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GUIDELINES FOR SURVEY OF THE REASONABLENESS
OF SUBCONTRACT PRICES INCLUDED
IN PRIME CONTRACT PRICES

CODE 950450

Other
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PROCUREMENT AND SYSTEMS ACQUISITION DIVISION
GENERAL PROCUREMENT SUBDIVISION

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OF SUBCONTRACT PRICES INCLUDED
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OBJECTIVE

The objective of this survey is to determine, for those subcontracts selected, whether sufficient bases exist to warrant performing a detailed review of the reasonableness of the prices negotiated.

BACKGROUND

With the enactment of Public Law 87-653, Department of Defense (DOD) contracting officers were required to obtain certified cost or pricing data from prime contractors in support of their noncompetitive price proposals prior to contract award. Similar data is required of prospective subcontractors in support of their noncompetitive proposals to prime contractors prior to subcontract award. Since most subcontracts are usually entered into after prime contract award, subcontractor data was not required to be provided to DOD contracting officials for consideration in the negotiation of the prime contract.

DOD remedied this situation through the issuance of Defense Procurement Circular 74 on October 10, 1969. It provided that effective January 1, 1970, prime contractors be required to obtain and submit to DOD contracting officials, subcontractor cost or pricing data in support of estimates included in the prime contractor's proposal that are \$1 million

or more or both more than \$100,000 and more than 10 percent of the prime contractor's proposed price. The prime contractor is required to certify to the currency, completeness, and accuracy of the subcontractor data. This requirement was incorporated in the Armed Services Procurement Regulation (ASPR) 3-807.3(b)(1) on April 30, 1971.

The subcontractor data submission requirement imposed on DOD officials is intended to improve the pricing of prime contracts through the elimination of windfall profits experienced by contractors who frequently obtained lower prices than subcontract estimates subsequent to prime contract negotiations. Additionally, the subcontractor cost or pricing data submission provides DOD contracting officers the opportunity to obtain analyses of the data as a basis for determining the reasonableness of the material cost estimates in the prime contractor's proposal.

ASPR 3-807.2(c) and .3 provide that some form of cost analysis (financial audit and technical evaluation) of the contractor's proposal be performed whenever cost or pricing data are required to be submitted. Financial audits and technical evaluations are reviews of the contractor's submitted cost or pricing data and of the judgmental factors applied in projecting from that data to the estimated costs. They provide advice to the contracting officer about the degree to which proposed costs are representative of future performance, assuming reasonable economy and efficiency.

The contracting officer is responsible for negotiating a fair and reasonable price (ASPR 3-801.2). The degree to which adequate cost analyses and technical evaluations are performed and the extent to which such assessments are relied upon by the contracting officer, significantly influence the contract price.

The Law also provides for a reduction in the prime contract price when the negotiated contract price to the Government was increased by any significant sums because the contractor furnished cost or pricing data which was not complete, accurate, and current as certified in the contractor's certificate of current cost or pricing data (ASPR 7-104.29 Price Reduction for Defective Cost or Pricing Data). The prime contractor's certification to the currency, completeness, and accuracy of the subcontractor cost or pricing data at prime contract negotiations provides a sound basis for DOD actions against the contractor if it is subsequently determined that the subcontractor data was defective.

We want to emphasize, however, that the identification of potential defective pricing is only one part of this survey. We also want to pursue instances where we believe the price may have been overstated because of actions taken or not taken by the prime contractor, contracting officer or members of his team, such as DCAA or the technical evaluators.

SUBCONTRACT SELECTION

The subcontracts to be surveyed were selected from major prime contracts surveyed previously under code 950321. (See

attachment for a listing of subcontracts to be surveyed.) We reported several million dollars of overpricing in the prime contracts reviewed under code 950321. Indicative of past reviews, the prime contract overpricing occurred primarily because (1) contracting officers did not obtain adequate cost or pricing data along with prime contractors' proposal submissions, (2) adequate cost and technical evaluations of the proposal were not performed and/or (3) negotiations with the contractor were ineffective. In addition to the overpricing in prime contracts, past reviews have shown that subcontracts have a propensity for over and/or defective pricing primarily because (1) of claimed ignorance by the subcontractor of the requirements of ASPR 8-307.3, (2) the prime contractor failed in his responsibility to update the prospective subcontractor's data to the "Certificate" date from the time of the original submission by the subcontractor, and (3) the prime contractor did not perform an adequate evaluation of the subcontractor's proposal.

