force failed to properly take into account the tradespace requirements. Indeed, the Air Force had identified five "discriminators" (i.e., features evaluated as strengths) in the area of aerial refueling in Boeing's

proposal, but only one in NGE's. Yet, NGE received a higher overall score in this area. In an initial response to Boeing, the Air Force asserted that the Boeing proposal contained "more discriminators offering less benefit" (GAO, 2008, p. 32). Though Boeing acknowledged that source selections should not be based upon a simple count of strengths and weaknesses, executives asserted that the solicitation specifically stated that offerors make an effort to meet as many tradespace requirements as possible, an effort for which Boeing received no credit. The GAO agreed with Boeing, stating that the Air Force gave "no consideration to Boeing's offer to satisfy significantly more trade space requirements" (p. 32).

In addition, despite earning the same color scores under the mission capability requirement, NGE received a significantly higher numerical score in the area of refueling under the key system requirements subfactor—the most critical subfactor under mission capability (see Figure 2). Though this raises questions regarding the utility of the color scoring scheme, Boeing had greater reason to be dissatisfied. Boeing asserted that the credit awarded to NGE reflected the fact that NGE's proposed tanker significantly exceeded the second KPP related to fuel offload versus unrefueled range (GAO, 2008). And although mission capability requirements were to be evaluated on a trade-off basis, KPPs were only to be evaluated on a pass/fail basis.

The Air Force and NGE attempted to convince the GAO that this KPP was "unbounded," that there was no specified minimum threshold, and that NGE's proposal rightfully earned a higher score (GAO, 2008). Despite these assertions, the GAO sided with Boeing, issuing its decision to sustain the protest in 2008.

In 2009 the Air Force devised a new source selection process that relied primarily on LPTA evaluation criteria, an unexpected choice, perhaps, given that Boeing's protest was sustained largely on account of the Air Force's understandable desire to fully evaluate KPPs. Nevertheless, LPTA was chosen in an effort to clarify and simplify the solicitation process and ensure against future protests. Given LPTA's reputation, it is perhaps unsurprising that Deputy Secretary of Defense William Lynn flatly asserted that the new process "is not a Low Price Technically Acceptable (LPTA) Approach...In acquisition parlance, this is a best value competition, with price and non-price factors taken into account" (Lynn et al., 2009, p. 3).

Indeed, some elements of the tankers would be evaluated on a trade-off basis. The offeror's price would be adjusted downward to reflect life-cycle cost over 40 years, and all proposals would be evaluated using the Integrated Fleet Aerial Refueling Assessment (IFARA). To an extent, then, higher cost could be traded for more efficient design.

However, the non-price (i.e., non-mandatory) factors (there were only 93) to which Secretary Lynn made reference would only to be considered in the event that the leading offerors' cost proposals came within 1% of each other; otherwise, the lowest cost offeror would be awarded the contract, provided that it met or exceeded the 373 mandatory requirements. Boeing and EADS submitted final bids which were far apart; thus, the non-price factors played no role in the outcome. In the end, Boeing's initial protest paid off. It was awarded the contract in February of 2011. It should be noted that Northrop Grumman, which had teamed with EADS in an effort to win the initial competition, decided not to bid the second time around. The CEO of Northrop Grumman, Wes Bush, issued the following statement:

We reached this conclusion [i.e., not to submit a bid] based on the structure of the source selection methodology defined in the RFP, which clearly favors Boeing's smaller refueling tanker and does not provide adequate value recognition of the added capability of a larger tanker, precluding us from any competitive opportunity. (Northrop Grumman, 2010, p. 1)

Boeing would later contend that the EADS proposal, which was also based on a larger aircraft, was unfairly accommodated by the Air Force, contrary to RFP requirements.

