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INNOVATIVE USE OF INCENTIVE CONTRACTS

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ABSTRACT

Fixed price contracts have been proclaimed as the most appropriate type of contracts for the Government to negotiate to the detriment of any consideration of the incentive type contracts. This tendency is especially true for the production contracts where clear, firm specifications are available to enable the contractor to perform the required work. In many cases, however, the use of incentive contracts might prove a valuable tool for contracting officers.

This paper will explore the use of fixed price incentive and cost plus incentive fee contracts where negotiations have become deadlocked due to substantial differences in negotiation positions between the parties involved. In these situations, there is a natural tendency to split the difference which can result in a final settlement in which the contracting officer is left feeling uncomfortable.

Several options open to both parties accompanied with graphical representations will also be presented. These options afford incentives in the form of rewards and penalties that both the Government and the contractor can accept. Also provided are practical solutions and methods for resolving the negotiation impasse, thereby enhancing a settlement to a fixed price incentive contract or an alternative incentive contract.

A case study of an actual program will be used to demonstrate the methods proposed to achieve acceptable compromises during negotiations. The case study covers an Engineering Development Program in a mature phase of development. This study includes the use of variable share lines in the same contract and offers an innovative method whereby agreements can be reached in even the most difficult negotiations during any phase of the product life cycle.

INTRODUCTION

Historically, the use of incentive contracts for Government procurement has existed since the early part of the 20th century. During the Kennedy era, use of incentive contracts became quite fashionable when the Secretary of Defense, Robert Mc-Namara, directed their use in the early 1960's. McNamara's direction reflected a concern by the Department of Defense (DoD) that the various purchasing elements were depending too heavily upon the cost plus fixed fee contracts for the purchase of weapon systems and weapon components.

As a result of the direction from the Secretary of Defense, Government procurement personnel were familiarized with incentive contracting procedures through training classes, publications on incentive contracting, and "hand's-on" experience. More

recently, emphasis has waned to such an extent that the contracting community has eased back into the relative comfort of pre-1960 contracting tradition. In fact, it is safe to say that there exists a serious lack of emphasis on incentive contracts in DoD today. Courses on incentive contracts are still offered, and employees are encouraged to avail themselves of requisite training. The incentive contract types have been retained in the Federal Acquisition Regulations (FAR) as an appropriate contract type, and there is occasional indication for the use of these contract types. Nevertheless, due to their decline in popularity and/or lack of enthusiasm and understanding on the part of Government contracting personnel, incentive contracting methods are seldom employed for production phase procurements, to the detriment, sadly, of all parties concerned.

By the time the acquisition cycle reaches full scale production of the systems and component breakout, the contractual instrument primarily selected and negotiated is the fixed price contract. The fixed price contract is the ultimate in the eyes of the contracting community because of its relative simplicity and predictability. When contracting officers use the fixed price contract, they have shifted most of the cost/price risk onto the contractor. The obvious reluctance on the part of Government contracting personnel to depart from the relative safety of this risk-shifting plateau into higher cost risks borne by the Government in other contract types is much in evidence. Mere mention in passing that an incentive contract might aid in overcoming negotiation deadlocks is usually met with negativism and rejection, and the advocate quickly assumes the role of "persona non grata." The matter should not be allowed to drop here, however, as there are potentially too many advantages to be gained by more serious consideration of incentive-type contracts.

The reason most contract specialists tend to shy away from the use of the incentive contracts should be examined more closely. Human nature tends to resist anything that is not performed habitually or involves sailing in uncharted waters. These psychological aspects, combined with inexperience and lack of training, are the key inhibiting factors which undermine attempts to explore new vistas of contracting methodology.

COMMON USES OF INCENTIVE CONTRACTS

Incentive contracts are commonly used, with a great deal of success, in latter stages of the research and development phases of system and product development. Initially, in this latter phase of R&D, a cost plus incentive fee contract is used. In large system procurements, multiple incentives are employed to promote technical advances coupled with cost restraints. In these multiple incentive arrangements, the negotiator develops, with the aid of the technical people, a value statement. The value statement serves as a yardstick by which the value of certain technical elements are established in a cost trade-off arrangement by "goal posting." In such arrangements, miles per hour, distance between fueling, and/or mean time between failures are scaled to dollars of cost and program objectives. In this manner, the contractor cannot achieve a greater profit/fee for higher performance and overrun cost in attaining that higher level of performance than was originally intended. What is supposed to happen in multiple incentive arrangements is that higher cost targets are subtracted in a shared dollar ratio from the amount of fee earned in direct relationship to the increased costs for higher-level performance. This tricky area is where the balancing of the various cost and performance bogies must come into play.

