

PERFORMANCE SPECS, ACQUISITION STREAMLINING, AND VALUE ENGINEERING



Kenneth E. Dulaney

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ABSTRACT

This paper discusses a new way of doing business in the future as defined by Dr. William Perry, the Secretary of Defense. The discussion includes the contractor's use of the Value Engineering Change Proposal (VECP) process for the transition from Military Specification and Standards to Performance Based Specifications; and for VE application in the future.

performance specs and wished to pass that knowledge on to others by briefing the subject matter one last time. The third then asked to be shot immediately by firing squad.

So it is with us. We are so comfortable with the system we have in place, we do not want to change. We would rather go to the firing squad than change the way we have always bought our hardware and services. We desire not to even listen to change. We no longer have a choice.

BACKGROUND

We all were glued to our sets or were extremely fortunate to have been there when the Berlin Wall began to fall. We all remember the collapse of communism and the declaration by Congress of downsizing, the peace dividend, and finally approaching an opportunity to balance our budget.

We also remember the horror of the defense contractor community when we realized what this meant to future procurement of weapon systems, a limited start of new production of weapon systems, and reduced developmental efforts due to a diminishing threat. We also remember the concern that this generated in regard to the ability of the U.S. industrial base supporting our needs during the time of conflict.

This was further enhanced when it was determined that the U.S. forces had the need to support two near-simultaneous conflicts and that the watchword for the industrial preparedness community was no longer replenishment, but was reconstitution. This meant that future wars are "come as you are" with our existing assets and reserves.

INTRODUCTION

PERFORMANCE SPECS, ACQUISITION STREAMLINING, AND VE

I am pleased to speak to you on a subject that is near and dear to everyone who is trying to let a contract or who is trying to propose on a contract, particularly for new development or first time production. I am speaking of course, of a new way of doing business as defined by Mr. Perry, the Secretary of Defense.

I am reminded of the story of the three men condemned to death. Before their death they were given one wish. The first stated he wished to eat a wonderful meal before his death. A lavish meal followed and he was then executed. The second stated he had developed great expertise in

THE PROCESS TO DETERMINE OUR
INDUSTRIAL BASE NEEDS

With an established downsizing environment and the need to preserve only those critical elements of a shrinking defense industrial base, it became apparent that defense conversion to a commercial industrial base and investment in technologies that had application to both commercial and defense requirements was necessary.

Over a two year period, Department of Defense (DoD) started and failed several efforts to determine the best approach to enhance a struggling industrial base. A Process Action Team established by Office of Strategic Development was put in place to determine how to best make changes. Their response from industry was of little doubt--radically change the method of contracting for goods and services. The best approach would be to contract in a technology and process transparent means. This meant that the new way would be to buy to performance specs only.

Why did they place this argument?

1. The defense industrial base would be equivalent to the commercial industrial base.
2. Goods and services would be reduced due to the dual processes that have been required for production facilities.
3. Commercial specs and standards have approached or exceeded military requirements over the past few years.

Who bought this argument? In a memo published in June 1994, the secretary of defense published guidance to DoD to immediately begin the process of contracting in this manner.

All the services are pursuing an approach to implement this process.

A CHRONOLOGY OF ACTIVITY

Since June 1991, there have been policy and guidance issued by DoD and the Army concerning efforts to streamline and simplify the acquisition process, and increase the commercialization of the defense industrial base. The Federal Acquisition Act of 1994 represented the most comprehensive procurement reform in the last 10 years and was reflective of the National Performance Review and the Advisory Panel on Streamlining and Codifying

Acquisition Laws (known as the Gore Report and the Section 800 Panel respectively).

The greatest facilitator of practical change to the process however, has been the Secretary of Defense Perry Memo issued on 29 June 94 entitled

Specifications and Standards-A New Way of doing Business.

The highlights of the contents of the Perry Memo are:

- a. Use Performance specifications to develop and buy our weapon systems
- b. Use commercial specs and standards within the DoD. MIL Specs and Stds should be for guidance only.
- c. The contractor should be responsible for the details, not the DoD.
- d. Use process controls to insure we are getting the product we contracted for. Do not overtest or overinspect.

THE FUTURE IS NOW

A practical discussion of the matter is: We need to make all efforts to insure that we are not forcing unique requirements on our contractors or hardware when it is not necessary, and that the hardware remain technology transparent to the degree practicable to insure that Technology Insertion efforts and Product Upgrade efforts may be accomplished in the easiest possible manner.

So what we have is the functional definition of our requirements, not the micro-control that we have so long demanded through our technical data packages and our managerial military standards and specifications. Our challenge is to do this without losing control of the process. We must still adequately define what we want and with sufficient specificity to truly meet all of our requirements.

What does all of this have to do with VE? Let's examine the issue further.