As previously discussed, LPTA criteria can only be applied when the soliciting agency reasons that its use will result in the best value. However, it remains to be seen whether or not reliance on LPTA will result in best value in this case. It is true that the use of LPTA resulted in a more objective and simpler evaluation. Indeed, many described the initial solicitation as unwieldy. Stockman, Ross, Bongiovi, and Sparks (2011) write that the initial competition relied on "the theoretical belief that … [the Air Force] can consider hundreds of important performance, maintenance, operational, and cost factors which can then be rank ordered, weighted, and then recombined into a single objective evaluation score to find the best choice" (p. 104). And Kaymaz and Diri (2008) uncovered flaws in the use of the color-coding scheme upon which the

initial competition relied. They concluded that the color rating method is not capable of reflecting small differences and information technology tools can help decision-makers choose the best-value offeror with less subjectivity, and that "if the [Air Force] had used the weighted sum method as its evaluation method, the winner of the KC-X program could have been different." It is also important to remember that the cancellation of the initial competition further delayed Air Force acquisition efforts that had begun years earlier, thus adding to the overall expense of the program.

At the same time, there are reasons to believe that the best value was not achieved. The Air Force determined that EADS' aircraft would perform more effectively during wartime (EADS earned a significantly better IFARA score, which is based on how much fuel the plane delivers, how far it flies, and how long it can stay on station; Gates, 2010). But Boeing's aggressive bid was low enough to overcome this advantage. Of course, spending less on the tankers may allow the Air Force to spend more on other programs; additionally, depending on how often the mission scenarios on which the IFARA scores are based actually occur, there may be little difference between the two tankers with regard to operational capability.

To some degree, the Air Force's use of LPTA informed the decision by both firms to base the design of their tankers on existing aircraft in their respective fleets. The two proposed aircraft were quite different; EADS' was significantly larger than Boeing's. In fact, Boeing maintained that the Air Force went out of its way to accommodate EADS' larger design in order to foster competition, asserting that the Air Force underestimated the projected cost of jet fuel in the future, thereby lowering the life-cycle fuel costs of EADS' aircraft (Gates, 2010). In addition, the Air Force chose 10 airfields for the military infrastructure analysis that Boeing thought to be unrepresentative of typical space constraints, which lowered EADS' projected construction costs (Gates, 2010). Had the Air Force relied on a trade-off source selection process that specified requirements to a greater degree, then it may have gotten a better aircraft, one that combined the strengths of both proposals.

U.S. Navy Next Generation Enterprise Network

In 2009, the Navy began planning one of the most comprehensive transition processes to new IT and cybersecurity services ever performed, in either the public or private sectors, with its Next Generation Enterprise Network (NGen). Plans began with the Navy seeking to replace its previous network infrastructure and operations contract (Navy/Marine Corps Intranet [NMCI]), which it had awarded to Electronic Data Systems (EDS; a company later acquired by Hewlett Packard Enterprise Services) in 2000.

NMCI sought to create a single, functionally secure, enterprise-wide network in order to support connectivity between onshore activities and at-sea operations (Slabodkin, 2012). The plan includes connecting 360,000 computers to one secure intranet—the scope of this initiative is second only to the Internet itself. The challenges associated with the project were widespread; from project delays, to customer dissatisfaction with the product, to questions about long-term performance, NMCI was rife with complications (Jordan, 2007). One reason the project incurred such challenges came as a result of poorly defined technical requirements; neither EDS nor the Navy truly understood the scope of the challenge, and the technical needs were expected to be sorted out after the contract awarding. Further, both NMCI and EDS underestimated the challenge of transitioning from the legacy enterprise systems in place, and the number of systems they would actually need to address.

It was estimated that the set of five Next Generation Enterprise Networks would be operational by March 2014. Notably, the Navy projects NGen will cost about \$50 billion through 2025 and support over 800,000 users (Perera, 2011a). Despite the technical complexity and size of the project, LPTA evaluation criteria were used for the source selection.

The Navy's decision to award the NGen project on an LPTA basis is unprecedented. Never before has the Navy used an LPTA evaluation for a contract as large and technically complex as NGen. Still, NGen Program Director Capt. Shawn Hendricks argued, "It is made of the same stuff that makes up the networks that support USAA, and Proctor & Gamble and the Federal Bank and the Army and the Air Force, and there are companies out there that do it for a living, more than one" (as cited in Perera, 2011b). In Hendricks's opinion, once the technical

requirements were met, there was difficulty in proving additional distinguishing characteristics. In a set of post-congressional hearing questions for the record from November 2011, Dan Gordon, the former OFPP administrator, stated under non-specific terms that while the LPTA is not always an appropriate acquisition strategy, if government does not expect to gain additional value from a proposal that exceeds minimum technical requirements, then LPTA may be a good fit (*On the Front Lines*, 2011).

