

UTILIZING FAR CLAUSE 48.104-3 "NO COST" SETTLEMENT APPROACH IN TODAY'S VECP ENVIRONMENT

Lewis W. Kingsbury



Mr. Lewis W. Kingsbury is a native of Bath, Maine and has worked for Bath Iron Works Corporation for 16 years. After working in the Production, Planning, and Contracts Divisions, he was promoted to Producibility/Affordability Program Manager in 1992 as part of the Engineering Division. Under the AEGIS Affordability Program, he pioneered the use of the no-cost settlement method, FAR 48.109-3. Due in part to his efforts, Bath Iron Works Corporation received the 1993 DOD Value Engineering Achievement Award as outstanding Contractor for the United States Navy.

ABSTRACT

This Paper explores the advantages and disadvantages of using the "no-cost" settlement approach when implementing VECs. This approach is especially suited to major defense contractors with large continuing procurement contracts. Cost savings ideas generated within these contracts must be adequate to make self-funding of the VECP attractive. This method eliminates a sometimes tedious process of savings negotiation between the Government and the Contractor.

INTRODUCTION

Since the collapse of the Berlin Wall and the cold war postures of the last four decades, the Department of Defense procurement planners have echoed a consistent theme of downsized budgets and an emphasis on savings. Many defense procurement programs have either been eliminated or severely curtailed in comparison with the burgeoning acquisition strategies embraced in the 1980's. Defense contractors for larger procurements whose performance schedules stretch over many years have been faced with a change in philosophy mid-stream in the procurement cycle. This dilemma has created an enormous opportunity for the use of the Value Engineering Change Proposal (VECP) process as a vehicle to incentivize contractor's to suggest ideas to save money on existing and future contracts as well as equitably share in the savings generated by these ideas.

Traditionally, the VECP process has bogged down in the negotiation of the sharing of savings generated by VECP ideas especially when discussing future and collateral savings. Contractors whose high hopes in funding the development of great ideas have become frustrated and disillusioned when dealing with what appears to be a bureaucratic morass in determining and negotiating the value of the savings generated by an idea. The government procurement activity is similarly frustrated and handicapped by a process which may depend upon reduced price change activity on programs outside of their particular contracts to "fund" the collateral savings. This "Catch 22" situation has stagnated an otherwise exceptional process of cost savings generation. The answer in some cases for defense contractors with large backlogs and long construction cycles may be utilization of FAR Clause 48.104-3 "No Cost" VECP settlement approach.

FAR Clause 48.104-3 states:

To minimize the administrative costs for both parties when there is a known continuing requirement for the unit, consideration should be given to the settlement of a VECP submitted against the VE Incentive clause of the contract at no cost to either party. Under this method of settlement the contractor would keep all of the savings on the instant contract, and all savings on its concurrent contracts. The Government would keep all savings resulting from concurrent contracts placed on other sources, savings from all future contracts and all collateral savings. Use of this method must be by mutual agreement of both parties for individual VECs.

This type of an approach eliminates any negotiation of shared savings between the Contractor

and the Government as the contractor keeps all savings developed against existing contracts while releasing all rights to savings on future contracts and savings on contracts with other contractors. The Government, for its part, places the new requirement within the baseline for the follow-on procurements with the originating contractor and reaps the savings as part of the lower overall procurement value. And to the extent that the Government chooses to implement the new requirement on contracts with other contractors, the Government may either implement via reduced price change order on existing contracts or as part of the new procurement baseline requirements.

The obvious tradeoff using the "no-cost" settlement approach from the originating contractor's point of view is an expedited VECP turn-on in exchange for the originating contractor's share in future and other contractor's savings. The "no-cost" settlement approach will not work for contractors whose motivation for developing an idea is the opportunity to reap the benefits of the idea across government-wide procurement. However, for major contractor's with large continuing procurement contracts this approach has merit. In many of these situations, the contractor is the only beneficiary of the idea as the VECP may only apply to his contracts. In this instance relatively minor changes such as material type changes which would normally be overlooked can be quickly implemented through the "no-cost" change approach.

The Department of Defense, for its part, is supporting the use of the "no-cost" settlement approach as a major incentive to contractors to bring about overall cost reductions in DOD procurements. In a June 29, 1994 memorandum from the Secretary of Defense on the subject of Specification and Standards Reform by commercializing the DOD procurement process, Secretary Perry stated:

Government contracting officers shall expedite the process of proposed alternatives to military specifications and standards and are encouraged to use the Value Engineering no-cost settlement method (permitted by FAR 48.104-3) in existing contracts.

This edict clearly establishes the DOD's position on using the "no-cost" settlement approach, when agreeable to both parties, as an equitable approach to implementing changes to specifications and standards in existing contracts.

A good example of how this approach has been

successfully used in a large DOD procurement is on the AEGIS Destroyer Shipbuilding Program. This program supplies ARLEIGH BURKE Class Destroyers for the U.S. Navy. Bath Iron Works Corporation, Ingalls' Shipbuilding Industries, and Martin Marietta are the prime contractors supplying the integrated AEGIS Weapons Systems and DDG 51 Class Ship platforms. In June of 1991, the AEGIS Program Manager initiated the AEGIS "Affordability" program to reduce overall program costs.

