

VALUE ENGINEERING REQUIREMENT FOR THE INCENTIVE VALUE ENGINEERING PROGRAM

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ABSTRACT

This paper discusses the development of a VE Statement of Work to be implemented in contracts where the voluntary VE Incentive Federal Acquisition Regulation (FAR) Clause 52.248 is used.

INTRODUCTION

The U.S. Army Communications-Electronics Command (CECOM) is a Major System Command within the Army Materiel Command (AMC). CECOM is responsible for developing, procuring, and maintaining all of the avionics and communications equipment for the Army. In Fiscal Year (FY) 93, CECOM awarded 414 new contracts which exceeded \$25,000. For contractors to participate in the VE program, they must first have the Federal Acquisition Regulation (FAR) VE clause 52.248 in their contract. CECOM regulations mandate that any contract greater than \$25,000 contain the VE incentive (voluntary) FAR clause 52.248. The clause allows the contractors to submit cost saving Value Engineering Change Proposals (VECPs) to the government.

In FY 93, only five contractors submitted VECPs. Less than two percent of the eligible contractors took advantage of the FAR provision in their contract. Since FY 83, only 63 contractors have submitted VECPs. Looking at these numbers, one could say that the VE program is a dismal failure. This is not necessarily true since CECOM has the most successful VE contractor program within AMC.

Confronted with these numbers the CECOM Value Management Office (VMO) realized that the potential loss of savings to the government and loss of additional profit to the contractor is staggering. A possible reason why contractors are not taking advantage of the VE clause is that they are not aware of it. If you look at a contract you can see how the VE clause, a Win-Win opportunity for both the government and the contractor, is buried among all of the requirements that the government imposes. For instance, CECOM contracts usually contain 14 sections containing various clauses, the FAR VE clause is incorporated in section (I) with 20 other clauses. It is no wonder that a contractor overlooks the VE clause. To focus attention on VE, thus increasing contractor participation, there must be a plan to highlight as well as define VE for government contractors.

TO USE VEPRC OR NOT TO USE VEPRC

CECOM's VMO reasoned that the VE clause could be brought to the attention of a contractor by using a contractual requirement that dictates a response from the contractor. The problem that the VMO faced, was how to mandate a contractor to respond to a VE requirement without using the VE mandatory clause. The VE mandatory clause is a government funded line item that pays a contractor for a specified level of VE effort to run a VE workshop, generate a VE plan, reports and submit potential VECPs. Following AMC guidance, at CECOM the mandatory clause is used in contracts greater than \$10,000,000. Applying the VE mandatory clause to every contract would not be feasible. A fusion of both the incentive and mandatory programs would have to be developed.

USING FAST TO IDENTIFY STATEMENT OF WORK (SOW) REQUIREMENTS

The CECOM VMO determined that a SOW, for the incentive VE clause, should be developed. To identify the SOW requirements, the VMO used the Value Analysis methodology. The problem was clarified once the Function Analysis System Technique (FAST) diagram was completed (see figure 1). Looking at figure 1, you can see that the basic function is "increase contractor awareness". Following the FAST logic: How do you "increase contractor awareness"? by having the contractor prepare a VE action plan, going in the other direction — why do you "increase contractor awareness"? so you can "increase participation" which is the Higher Order Function. Let's look at the next function, how does a "contractor prepare a VE action plan"? by answering the "request for a VE plan" going the other way, why "contractor prepares a VE action plan" — so it will "increase contractor awareness", the logic still stands. Let's look at the next function, "request VE plan". If you ask how do we "request a VE plan"? the answer would be "awarding a contract". By going the other direction; why do you "request a VE plan"? to have the "contractor prepare a VE action plan", the logic still stands. These functions make the critical path. As seen in figure 1, some of the functions have activities associated with them as seen in the blocks located below the functions. The activities are:

- Under "Contractor prepares VE action plan"
 - . Read FAR
 - . Learn benefits
- Under "Increase Contractor awareness"
 - . Familiarize yourself with FAR
 - . Train people (suggestion)

Discuss with government

Using the FAST diagram helped the VMO clarify what is actually needed from a contractor.

DEVELOPING THE SOW

The FAST diagram was instrumental in the development of the VE SOW for the incentive clause (see attachment 1). The SOW requires the contractor to prepare a VE action plan on this contract. The function of the VE action plan is to convey to the government the contractor's understanding of, and intention to participate in, a voluntary VE cost reduction process. The VE action plan should be part of the contractor's management effort and is not intended to represent any greater level of effort than one week for familiarization and preparation of the VE plan. The SOW would be inserted on all contracts containing the voluntary VE incentive FAR clause and with a contract value greater than \$100,000.

A contractor can use his own format to submit the response to the SOW. There is no formal Contractor Data Requirement List. In response to the SOW, the contractor should address the following in narrative form:

1. The contractor's corporate VE policy. If a contractor does not have a corporate VE policy a satisfactory answer is "I do not have one". This gives the CECOM VMO an opportunity to help and explain the VE benefits.
2. The contractor's plan to familiarize company executives and employees with the conditions and business benefits of the far clauses relating to VE - FAR part 48 and 52.248.
3. The contractor's plans for training executives and other personnel in VE methodology and VE contractual aspects. The contractor personnel can attend government sponsored VE training. Included in this section could be plans and/or details for either: attending a VE executive briefing seminar or requesting government VMO to present a VE executive briefing in plant; or obtaining services of a VE consultant (Certified Value Specialist), or other training means; or combinations of the above. The training is not mandatory because training is not a funded requirement;
4. The contractor's plans for including appropriate VE clauses in contracts with his subcontractors.
5. The contractor's plans for discussion of candidate VECPs and other cost saving ideas with government technical and program representatives. The contractor can contact the CECOM VMO for any assistance in submitting and marketing the VECPs.

The contractor's VE action plan should include approximate timing for these items and their relationship to the program's master plan schedule.

CONCLUSION

The SOW is used to solicit contractor participation in the VE program, unfortunately this has to be achieved by a contract requirement. It seems that the only way we can make a contractor pay attention to the VE FAR clause is to mandate it. As can be seen in the SOW, the CECOM VMO is willing to help contractors in any way possible. The VE effort is a partnership between the government and contractors, both parties have to participate to ensure a successful program.

SUMMARY

The CECOM VMO developed SOW for the incentive VE program is being implemented at CECOM and is being evaluated for implementation throughout AMC. This requirement should increase contractor participation in the VE program which will result in additional savings for the government and additional profit for the contractor. A WIN-WIN situation for both parties.

REFERENCES

FEDERAL ACQUISITION REGULATIONS (FAR)	Part 48	-	Value Engineering
Part 52	-	Solicitation Provisions and	Contract Clauses 52.248-1
Value Engineering			

Figure 1