Conversely, it was noted in an editorial published in the *Federal Times* that because the NGen project *is*, in fact, a highly sophisticated and complex IT procurement, LPTA sourcing is a "failure waiting to happen" (Gansler, 2011). The GAO effectively made the same point in a 2010 report, stating that the Defense Department should only use LPTA for simple purchases, such as fuel for the Air Force, but not technical or sensitive projects (GAO, 2010). Recently, the Navy announced it would delay the previously scheduled contract award from February to May, due to the complexities of the NGen requirements, leading one to question the wisdom of using LPTA as a source selection criterion.

Personal Security Contract, U.S. Embassy in Kabul, Afghanistan

In 2007, the U.S. Department of State awarded a private security contract, on an LPTA basis, to Armor Group North America (ANGA), to protect the U.S. Embassy in Kabul, Afghanistan. The contract was valued at \$189 million (Schulman, 2009). The runner-up, Wackenhut Corp of Arlington, VA, presented a bid that was \$80 million more expensive. Over the next two years, the project was plagued with cost-overruns, mismanagement, and security failures (Weckstein & Delgado, 2012).

Since 1990, the Department of State has operated under 22 U.S.C 4864: Increased participation of United States contractors in local guard contracts abroad under diplomatic security program. The Code reads as follows.

Many United States security firms that provide local guard services abroad have been unaware that local guard contracts were available for bidding abroad and such firms have been disadvantaged as a result. ... It is the objective of this section to improve the efficiency of the local guard programs abroad administered by the Bureau of Diplomatic Security of the Department of State and to ensure maximum competition for local guard contracts abroad concerning Foreign Service buildings. (22 U.S.C. § 4864)

The Code also states that all local guard contracts for a Foreign Service building, in excess of \$250,000, must be awarded on an LPTA basis. The Commission on Wartime Contracting (CWC; 2009), an independent and bipartisan legislative commission, warned of two potential consequences of required LPTA sourcing. These included (1) the potential for systemic underbidding and (2) high-quality contractors opting not to bid as a result of anticipation of such under-bidding.

Ultimately, these fears were substantiated, as complaints poured in over a two-year period, varying from reports of insufficient staffing numbers and inadequate training, to sexual misconduct and degradation of subordinates. In fact, in one letter from the State Department to ANGA, conditions were described as undermining the "performance of the contract to such a degree that the security of the U.S. Embassy in Kabul is in jeopardy" (CWC, 2009). In its report, the CWC found mandated LPTA source selection to be inappropriate for security in war-zone embassies and urged flexibility in contract choice by way of a congressional amendment to 22 U.S.C 4864, allowing the State Department to employ full-spectrum best-value contracting.

In response to the report, Congress temporarily lifted the LPTA mandate for security contracts in Iraq, Afghanistan, and Pakistan, though this action is set to expire in March 2013 (U.S. Senate, 2013).

Private Security at U.S. Diplomatic Posts

Congress is currently considering changes to 22 U.S.C 4864, the 1990 public law mandating that the State Department accept the lowest bid when reviewing offers for private security services at U.S. diplomatic posts. The review came in part as a result of the September 2012 attack on the U.S. mission in Benghazi, Libya, which killed Ambassador Chris Stevens and three other Americans. While Marines protect the entryways to U.S. embassies, the Benghazi facility was temporary and, thus, relied on the abilities of the locally hired and contracted guards. Documents recovered from the grounds of the American mission show that the guards hired by the State Department received an hourly rate of 5.21 Libyan dinars—the equivalent of \$4 per hour (Shachtman, 2012).