LOCATION OF WORK

The survey work will primarily be performed at the subcontractors' plants. However, it is expected that the need for certain information will require visits to local (within the GAO region) Defense Contract Audit Agency (DCAA) activities and/or Defense Contract Administration Services (DCAS) activities. Also, limited information may be required from the prime

contractor procurement office. (The prime contract, prime contract number, and prime contractor locations are shown in the attachment.) If this occurs, and the prime contractor and/or procurement office is located outside the GAO region, please notify the team leader if a formal assist audit will be necessary.

AUDIT GUIDELINES

Key indicators in achieving the stated objectives are as follows:

- A. Significant cost underruns in the performance of subcontract effort.
- B. Inadequate identification of basis for estimates in subcontractor proposal.
- C. Updated subcontractor proposals not obtained or evaluated where warranted.
- D. Significant variations between the subcontract price and amount included in the prime contract price.
- E. Inadequate Government or prime contractor cost and technical evaluation of subcontract estimate or ineffective use of this information.

A. SIGNIFICANT COST UNDERRUNS IN THE PERFORMANCE OF SUBCONTRACT EFFORT

1. Where the subcontract effort is complete or substantially complete, compare the cost of performance with the negotiated cost for the subcontract. Consider significant any underruns in excess of 10 percent or \$50,000 of the subcontractor's ^{negotiated} ~~proposed~~ cost. Identify the cost elements in which the underrun exists. Include all priced changes to the original subcontract in determining the negotiated costs. If costs were not negotiated

by element, estimates will have to be made on the basis of proposed costs and profit and the price negotiated.

2. If the subcontract effort is not substantially complete, obtain an estimate to complete. Where this data is not available, estimate the cost of performance from the subcontractor's accounting system using (1) the number of items completed or delivered, (2) cost of sales or cost input, and (3) work in process inventory.

3. Where the subcontractor does not record costs by contract, but rather uses a part cost or product line cost system not compatible with the end items being produced under the subcontract, make a selected test at whatever costing level is comparable with the subcontractor's cost proposal. For example, compare the bill of material prices for selected high value items with actual purchase history. Compare the average labor hours experienced in the production of major assemblies with the amounts proposed. Plant-wide or departmental labor and indirect expense rates experienced during the production period should be compared with rates proposed by the subcontractor.

4. Correlate the cost of performance results with other potential weaknesses identified during the survey. For example, significant underruns in labor hours may be associated with an inadequate preaward audit or technical evaluations of proposed labor hours. Also, the estimating bases for labor hours may not have been adequately identified in the cost proposal.

5. If the time permits, perform a detailed comparison of the proposed and actual quantities (units, hours etc.) and cost

of significant component items (such as individual direct material purchases, certain direct labor categories or functions, etc.) of the direct cost elements. This can be done to find possible defective pricing which may not otherwise be apparent and/or to decrease or increase the probability of defective pricing when significant underruns exist in the cost element totals.

It should be noted that the existence of a significant cost overrun(s) does not preclude the possibility of significant defective pricing. Defective pricing pertains to the contractor's nondisclosure of all current, accurate and complete cost or pricing data as of the date that the negotiated price was agreed to.

B. INADEQUATE IDENTIFICATION OF BASIS FOR ESTIMATES IN SUBCONTRACTOR PROPOSALS

1. For the following cost elements, the appropriate column should be noted as to whether cost or pricing data was submitted or identified and whether it was complete or incomplete. The answers should consider all data submitted to the prime contractor or the contracting officer rather than just the initial submission. Where more than one price proposal was submitted, evaluate only the most recent proposal that was considered in the negotiation of the contract price, *from the negotiation of the prime contract.*

