

## CONTRACTING FOR RESEARCH AND DEVELOPMENT

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### ABSTRACT

A brief and simple outline of contracting procedures and requirements for the acquisition of the Navy's needs will be presented. Examples of the roles of Engineers/Scientists in the Contracting process will be given.

The purpose of the Department of Defense's acquisition mission is to develop and supply the weapons, services and supplies required to meet the nation's defense needs. Although working under the same laws and basic regulation, the methods of achieving this goal of defense vary among the services, even among different commands within each service, and are constantly changing. Because of the variations between agencies, to explain the process in detail would almost be impossible for one person. Therefore, I propose to present a general overview of the acquisition process, particularly as it pertains to the contracting function, citing the methods used by my Command as specific examples.

The basic law governing defense contracting is Title 10, Chapter 137, of the U.S. Code known as the Procurement Act. The Act provides for two methods of contracting - formal advertising and negotiation. Formal advertising must be used except when it is impracticable and the acquisition falls within certain categories, established in the Act. The categories, or exceptions, provide the authority to negotiate. The Act also provides procedures for formal advertising and sets forth specific restrictions and qualifications as to the types of contracts that may be used. Formal advertising means acquisition by competitive bids and awards. Negotiation means acquisition made without the use of formal advertising. In negotiation, the Government asks prospective contractors to submit offers and to support them with statements of estimated cost or other evidence of reasonable price and data covering technical and management plans and capabilities to perform the required effort. Negotiation provides the flexibility to discuss the costs, technical and management effort proposed. This flexibility is not permitted under a formally advertised acquisition.

The Defense Acquisition Regulation, the DAR, is jointly issued by the Military Departments to provide uniform policies for carrying out the provisions of the Act and to establish policies for contracting areas not covered by it. In addition, the Defense Acquisition Regulation provides direction and guidance for complying with pertinent Statutes and Executive Orders. It covers policies, practices, and procedures for formal advertising and negotiation. It also covers other contracting topics such as pricing, type of contracts, contract clauses and contract cost principles.

Departmental regulations supplement the Defense Acquisition Regulation. The Army issues the Army Defense Acquisition Regulation Supplement (A DAR Sup.); the Navy, the Navy Defense Acquisition Regulation Supplement (N DAR Sup); the Air Force, the Air Force Defense Acquisition Regulation Supplement (AF DAR Sup). These regulations parallel the Defense Acquisition Regulation in outline and format providing subordinate policy and procedural guidance.

Some Department of Defense contracting policies and procedures are not suitable for inclusion in the Defense Acquisition Regulation. Others must be distributed faster than the periodic revisions of the Defense Acquisition Regulation permit. These situations are handled by issuing special instructions, directives, or circulars. The Military Departments also issue their own publications with respect to their acquisitions. Thus in the Navy, we have Secretary of the Navy (SECNAV); Navy Operations (OPNAV); Naval Material (NAVMAT); and Systems Commands (SYSCOM), in my case Naval Electronic Systems Command (NAVELEX) publications. These publications must not contradict the applicable higher level regulations.

The acquisition process may be broken down into three phases: (i) the pre-solicitation phase; (ii) the solicitation - award phase and, (iii) the post award contract administration phase.

The pre-solicitation phase begins with acquisition planning between the initiators of the acquisition request, contracting and other personnel .

The acquisition plan should cover such areas as:

- (i) the contracting lead-time;
- (ii) the method of contracting - formal advertising or negotiation;

- (iii) the terms and conditions - specifications, work descriptions, quantities, delivery dates and terms, contract type, reports required, data requirements, small business considerations, etc.;
- (iv) the handling of proposals - supporting information required, evaluation criteria and closing date.

The pre-solicitation stage ends with the preparation of the solicitation package, the invitation for bids in the case of formal advertising or the request for proposal in the case of negotiation. The solicitation package includes all documents and information needed to prepare a bid or proposal or refers the prospective offeror to where he can obtain the needed documents or information. The package also sets forth the terms and conditions of the proposed contract and the rules for submission of bids or proposals. Requests for proposals also include the evaluation criteria, those specific areas of the proposal that will be evaluated and their relative importance.

The solicitation-award phase of the acquisition begins with the issuance of the solicitation package and the publication of a summary of the solicitation in the Commerce Business Daily.

Firms interested in the acquisition submit bids or proposals in response to the solicitation. In advertised acquisitions the award is made to the lowest responsive, responsible bidder. A responsible bidder is one who has (i) adequate financial resources or the ability to obtain such resources for the performance of the proposed contract, (ii) be able to comply with the delivery or performance schedule, (iii) have a satisfactory record of performance, (iv) have a satisfactory record of integrity, and (v) be otherwise qualified to receive an award under applicable law and regulation.

In many ways, the negotiation process parallels formal advertising. Competition is obtained to the maximum extent practicable. Proposals are required by specified closing dates and an award may be made without discussion to a responsible offeror. In negotiation, award is made to the firm whose offer is most advantageous to the Government - price and/or other factors considered. The best price and/or pricing arrangement is often the basis for determining which of several responsible firms will receive the award. But negotiation is flexible enough so that factors other than price may be considered - to the extent of their importance. When technical competence is of prime importance for example, as in research, it and the technical proposal are the main criteria for award.