Recently, Congress passed a spending bill that would extend the State Department's temporary ability to hire local guards on a trade-off basis for Afghanistan, Pakistan, and "other hostile high-risk areas" (Cornwell, 2013). Senators Robert Menendez and Bob Corker of the Foreign Relations Committee, though, are currently discussing the potential of making such changes permanent, according to aides. Further, in one of her final appearances before Congress, outgoing Secretary of State Hillary Clinton expressed her interest in seeing the law changed permanently as well (U.S. House, Committee on Foreign Affairs, 2013).

Still, building consensus in order to change the current policy will be challenging. The State Department inspector general's office believes changing the law to allow best-value trade-off discretion could ultimately cost more (Cornwell, 2013). During the past several years, roughly \$500 million has been spent annually on 30,000 local guards protecting roughly 285 U.S. diplomatic facilities worldwide, not including Iraq and Afghanistan, which are budgeted separately.

IV. Findings

The DoD can anticipate declining budgets for the next several years. Accordingly, there will be ever-increasing pressure to find cost savings, with the potential that acquisition officials will continue to rely on LPTA in order to save money. It is, therefore, imperative that officials learn to leverage LPTA effectively and only when it is appropriate. In the next sections, we provide some guiding rationales that government acquisition officials should consider in deciding upon a source selection process.

LPTA Can Be Overused

For years, industry leaders have proclaimed that the use of LPTA source selection has accelerated from judiciously prudent to recklessly frequent. As of late, the DoD and other government leaders have also begun to acknowledge the long-term challenges associated with inappropriate or questionable use of LPTA. For instance, HASC Chairman Howard Philip ("Buck") McKeon (R-Calif.) criticized the DoD's use of LPTA and warned that "[t]he committee believes that awarding contracts based on an LPTA basis should not become [the DoD's] default position" (Covington & Burling LLP, 2013). HASC recently released its FY 2014 National Defense Authorization Act (NDAA). The document directs the GAO to investigate the use of LPTA and other source selection options and to report its findings to congressional defense committees by June 2014.

The overuse of LPTA by the government carries its own set of unique risks, separate from those already discussed. If the trend toward greater reliance on LPTA continues, then there is a worry that industry will react by more closely adhering to the letter of each and every contract. As a result, government acquisition officials will have to spell out all requirements, including the smallest details—details that may have gone unspecified in the past—in order to ensure that the requirements, as envisioned by the government, are fully met.

It has already been suggested that shortages and low experience levels within the acquisition workforce have led, in part, to the greater use of LPTA. However, drafting LPTA solicitations may become increasingly complex as dissatisfied firms seek to win contracts by bidding low and providing the absolute minimum that is required, perhaps through a selective interpretation of the

contract requirements, leading to additional challenges for an already-inadequate workforce. That the word "technically" has two different meanings is rather inauspicious in this regard. Within the context of LPTA, technically means "with regard to technical quality." However, it can also mean "according to the exact meaning of something." The overuse of LPTA may lead to its greater association with the second definition, which would be unfortunate for the government, and for contractors, too, who have historically provided their government customers with their best efforts.

LPTA Reduces the Incentive to Innovate

Increased reliance on LPTA may deprive the government of the innovative services and products to which agencies are accustomed and upon which their missions rely. Lisa Mascolo, CEO of Optimos Inc., wrote, "When I hear 'acceptable,' I think adequate, good enough, not great but okay" (Mascolo, 2012). Mascolo also believes that the pursuit of lower costs means the decline of innovation. She opines that "acceptable really is the antithesis of innovative." She goes on to say, "LPTA is a hold-the-nose response to the economic climate. It doesn't challenge government, or the service provider community, to do anything other than define, expect, and deliver adequate work—and we need and deserve a lot more than adequate" (Mascolo, 2012).

Contrary to Mascolo's assertion, however, some proponents of LPTA use contend that the pressure on vendors to reduce costs will force companies to invest in technology in order to improve efficiency, while reducing labor costs. This may be true to an extent, especially with regard to low-end products and services for which LPTA source selection is already being used. However, the DoD is increasingly buying more services than products (in FY 2009 service contracts accounted for 57% of the DoD acquisition budget; Defense Science Board, 2011). As a result, replacing people with technology to cut costs is unlikely, particularly for professional services. The Percell Group notes, "The presumption that low cost evaluations will encourage investment in technology to cut labor or other capital costs by providers may work in services like lawn mowing, but the reverse is true in complex services" (The Percell Group, 2013).