Cost Element	Final and Negotiated Amount	Submitted or Identified Cost or Pricing Data			W/P No.
		Complete	Incomplete	None	
Purchased Parts	\$ ----	\$ ----	\$ ----	\$---	---
Subcontracted Items	----	----	----	---	---
Raw Material	----	----	----	---	---
Standard Commercial Items	----	----	----	---	---
Material Overhead	----	----	----	---	---
Interdivisional Transfers.	----	----	----	---	---
Direct Engineering Labor	----	----	----	---	---
Engineering Overhead	----	----	----	---	---
Direct Manufacturing Labor	----	----	----	---	---
Manufacturing Overhead	----	----	----	---	---
Other Costs	----	----	----	---	---
General and Administrative Expense	----	----	----	---	---
Royalties	----	----	----	---	---
Federal Excise Tax	----	----	----	---	---
Total Proposed Costs	\$ <u>----</u>	\$ <u>----</u>	\$ <u>----</u>	\$ <u>---</u>	\$ <u>---</u>
Percent	<u>100%</u>	<u>----</u> ²	<u>----</u> ²	<u>---</u> ²	<u>---</u>
Lump sum reduction (if any)	\$ <u>---</u>				
Profit	\$ <u>---</u>				
Negotiated price	\$ <u>---</u>				

1 The decision as to completeness should be based not only on the subcontractor's proposal but also on any data furnished to the auditors or technical evaluators during proposal evaluations.

2 Percent in relation to total proposed cost.

3 ~~If lump sum reduction was identified to cost element, apply to each element.~~

For those cost elements not adequately ^{with} identified in the subcontractor's proposal, correlate with the cost of performance data and preaward audit and technical evaluation results.

In evaluating support for subcontract costs, refer to ASPR 3-807.3(b) through (e). This section requires, in certain instances that subcontract estimates be supported by a subcontractor's DD-633 and supporting data. In applicable cases, compliance with these requirements should be determined.

The "Instructions to Offerors" on the rear side of the DD-633 describes to the subcontractor the type of data required. The ASPR Manual for Contract Pricing, Part 2, section E contains a number of detailed examples of what constitutes a complete submission or what represents enough data.

It is emphasized that a DCAA audit does not negate the responsibility for requiring submission of data.

It should be recognized that a subcontractor's proposal may be considered to be complete if the bases for the estimates of all cost elements are described and supporting data is submitted or identified. The data submitted may, however, later be found to be inaccurate, incomplete, or noncurrent.

Selected data items should be traced to underlying support to determine if the most accurate, current, and complete data available was submitted or identified (select data should come from elements we determine to be complete or near complete concerning cost data submitted). For those elements not adequately identified in the price of proposal, compare with the cost of performance and preaward audit and technical evaluation results.

The following excerpts from our report "Improvements Still Needed in Negotiating Prices of Noncompetitive Contracts" (B-168450 dated August 5, 1974) are examples of cases where insufficient cost or pricing data were submitted in support of proposed or negotiated costs.

Materials

The Army's San Francisco Procurement Agency awarded a \$5.8 million contract for cartridge cases that included material costs of \$1.4 million. About \$1.2 million of this amount was not supported by adequate cost or pricing data. For one type of material, steel plate, the contractor identified the basis for unit cost but did not identify the basis for the quantity required. Other material costs were identified as based on standard costs, but no data was presented or identified to show how the standard costs were established or the basis for adjustment factors applied to the standard costs to arrive at proposed costs.

In its letter of May 24, 1974, (see app. III), DOD commented on this example.

DOD said that its review indicated that the data available was sufficient and in accord with policy requirements. Specifically, DOD stated that the contractor disclosed the steel plate to be used, its price per pound, the pounds required, and identified the price increases of steel since award of a predecessor contract. DOD also stated that the agency auditor took no exception to material, noting that the steel price was based on a catalog price effective on the same date identified by the contractor as the most recent steel price increase.

We agree with DOD that the above information was made available to the contracting officer. However, except for the basis of the price of steel plate, this information does not fulfill specific requirements for cost or pricing data established by ASPR and the ASPR Manual for Contract Pricing.

The material cost proposed by the contractor apparently consisted of several types of materials. Basic material costs were adjusted for spoilage and material variances. The contractor identified the quantity and price of the steel plate, but did not disclose the source of this information or data to support other material quantities, prices, and variances. The auditor, technical analyst, and price analyst furnished the contracting officer additional supporting information but did not adequately identify how the contractor determined the types and quantities of all materials proposed, the method of pricing all of the materials, or the basis for estimating spoilage and variance factors.