A memorandum to the prime contractors requested that each contractor propose cost reduction initiatives within their own area of expertise. Before this process could begin, a contractual arrangement was worked out which incentivized each contractor to seek out cost saving ideas and equitable share in the savings. From specific discussions on this subject two methods of contractual implementation emerged. First, it was agreed that "alternative" specification requirements would be implemented within the specifications under a no-cost agreement. This approach created an "either/or" specification arrangement allowing the contractors to implement at their own discretion. The second approach used the VECP FAR Clause 48.104-3 which mandated the change as a single option approach under the same "no-cost" agreement. The subtle difference between the two methods aside from the "optional" versus "mandated" specification language is that under the optional approach both the originating and non-originating activities shared in the savings to the extent that they opted to implement the change. Under FAR 48.104-3 only the originating activity shares in the savings. With the sharing ground rules established, VE ideas began to pour in.

The next step in developing the overall "affordability" process was to establish a technical review board to review each idea on a technical merit as well it's cost savings potential and provide guidance to the AEGIS Program Manager concerning technical acceptability and implementation status. This review board comprised members from each prime contractor, local Naval Supervisor of Shipbuilding, the AEGIS Ship Design Manager and specific members from the NAVSEA technical community. Each idea as developed by the originating activity was provided with a full technical description, contract level mark-ups to the current requirements, a cost benefit analysis and a schedule for implementation. Each group reviewed the member ideas and provided comment on their suitability.

After thorough analysis, the AEGIS Design Manager provided a technical position on suitability for implementation to the AEGIS Program Manager. Upon acceptance by the AEGIS Program Manager, the formal approval is documented in the monthly ACC Technical Review Board Meeting minutes. For "Alternative" specification changes, each Local Naval Supervisor of Shipbuilding group authorizes a "no cost" specification change notice in accordance with Mil Std. 480 Configuration Control Requirements. For "no cost" VECPs, the procuring contracting officer acts as the implementing authority in accordance with FAR 15.7. Average turnaround time has been 120 days from submittal to authorization. To date, over 125 affordability candidates have been authorized with a combined overall program savings in excess of 200 million dollars.

But what exactly does a "no cost" settlement mean to the Contractor. As implied in its title, no additional funds change hands at contract modification. This means that the savings accrued by the Contractor must be adequate to cover all non-recurring expenses to implement the new idea and still be attractive enough to warrant the risk. Non-recurring expenses include all drawing, software and administrative changes. In addition, retooling, training and facilities upgrades must be considered as overhead and capital investment costs. However, the most minor change can result in major cost savings with little or no design impact.

The BIW initiated change to fuel oil piping found on DDG Class ships is a good example. The ship's specifications called out schedule 10 70/30 copper nickel pipe for all piping associated with the fuel system. This alloy of pipe was very expensive and was only marginally less erosion resistant than 90/10 copper nickel pipe. The NAVSEA Tech Codes were concerned that copper leachates emanating from the copper/nickel pipe might contribute to potential clogging of the fuel nozzles in the ships gas turbine engines. However, other piping components in the fuel system were found to be 90/10 copper nickel and there has been no evidence of additional clogging due to their presence. The shipbuilders argued that standardization of the piping to 90/10 copper nickel pipe would reduce required amounts of on-hand material as well as result in reduced material cost. After much discussion, the AEGIS Design Manager determined that the marginal loss of performance with absolutely no change to the configuration of the piping system was acceptable considering the \$100,000 material savings per ship in switching

material type.

This Affordability Cost Candidate is being implemented as a "no-cost alternative" ship specification change which will allow BIW or ISI to implement the change at their own discretion and timetable.

Major VECP initiatives may also be implemented under the "no-cost" change approach. The DDG Class Destroyers were originally required to have high strength steel shell plating with a secondary layer of ballistic sheathing attached to the interior shell stiffeners to provide extra fragmentation protection to the combat system spaces. This "steel-space steel" or secondary sheathing was to be portable, bolted in place and be of a size to allow removal by two sailors. Shipboard equipment could not be mounted to the sheathing and the contractor installation costs and life cycle maintenance costs were extremely high.

This approach did however provide maximum protection with minimum weight impact. BIW suggested that the secondary ballistic sheathing be replaced with a single thicker hull shell plating or mono-block system. Although heavier in overall weight, this system offered greatly reduced construction as well as life cycle cost advantages. The AEGIS Program Manager concluded that cost and life cycle advantages outweighed the increased weight concern and implemented the ACC suggestion both as a baseline upgrade on follow-on procurements as well as a VECP on BIW's in process hulls.

Additional VE ideas implemented under the AEGIS Affordability Cost Candidate Process include using battery powered clocks in lieu of electrical and mechanical clocks, deletion of wire sprayed aluminum coatings, downsizing and rearrangement of the electronic cooling water system, deletion of ceramic coating on rigid pipe hangers and use of socket welded closure couplings in piping systems.

These representative affordability candidates are the mainstay of the AEGIS Affordability Program and introduce the type of cost/benefit/risk tradeoff discussions which have to be explored in today's cost conscious procurement environment.