Increased reliance on LPTA may also accelerate worrisome national trends. It is clear that global markets; technology proliferation; and education in science, technology, engineering and

mathematics will drive innovation in defense and other increasingly global industries. However, U.S. demographic reality (every day in America, 10,000 people age into social security) and the fact that many U.S. students have been choosing not to go into science and technology (by 2015, Brazil, China, and India will account for 88% of worldwide graduates in science, technology, engineering, and math programs (Maybury, 2013) all but guarantee that American dominance in scientific and technological innovation will continue to decline. In fact, recent estimates by Coffey and Ramberg (2012) suggest that the U.S. share of science and technology productivity will continue to decrease from 26% in 2005 to 18% in 2050. Reducing the demand for new innovation could potentially weaken America's economy and national security posture.

Aggressive Cost-Cutting Can Impact Quality and Value

Using LPTA as a source selection strategy, can enable the DoD to cut the cost of low-risk acquisitions. However, the expansion of LPTA to higher risk acquisitions not only creates controversy, but also may deprive the government of quality and value, and, in the end, may cost more.

A recent opinion article by Bob Lohfeld (2013), chief executive officer of the Lohfeld Consulting Group, details an LPTA procurement in which "rational decision-making" broke down. The DoD sought to purchase network equipment for military bases across the country. Because it was considered a relatively simple, low-risk acquisition, LPTA was used. All of the network equipment would be provided by the customer (i.e., the material costs for each vendor would be the same). Moreover, the installation fell under the purview of the Service Contract Act, where hourly wage minimums are specified by the Department of Labor, meaning that labor costs were also the same across vendors. Consequently, the range of prices offered by different vendors was very narrow. Lohfeld (2013) claims that once they viewed the proposals, the DoD's technical evaluators preferred to make the decision on the merits of non-cost factors in order to better differentiate across options. However, the technical evaluators were restricted from using their judgment because LPTA source selections rely on a pass/fail decision. As a result, the evaluators were required to choose the lowest priced option over one they believed to be a superior proposal that would provide the best value to the government.

LPTA Can Lower Industries' Investments in Human Capital

Issues related to retention, development, and employee morale affect both the vendor and government. One of the great challenges for incumbent contractors is winning contracts for follow-on work. Under the first BBP initiative, service contracts were re-competed every three years in order to ensure competition, much to the dismay of service providers who regularly met or exceeded government expectations. In April 2013, the under secretary of defense AT&L modified this guidance to provide for the indirect competitive effect of using options for additional years of work as an alternative means of creating competitive incentives to better performance. It appears, then, that the government wishes to place greater importance on the incumbent's past performance as a metric in the evaluation process. Yet, past performance is typically ignored under LPTA.

In fact, the constrained budgetary environment and the increased usage of LPTA may lead incumbent companies to cut salaries of their workforce in order to retain their vendor position against lower bids. Those costs can cut incumbent workforce salaries by 15–20% or result in staff layoffs. In an effort to unseat incumbents, some newer, less experienced, Washington-area vendors offer salaries in the mid-\$30,000s for positions that typically require post-graduate degrees (Simone, 2012). This can result in a "race to the bottom."

The budgetary restraints also affect government, with particular attention brought to the acquisition and procurement workforce. In FY 2010, there were \$536.7 billion in government contracts awarded to over 303,000 contractors. While the amount of spending has decreased by almost \$20 billion since that time, federal acquisition personnel are overworked and understaffed. In submitted testimony to Congress, Allan Burman (*Doing Business*, 2012), President of Jefferson Solutions, which provides acquisition support and management services, details the reality of challenges that face such personnel:

We find overworked and understaffed acquisition personnel. Staff are coming in on the weekends in an effort to keep up with crippling workloads; new employees are forced to hit the ground running with little to no training or mentorship; existing staff do not have the time to take away from their work to get the training, development, and refreshers they need to perform effectively; and office morale is low, causing high turnover as staff look for less stressful work at other agencies. (*Doing Business With DoD*, 2012)

This lack of support manifests itself in the form of missing documentation, increasing backlogs, and an increased use of less complicated evaluation schemes, such as LPTA, in order to circumvent the time and effort it takes to appropriately apply more appropriate evaluation practices (*Doing Business With DoD*, 2012).