During the post-award administration phase of the acquisition process, the Government's relationship with the successful offeror is a contractual one. Therefore, the contract is the prime reference for all matters concerning performance.

Administrative responsibilities vary with the type and complexity of the acquisition. On even the simplest contract, the item to be delivered must be accepted or rejected. On a contract of any complexity, the Government acquisition team has many administrative duties. One of them is progress surveillance to make sure that the work is being carried out successfully as well as monitoring the performance for compliance with the terms and conditions of the contract.

The Government often takes an active part in contract performance. It may provide Government-furnished material or equipment, approve designs; participate in periodic program reviews, test, evaluate, inspect and accept supplies or services and provide technical information. These are some of the actions required of the Government which may condition contract performance. Delays or omissions on the part of the Government may excuse the contractor from his own related performance obligations.

The Department of Defense acquisition team is made up of specialists in many fields. It includes contracting officers, engineers, auditors, lawyers, price and cost analysts, administrative contracting officers and their technical staff and negotiators. The contracting officer has the authority and basic responsibility on all contractual matters. Many persons who do not have contracting officer authority may be delegated to act as his representative. Particularly on complex contracts, the key person delegated to act as the Contracting Officer's representative is usually the engineer. Let us briefly examine the role of the engineer in the acquisition process by following him in his capacity as acquisition manager, through a simplified version of an acquisition from planning through award of a contract in NAVELEX.

Timing is a vital part of acquisition planning. Responsibility for the timing rests with the Acquisition Engineer. Prompt coordination with interested groups within the contracting activity will surface potential problems. Upon conceiving and justifying a required need, the acquisition manager calls for an Acquisition Planning Conference (APC) to which he/she invites those parties who will constitute the Acquisition Team. At this conference, the team members plan the acquisition. The following topics are discussed:

1. The requirement and the estimated cost/price
2. Earliest required delivery date
3. Specification
  - a. type
  - b. status
4. Statement of Work
5. Approval for Service Use
6. Planned Method of Acquisition
  - a. advertised
  - b. negotiated
    - i. competitive
    - ii. sole source
  - c. type of contract
    - i. fixed price
    - ii. cost reimbursement
  - d. multi-year
  - e. options
7. Security Requirements (DD Form 254)
8. Requirement for an Acquisition Plan
9. Small and Disadvantaged Business Consideration
10. Small Business Set-Aside Consideration
11. Acquisition Schedule

For our purpose today, let us presume that the planning conference has determined that the proposed acquisition will be for research

and development and will cost in excess of \$100,000.00 and that the method of acquisition will be by negotiated, competitive, cost reimbursement contract.

At the conclusion of the Acquisition Planning Conference, the Acquisition Engineer prepares the specifications/statement of work, the integrated logistics support requirements and the data requirements and circulates them to the appropriate activities, in accordance with regulations, for review and approval. Concurrently, he/she meets with the acquisition team to prepare the formal Acquisition Plan required by DAR 1-2100. This plan sets forth the background of and justification for the requirement and the basic acquisition strategy. The Acquisition Plan and later, The Determination and Findings (D&F) and Justification for Authority to Negotiate (JAN) is forwarded to the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics) via Chief of Naval Material and Assistant Secretary of the Navy (Research and Systems). When the D&F is signed by the Assistant Secretary of the Navy (Manpower, Reserve Affairs and Logistics), the Contracting Officer has the needed authority to negotiate for a contract. As the activity associated with preparing the acquisition winds down, the Acquisition Engineer starts to prepare a Source Selection Plan. This plan is crucially important to the success of the acquisition effort and must be carefully prepared and strictly followed. This plan establishes specific milestones for accomplishing the acquisition and specific dates for each milestone; the Source Selection Authority (SSA); the Contract Award Review Panel (CARP) and the Technical Evaluation Board (TEB). The plan also establishes the instructions to offerors. These instructions appear verbatim in the solicitation and tell offerors which areas of a proposal most interest the Government and therefore the areas in which they should expend most of their effort. This normally results in cost savings to offerors and better proposals to the Government. The evaluation criteria is established in the plan and reproduced verbatim in the solicitation. The criteria lists in descending order of relative importance the specific elements to be evaluated and used in ranking proposals. Numerical weights are assigned to the criteria in accordance with the importance of each criterion. Criteria weights are not published by NAVELEX but are put in a sealed envelope and kept by the Contracting Officer in a secure place.

Sometime after issuing the Request for Proposal (RFP), usually thirty (30) days, a pre-proposal conference is held in which prospective offeror's ask questions, the answers to which will help them submit better proposals. Often the questions asked cannot be answered during the conference as they require research by the Acquisition Engineer. All questions and answers are reduced to writing and issued

to all recipients of the solicitation as an amendment.