THE VE PROGRAM WE ONCE LOVED AND
KNEW

There is no question how the VE program once operated for the agency to which I belong. The hard and fast set of rules applied to a definitive approach of contracting resulted in known guidelines. Let's

look at the VE program of the U.S. Army Missile Command over the last few years. It is a look at the most successful program in DoD during that period encompassing the Field Command Award six times in a seven year period and a tremendous number of individual, team, and professional awards.

The savings are clearly most easily approached during the production through ongoing acquisition savings. The EMD, with clearly the greatest opportunity for savings, was clearly the greatest disappointment.

The contractual methodology for each program was generally set up in this manner: Concept Exploration--CPFF; Dem/Val--CPFF; EMD--CPIF; and Production--FFP. The solidity of contractual baseline is clearly greatest during the production phase and least established during the developmental efforts and transition efforts.

The point is that baseline establishment has a great influence on the confidence the acquisition community has toward VE acceptability. Their reason is clearly understandable.

A NEW VE WORLD

What will contracting look like in the future? This chart describes what we think will occur in a transition of the old method to the new method of doing business as we are clearly being directed to do. What does this mean to the world of VE? As you can see, the old solid baseline of TDPs, firm requirements, proposal and response specificity, and specific contractual languages are being replaced by performance definition, flexibility in proposal format, consideration of approach alternatives, and protection of the industrial base through commercial equivalents.

WHAT IS GOING TO HAPPEN TO VE

To address what will happen to VE as a result of implementing a new way of doing business, the U.S. Army Missile Command established a Government /Industry Symposium on Specs and Standards to examine 15 areas of acquisition and contract management. This chart shows the 16 areas that were addressed during this 2 day meeting.

The VE Workgroup consisted of a distinguished panel of Government and Contractual personnel with an exceptional level of knowledge and experience in the VE Change Proposal (VECP) process.

**GOVERNMENT/INDUSTRY
SYMPOSIUM ON SPECIFICATIONS
AND STANDARDS**

Working Groups

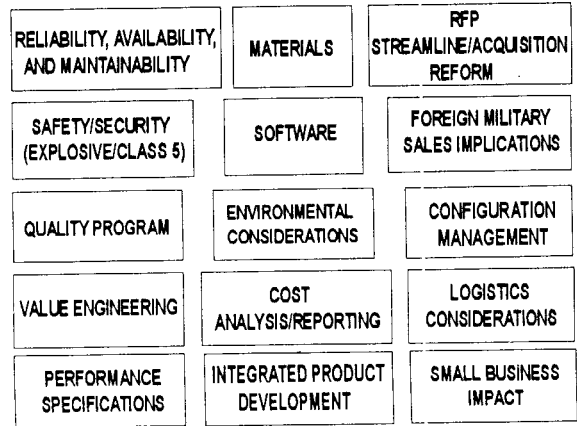


Figure 1

Following is the process used by the workgroup to develop the positions:

- a. Definition of the future environment
- b. Contractor input and recommendations
- c. Prioritization and ranking of conclusions and recommendations.

Following are the key questions that each one of the contractor discussed during the workshop

1. To what degree has your company participated in the VE program?
2. At what program phase does most of your VECP activity occur?
3. What changes have you seen in your solicitations, etc, as a result of the Perry Memo?
4. Will VECP activity change in the future? Will program phase change?
5. Define what you think will happen overall to VE in the future?
6. Why?
7. Other areas you would like to comment on.

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This resulted in active and beneficial discussion between government and contractor personnel. Seven companies briefed the first day. This resulted in areas of further discussion being developed. The Government personnel developed a comprehensive list and then had them grouped appropriate to the findings and recommendation areas. Following are these areas:

1. The workgroup concluded the importance of the use of VE for the transition to performance specifications. It also realized the need to continue reducing the cost of our weapon systems through the application of VECPs. Changing the way we do business in the future must include the application of VE, as it has always proven to be an excellent means to control cost and improve product functionality

2. The workshop participants represented all disciplines involved in the VE process. The workshop developed several issues/concerns (fig 2) for performing VE.

- Value Engineering Working Group Issues/Concerns**
- O&S - "Great Potential, but no Incentive"**
 - No Cost Settlement Method - Not effective mechanism for changes at MICOM**
 - 90 - 100% VECPs hardware related, TDP change**
 - VE critical avenue for Technology Insertion**
 - Dual Sourcing nightmare**
 - Requalification is a Inhibiting cost driver for conversion to commercial parts**
 - Color of money prohibits VE activity**
 - VE clause has been omitted from some contracts**
 - No "avenue" for VECPs with the elimination of specifications and standards (TDP)**
 - Concern that elimination of TDP could create high technical & risk cost to both government & contractor**
 - Uncertain of the meaning and contractual validity of "For Guidance Only"**
 - Belief that VE opportunity will be increased during transition period**

Figure 2

The issues/concerns were discussed for possible solutions (fig 3).