V. Recommendations and Conclusion

The LPTA approach often reduces the costs of acquisitions, but the savings typically only provide short-term relief, which often comes at the expense of long-term risk mitigation, better quality, and greater innovation. LPTA can serve a useful purpose in selected federal acquisition and procurement realms (e.g., commodities). However, the fact that its usage appears be on the rise is cause for concern.

Recommendations

Some changes could provide improved usage of LPTA, without stifling innovation and risking project completion. We provide the following recommendations.

Use LPTA only when "technically acceptable" can be fully defined and the risk is low.

Consensus from industry leaders in the contracting space believe that when government asks for goods and services that are "technically acceptable," they receive just that: a product that is acceptable, but in no way superior. This is a result of a perception that delivery above "acceptable" must inherently mean more costly, but this is not necessarily true..

One method to achieve higher standards is to build them into the official solicitations; building improved metrics into the solicitations and necessitating proof of understanding through a statement of work (SOW) would provide the government with greater assurance, reduce risk, and hopefully eliminate project creep. This also helps eliminate "low-ball" offerors who may respond to an RFP by simply reiterating much of the same project description or requirements, without full conceptual understanding.

Incorporate past performance.

Past performance should be used as an evaluation factor in the LPTA process, especially when acquiring complex mission support services. However, as with LPTA requirements generally, competitors are typically rated as either "acceptable" or "unacceptable." But there is no reason that past performance cannot be assessed on a graduated scale. Whether or not such a change violates the principles of LPTA is not particularly relevant. Government agencies could still

award contracts to the lowest price, technically acceptable offeror, provided that the offeror earns a past performance confidence assessment rating of "substantial confidence." There is no reason to believe that this would lead to increased bid protests, lengthy solicitation periods, or other negative consequences associated with the use of trade-off source selection.

In drafting the past performance requirements for high-end services solicitations, the government should ensure that prior contract performance is similar in size, scope, and, especially, complexity.

Reduce potentially inappropriate use of LPTA.

DoD acquisition and procurement officials are increasingly employing LPTA source selection strategies instead of trade-offs or other selection procedures that are a better fit for complex procurements. Federal acquisitions and procurement officials more frequently are employing LPTA to more quickly shepherd contracts, make awards, and begin deploying needed goods and services. Part of the concern of increased LPTA usage stems from buyers' reduced effort in thoroughly evaluating the technical requirements. Some concern is related to insufficient personnel to evaluate appropriately, efficiently, or in a timely manner. While federal acquisition personnel numbers are up, a survey of federal government acquisition leaders shows that they fear that the combination of new, inexperienced personnel and the retirement of a significant proportion of the workforce in coming years may result in a drain on institutional knowledge unless appropriate education or training is implemented.

The expansion of the LPTA source selection method to less conventional procurements is another challenge. The FAR states that LPTA usage is limited to incidents where service requirements are "clearly definable," and "the risk of unsuccessful contract performance" is something other than "minimal." Complex and professional services are rarely "clearly definable," and the government deserves something better than acceptable in what it delivers to taxpayers. There is value in providing solutions that exceed the minimal requirements that are prescribed by contracting officers. This value comes in the form of industry-based innovation, improved accuracy in schedule planning, and most important, long-term cost reductions. Very rarely are the goals of professional services contracts clearly definable; rather, requirements

evolve over time. Accordingly, there is always some degree of risk. This is especially true in the case of national security and intelligence services.

Improve government-vendor communications.

Under FAR 15.101-2, "exchanges" may occur between the buyer and the solicitor. Such exchanges can be classified as "clarifications" or "discussions.". FAR 15.306 states, "Clarifications are limited exchanges between the government and offerors that may occur when award without discussions is contemplated." Conversely, discussions give solicitors the opportunity to address those areas of their initial proposals that do not meet the minimum requirements needed to achieve an acceptable rating. If the agency opens discussions with one offeror, it must engage in discussions with all applying offerors in the competitive range.