On the closing date of the solicitation, the Contracting Officer removes all cost and pricing data and furnishes the balance of the proposal to the Technical Evaluation Board for technical evaluation of the proposal. The cost and pricing data is removed so as not to bias the technical evaluation by cost considerations. When the Technical Evaluation Board completes its evaluation and ranking of the offers, it prepares its report in accordance with the instructions in the source selection plan and submits it to the Contract Award Review Panel, usually chaired by the Acquisition Engineer. The Contract Award Review Panel combines the technical ranking with the cost ranking submitted by the Contracting Officer and develops a combined preliminary ranking. To this ranking, the Contract Award Review Panel applies the criteria weights furnished by the Contracting Officer and develops a final ranking. The Contract Award Review Panel prepares a report of its finding and submits it with a recommendation of a competitive range and those offers which fall within that range. The determination as to which offerors fall within the competitive range is made by the Contracting Officer. If there is doubt whether a proposal falls within the competitive range, that doubt is resolved by including it. Discussions, written or oral, are held with all offerors that are within the competitive range. They are advised of the deficiencies in their proposals and are given a reasonable opportunity to correct or resolve the deficiencies and to submit revisions to their proposals that may result from the discussions. At the conclusion of the discussions, the Technical Evaluation Board and the Contract Award Review Panel evaluate the revised proposals and rerank them. As a result, the number of proposals falling within the competitive range may be reduced. At this point, the Contracting Officer establishes a common cut-off date for discussions and so notifies the offerors still within the competitive range and offers them reasonable opportunity to submit "best-and-final" offers. Upon receipt, the "best-and-final" offers are reviewed by the Contract Award Review Panel which then recommends to the Contracting Officer a single offeror for award of the contract. The final determination for award is the responsibility of the Contracting Officer. Upon selection of a successful offeror, a contract is drafted. The drafted contract is reviewed by the Acquisition Engineer and legal counsel for technical and legal sufficiency and the Comptroller is requested to certify the availability of funds in the amount needed to finance the contract. The unsuccessful offerors are notified and the proposed contract is mailed to the successful offeror for review and signature. After signing two copies of the proposed contract, the successful offeror returns them to the Contracting Officer for execution.

After the contract is executed and issued, the Acquisition Engineer with assistance from the Contract Administration Office works with the Contracting Officer in administering the contract. He assumes the responsibility for technical performance under the contract, recommending changes to the specifications, statement of work, delivery schedules, etc.

The brief description of the acquisition process presented does not depict the time it takes to enter into a contract for a requirement. The process may take years. I know of one case where the requirement was conceived two years before contracting action was initiated. The process, once an acquisition request is received by the Contracting Officer, may take from one to seven months (see figure 1). However, on large, complex acquisitions, it may take a year to enter into a contract. Federal acquisition is no longer simply getting the right material to the right place at the right time for the right price. The federal acquisition contract is one of the most effective tools for implementing federal policy. Unlike statutory requirements which penalize for non-compliance, a contractual requirement rewards for compliance. Not only is the cost of compliance reimbursed, but profit is also paid. The Government is using federal acquisition contracts more and more to implement policy, i.e. increased EEO requirements, the small business program, the labor surplus program and requirements for compliance with the Presidential wage guidelines to name a few of the better known policies.

What does all this mean to the Acquisition Engineer? It means that each year new policies come into effect and it takes longer to get his requirements under contract. He must therefore assemble his Acquisition Team, particularly the Contracting Officer and begin his acquisition planning early in his program so as to better serve his clients.



PROCUREMENT LEAD TIME CHART

(From Time Received By The Contracting Officer To Award)

PHASE	MILESTONE	CONTRACT TYPE													
		IFB		TWO STEP		NEGOT. UNDER 10K		NEGOT. 10K - 100K		NEGOT. 100K TO 1 M		NEGOT. OVER 1 M			
		TARGET	IDEAL	TARGET	IDEAL	TARGET	IDEAL	TARGET	IDEAL	TARGET	IDEAL	TARGET	IDEAL		
I PRE-SOLIC.	PRE-SOLIC. COMPLETE	3	3	3	3	-	-	2	3	2	3	3	4	4	4
	SOLIC. MAILED	2		2		2				1		1		2	
II SOLIC.	OFFER/PROPOSAL RECEIVED	5	4	5	4	3	2	3	3	3	3	4	4	5	5
III EVAL.	ADVICE RECEIVED	3	3	8	8	3	3	1	1	3	3	4	6	5	7
	EVAL. COMPLETE	1		2		1				1		1		2	
IV NEGO.	PRE-NEG. CLEARANCE COMPLETE	1	-	-	-	-	-	-	-	1	2	2	3	2	4
	POST NEG. CLEARANCE COMPLETE	-		-		-				-		1		2	
V AWARD	SENT TO CONTRACTOR	2	1	-	-	-	-	2	1	2	3	2	3	2	3
	EXECUTED			-		-				2		1		1	
	ALL ACTIONS COMPLETE	-	-	-	-	-	-	-	-	2	3	2	3	2	3
		-		-		-				-		2		2	
	WEEKS	17	11	20	15	12	7	8	5	18	14	27	20	30	23
	DAYS	119	77	140	105	84	49	56	35	126	98	189	140	210	161

FIGURE 1