The contracts that we will discuss will concentrate on cost objectives. In later stages, the fixed price incentive may be employed. This phase is followed by the fixed price contract phase. The fixed price contract is considered the ultimate of incentive contracts. For every dollar that is saved, the contractor benefits 100 percent and thus obtains a dollar-for-dollar increase in profit if he underruns the original

negotiated cost target. In the case of a fixed price contract, this cost target amounts to the sum total of the direct and indirect costs that the parties agree upon to be reasonable for the performance of work on the contract.

What happens when the Government and the contractor cannot agree on the exact dollars which should constitute the cost base of the fixed price contract? In many cases, the negotiator is pressured to settle and, consequently, there is often a splitting of the difference between the Government's and contractor's positions at that point in the negotiations. If the Government's position in a negotiation is \$100,000 and the contractor's is \$110,000, a reasonable settlement might be to establish the cost base at \$105,000. In a fixed price contract, the result might be a \$5,000 windfall for the contractor. If the contractor is able to meet the contract requirement for \$98,000 and the contract settlement was \$105,000 plus a profit of 10 percent, what would be the profit realized? The contractor would have realized \$7,000 from the cost savings over the settled price plus the negotiated \$10,500 profit (in this case 10 percent) or a grand total of \$17,500 actual profit for the company. This situation would amount to 17.5 percent profit on the original Government position of \$100,000.

How could the Government negotiator have better served the public's interest in this case? The use of an incentive contract in this situation might well be the answer.

WEANING NEGOTIATORS FROM EXCLUSIVE USE OF FIXED PRICE CONTRACTS

There is considerable pressure from different sources applied to contracting officers of the Government to award fixed price contracts. This pressure stems from the certainty that a specific price will result through assumption by the contractor of all the cost risks for the performance of work; the Government liability is limited to paying only the dollars identified as the fixed price. As indicated above, in a poor settlement, the Government could end up paying the contractor more profit than was ever anticipated during the negotiation phase. This may come about not so much by the contractor managing better but rather by his astute negotiations before award of the contract. Government contracting personnel need to be made aware of and develop expertise in using different types of contracts that are available to them through the Federal Acquisition Regulations. This use of incentive contracts based on the circumstances and enhancement of contracting skills by Government personnel should be stressed and encouraged so that the Government's interests are better served and optimized.

Should all this rhetoric be interpreted to mean that we should refrain from using the cost plus fixed fee contracts? The answer is not at all, but ONLY in those cases where the cost plus fixed fee contract is clearly the most appropriate. It can be employed advantageously in settling of letter contracts or ceiling priced delivery orders when negotiations have reached a stalemate and most of the work has already been performed by the contractor. Moreover, consideration should be given to cost plus incentive fee contracts, particularly for production contracts where wide differences exist and the Government is not wavering on its cost base position. One of the major concerns is to ensure that the Government does not pay more for the items to be purchased or work to be done than is reasonable based upon the cost and technical evaluation performed. How can the parties be protected when both have reasonable doubts on the exact amount needed for contract performance? A decision to make use of the appropriate contract type is the solution. An explanation follows of one method that can be employed to structure an incentive contract which will alleviate these doubts. Let's analyze in detail the normal cost plus incentive fee method for use in reaching settlements in difficult situations.

CASE STUDY #1

Let's examine a hypothetical case in which the Government and the contractor are negotiating for purchase of, for example, 5,000 Special Purpose Rifles. Assume that the contractor has submitted a cost proposal of \$302.50 per rifle. The cost breakdown includes the following:

\$75.00 Material Costs 25.00 Material Overhead	\$100.00
\$75.00 Direct Labor 75.00 Overhead	150.00
\$25.00 General and Administrative Expense	25.00
\$27.50 Profit	27.50 \$302.50

Total Fixed Price Contract \$1,512,500.00

During the negotiations, the Government takes exception to the contractor's proposal in material costs, direct labor, and overhead accounts. The contractor has projected sales of \$10,000,000 on which he had developed his overhead cost charges allocated to various contract proposals. The Government looks at all of the sales projections and notes the contractor has proposals that were submitted to several Government purchasing offices that were not included in establishing overhead charges. The Government determines that total sales, based upon anticipated award on one or more pending Government contracts, would be \$15,000,000. This would result in a dilution of the contractor's overhead and G&A accounts by an additional \$5,000,000 of sales (50 percent increase in sales). The impact of this dilution would be \$141,700 reduction on the cost line for the contract being negotiated. The contractor would be hard pressed to accept this kind of projection unless he is absolutely certain of award of the contract which the Government had included in the overhead projections. Therefore, there would be a substantial disagreement as to overhead costs.