Possible Solutions To Issues/Concerns

- * Allow CO latitude to establish a baseline for VECP purposes
- * Clarify "For Guidance Only" for VE baseline identification
- * Change share ratio for O&S savings
- * Develop FAR language to enable payment of dev. costs on disapproved VECPs (Mutual consent at PVECP/CVECP time) when agreed to by PO
- * Incentivize Contractor (allow CO latitude to establish equitable sharing period and ratios of sharing)
- * Remove color of money as it relates to VE savings to allow availability of savings money for other use and for the reimbursement of Dev & Imp. cost
- * Modify FAR language that states requirement for contract change
- * Guidance on the use of "No Cost Settlement" method

Figure 3

The key issues and points are:

a. Operations and Support (O&S) cost reductions are an excellent area for VE. However, under the current guidelines there is no real incentive for the contractor to invest funds to pursue cost reductions. The O&S operations make-up 65% of the Defense Budget and cost reductions in this area should be significant. The Federal Acquisition Regulation (FAR) defines O&S cost as collateral costs which is the cost of operation, maintenance, logistic support, or Government-furnished property. It also defines collateral savings as those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

The Government shares collateral savings with the contractor, unless the head of the contracting activity has determined that the cost of calculating and tracking collateral savings will exceed the benefits to be derived. The contractor's share of collateral savings is 20 percent of the estimated savings to be realized during an average year of use but shall not

exceed (1) the contract's firm-fixed-price, target price, target cost, or estimated cost, at the time the VECP is accepted, or (2) \$100,000, whichever is greater. Noting this definition, reluctance of a contractor to invest funds for development VECPs on O&S is understandable. The agreed recommendation to incentivize contractors is to change share ratio for O&S savings. This will require a FAR change. Requirement clauses could also be used in this area if funds were available.

b. The Perry memo, recommends that the no cost settlement method be used for incorporating alternatives to MIL-Specs/Std.

It was determined by the workshop that this method will be a limited mechanism for incorporating performance specifications. This method allows the contractor to keep all savings for their instant and concurrent contract, and the government keeps all other concurrent, all future, and all collateral savings. This method is less precise than lump-sum or royalty settlement and is not renegotiable. It is good to use this method when low dollar savings are involved (\$100K or less); when there is a win-win situation for both Government and Contractor; and when there is an obligation balance (Government and Contractor entitlement equates).

c. A major concern of the group was that VECPs have been predominantly technical data package (TDP) hardware changes. The concept of buying to performance specifications will be to reduce the amount of technical data. It would appear this would significantly reduce the VE opportunities. It is still expected; however, that a substantial amount of technical data will still be incorporated into contracts based on input from acquisition personnel, thus maintaining VECP opportunities.

d. To accept a VECP there must be a change to the contract, which usually entails a drawing change. Because of missed VE opportunities, it was recommended that FAR language be modified to enable VE even if no contract change is required. The group encouraged the FAR recommendations be presented to the Electronics Industrial Association, Functional Control Group, and SAVE for submittal to the FAR council. The government agreed to accept this responsibility.

e. Contractors stated that technology insertion, obsolescence, and maintaining current technology was accomplished by VECPs. Going to performance specification could impede this practice. If an avenue

is not found to allow the continuation of these practices, it would not be feasible for contractors to continue. To remedy this problem, it was recommended that the contracting officer be given latitude to establish a baseline for VECPs.

f. Dual sourcing will be extremely difficult to conduct in a performance base contracting environment. VE will be extremely difficult to be effective. The contract officer must have substantial latitude in sharing period and ratios for this to have any opportunity.

g. The Perry memo recommended that contractors use VE to convert to commercial parts. The concern was that requalification of these parts would be an inhibiting cost driver and negate savings. No recommendation was made but the group felt that this concern should be noted; in essence, VE would not instigate this change for established weapon systems.

h. Apparently, the VE clause has been omitted from some contracts as part of the streamlining. The FAR mandates inclusion of the VE requirement clause in initial production solicitations and contracts (first and second production buys) for major system acquisition programs. MICOM has determined that they will not place requirement clauses but conceded to place the incentive clause in their contracts. It is advised that the incentive clause be placed in the new contracts. The FAR states that this voluntary approach should not in itself increase costs to the Government.

i. The "color" of money prohibits VE activity. This means that the Government often cannot accept VECPs because they don't have the correct type of money for payment. An example would be an O&S type VECP. The government savings do not materialize until the out years but payment is due on the instant contract. Most collateral type VECPs have to be paid with Operation and Maintenance Army (OMA) funds because the money saved will be OMA. Since the government cannot recoup the savings they have to fund up front, it is recommended that VE funding and savings be automatically reprogrammed to allow their utilization for the most appropriate means. This means that as money is saved through VE efforts, the funds saved may be applied to other VE unfunded projects. In addition, savings could be used to fund development and implementation costs or seed money to start a new VE project. This effort will require DoD level approval.

j. The possibility of having no baseline to identify