Yet government personnel rarely seek to engage in discussions, even during the contract's requirements development phase, fearing a bid protest. Perhaps this is understandable in light of recent high-profile cases. For example, the GAO (2008) upheld Boeing's tanker protest, in part, because the Air Force engaged in "unequal discussions." The Air Force failed to inform Boeing that it had only partially fulfilled a KPP objective related to operational utility. However, the Air Force conducted discussions with NGE regarding its successful fulfillment of the same requirement (GAO, 2008). It is important to realize that bid protests are relatively rare in government contracting: in FY 2012, contractors filed 2,475 bid protest cases with the GAO and only 570 garnered a sustain-or-deny ruling. Of those, the GAO sustained only 106 cases. Nevertheless, a greater effort must be made to improve communication between acquisition personnel and government contractors. Restricting communication out of fear of protest will, in all likelihood, lead to a greater number of "unequal discussions."

To facilitate better communication, the OFPP issued its first "Myth-Busting" memorandum in 2011 on "Addressing Misconceptions to Improve Communication with Industry during the Acquisition Process," with a second iteration in May 2012. Industry leaders saw the effort as good-natured, but ultimately not universally adopted, and falling short of substantive change.

Invest in the government acquisition workforce.

As previously discussed, there is a perception that government has come to rely more on LPTA because it is a simpler process that requires less expertise to implement and evaluate. Though this may be true on some level, only a highly trained workforce can determine if LPTA is appropriate in the first place and, if it is appropriate, how to implement it effectively. In order to develop the required acquisition workforce to make these complex judgments effectively, the DoD must enhance its recruitment processes, improve the hiring process, strive for quality not quantity, provide competitive wages, incentivize employees for improved performance, and provide continuing training and education.

Moreover, in instances where LPTA use is criticized, it is sometimes unclear whether the LPTA mechanism itself is to blame, or if the problem lies with government's inability to adequately identify and articulate the required minimum requirements. In 2007, for example, a report issued by the Commission on Army Acquisition and Program Management in Expeditionary Operations (Gansler Commission, 2007) concluded that the Army has failed to recognize the importance of the contract requirements development process (i.e., translating a commander's requirements into a statement of need that serves as the basis for a binding contract). According to the report, "Despite the critical role that contracting plays in expeditionary operations, no training of commanders on this important operational requirement occurs in the Service schools" (p. 40).

Clearly, in order to maximize the effectiveness of source selection processes, LPTA or otherwise, the DoD must invest more in the acquisition workforce.

Conclusion

Inappropriate use of lowest price technically acceptable source selection is on the rise, particularly in areas of professional services, complex services, and IT. Anecdotally, industry leaders believe government agencies are seeing the evidence of quality gaps in product and service delivery performance for contracts awarded under LPTA.

The calls for improved application of LPTA are increasing—from policymakers, government leaders, and industry leaders. As mentioned, the HASC criticized the use of LPTA in DoD procurements and stated that it should not become the default position. While the DoD promoted

the recent Better Buying Power initiatives in order to improve efficiency through affordability, some believe language in that initiative inadvertently encourages LPTA usage.

LPTA is a tool for acquisition and procurement personnel to utilize, but not exclusively. Consideration must be given to non-cost factors when appropriate, and awards should not be shoehorned into an LPTA source selection as a means of avoiding potential protest or expediting the award. Contracts with requirements that contain well-defined risks, with low chance of mission failure, are generally an appropriate use of LPTA. When the requirement is more complex or risk-based, including applications such as embassy security, technology, or intelligence, a trade-off approach likely will be more appropriate.

The DoD faces ongoing challenges associated with the current budgetary environment. While striking the right balance between mitigating requirement risks, efficiently and effectively judging offerors, and doing so in a timely manner is a difficult task, it is one that must be upheld in order to ensure mission success. LPTA source selection can support the DoD, but only if it is used judiciously.

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