How can this dilemma be resolved? The contractor could be difficult and hold out for his price. He might agree to some material costs and direct labor changes based upon another review of his estimates for the job. If this were the first time the contractor is to perform the work, then he might be reluctant to revise his estimates for the cost base. If the item has been produced by some other firm, there is always the possibility of competition between the two firms.

In this particular case, let us say that the contractor is sole source and we are dealing with the second production procurement. The contractor has had some experience with the items, direct labor, and material. The difficulties in negotiation would focus on the area of overhead absorption. In this situation, how can the best interests of both parties be served? The use of an incentive contract will fill this bill. When negotiations bog down, the Government might propose that a cost plus incentive fee contract be utilized. The target cost of that contract could be the Government's cost position. This would protect the Government from the contractor's making a windfall if he receives award on all of the contracts for which he is under consideration. This contract would also protect the contractor if he does not receive those pending awards or only part of them.

Let's graph the proposed numbers (see figure 1). As can readily be seen, the

proposed contract will provide the contractor an opportunity to share in any cost underrun from the Government position on a 50/50 basis. On an overrun, the slope will be 80/20 to the contractor's position and then 50/50 for the balance. The contractor's sharing of the cost would also be tempered by a higher profit/fee at the target position.

CASE STUDY #2

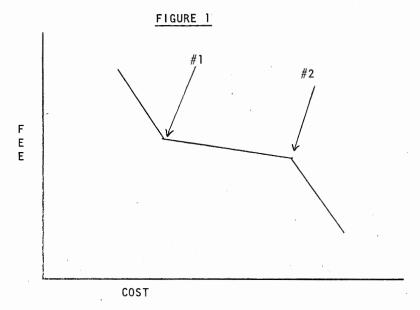
Looking at the same situation as before, but with a slightly different twist, assume the contractor will not settle at the Government's target cost. Let us examine what can be done in this case. The Government does not want to split the difference because it might establish a precedent.

One solution which comes to mind is a plateau of the fee/profit line in a cost plus incentive fee arrangement. The Government and the contractor are \$141,700 apart in the example outlined above. What we actually have is a cost plus fixed fee contract on the cost line between the contractor and the Government's position. Before and after that point, we can have the steep sharing arrangement which would stimulate the contractor to manage the cost expenditures or to save costs and reap additional benefits. Figure 2 graphically depicts this arrangement. As we can see, this is a very straightforward, simple solution to the dilemma.

Simply stated, the Government might also want to consider the use of a fixed price incentive contract instead of the cost plus incentive fee contract. The sharing arrangement and the ceiling price can be worked out to provide the Government with the measure of protection the contracting activity requires and at the same time assure the contractor the degree of security he needs before he will accept the terms of the contract.

RECOMMENDATIONS

It is strongly recommended that functional contracting offices aggressively promote the fixed price incentive contracting method to obtain agreements in difficult negotiations. Use of fixed price incentive contracts with shallow slopes of 95/5 or 90/10 should be seriously considered with the aim of reaching an agreement rather than splitting the difference or yielding to a position on costs that may not be in the best interest of the Government. The key element to bear in mind is that careful consideration is given the use of these incentive contracts. The benefits that can be derived far outweigh any objections or other considerations.



The slope between #1 and #2 indicates the 80/20 sharing of cost by the parties. The contractor shares 20 cents on each added dollar of cost between point #1 and #2. Beyond point #2 the contractor's fee is reduced by 50 cents on each added dollar of cost he experiences. Cost savings to the left of #1 provide the contractor with 50 cents added fee for each dollar saved. In Figure 1 point #1 is \$1,166,666 estimated cost and \$116,666 target fee. Point #2 is \$1,375,000 cost and \$88,326 fee.

In Figure 2 below there is no slope between #1 and #2. On that line the fee does not change when the cost rises between point #1 and #2. There is what can be classified as a Cost Plus Fixed Fee contract on that plateau. When cost exceeds point #2 the contractor must share cost from his fee pool at the rate of 50 cents per dollar and if the contractor can save cost to the left of point #1 on the graph his fee will increase at the rate of 50 cents per dollar saved. The fee is \$116,666 at any point on the line between \$1,166,666 and \$1,375,000 of cost and only changes when cost exceeds \$1,375,000 or underruns cost of \$1,166,666.