Some of the data furnished by these officials were contradictory. For example, as DOD states, the auditor noted that the proposed steel prices were based on catalog prices. The price analyst, however, stated that material costs were principally based on historical data and new quotations. As a result, there was no clear identification of the cost or pricing data submitted and certified by the contractor in support of the proposed price.

Subcontracts

The Air Force Electronic Systems Division awarded a contract which included a noncompetitive subcontract estimate of about \$515,000. The prime contractor supported this cost estimate with a firm quote furnished by a prospective subcontractor. The prime contractor, however, did not obtain and submit to the contracting officer, though required, subcontractor cost or pricing data to support the quote. DCAA's audit report on this proposal did not show what data, if any, had been furnished to the auditor to support the subcontractor's quote.

Labor

The Naval Electronic Systems Command awarded a \$1.1 million contract for electrical equipment shelters that included about \$146,000 for manufacturing labor costs. Although the contractor stated that the labor hours were based on prior experience, the experience data used to develop the estimate was not identified. The contractor stated that a composite labor rate was used but did not reveal how the rate was developed.

Overhead

The Army Corps of Engineers, Huntsville Division, awarded a contract for a shock test program. The contract price included overhead costs of \$260,000. Although the contractor's submission disclosed that this amount was computed by applying three overhead rates to certain direct labor costs, the

contractor did not submit data showing the basis for the rates.

General and administrative

The Defense Construction Supply Center, DSA, awarded a \$4.4 million contract for fire extinguishing foam which included \$205,000 for general and administrative costs. The proposal stated that general and administrative costs were based on projected costs for a particular year. The proposal, however, did not contain data showing how the proposed amount was computed, such as the various cost elements in the general and administrative pool or the base for allocation.

Other costs

The Naval Ordnance Systems Command awarded a \$9.8 million contract for gun mounts. This amount included other costs of about \$527,000, represented as being 6 percent of total production costs. Although the contractor explained that the rate was based on a mathematical projection of historical relationships between other costs and production costs under a specific contract, data in the records at the procurement office was not adequate to permit a reasonable understanding or reconstruction of the mathematical projection.

C. UPDATED SUBCONTRACTOR PROPOSALS NOT OBTAINED OR EVALUATED WHERE WARRANTED

1. Determine if significant changes were made in the scope of work (subcontract) prior to the negotiation of the prime contract. Ascertain whether the changes resulted in a revised subcontractor proposal and whether the cognizant Government agency or prime contractor recognized the need for an evaluation of the updated proposal.

2. Determine whether there were significant delays (more than 45 days) in the negotiation of the prime contract price in relation to the dates the subcontractor proposal was submitted or evaluated. An updated cost proposal may have been appropriate.

3. Determine the amount of time, after the award of the prime contract, required to negotiate the subcontract price. If significant (more than 45 days), determine whether the subcontractor furnished the prime contractor with an updated proposal. Under other than firm-fixed-price contracts, the Government would share with the prime contractor in any savings on the subcontract work resulting from the disclosure of current information.

D. SIGNIFICANT VARIATIONS BETWEEN THE SUBCONTRACT PRICE AND AMOUNT INCLUDED IN THE PRIME CONTRACT PRICE

1. Compare the negotiated subcontract price with the amount included in the prime contractor's proposal or the amount considered negotiated by the DOD procuring contracting office. Consider significant any case where the subcontract price is 10 percent or \$50,000 less than the amount included in the prime contract price. As in "A" above, attempt to determine the cost elements in which the difference exists. Also attempt to determine the basis for the reduction, such as a reduction in work scope after the award of the prime contract or the elimination during negotiations between the prime and subcontractor of overstated costs.

In determining the subcontract estimate included in the prime contractor's proposal or the amount considered negotiated in the prime contract price, initial reliance should be placed on data obtained from the DOD procuring contracting offices, in particular, the record of negotiation. An assist request may be necessary to obtain the information if not otherwise available and the prime contractor is not in your region. If the survey results, however, otherwise indicate that there is a sound basis for selecting the subcontract estimate for detailed examination without performing this audit step, an assist request may not be necessary.

E. INADEQUATE GOVERNMENT OR PRIME CONTRACTOR COST AND TECHNICAL EVALUATION OF SUBCONTRACTOR ESTIMATES OR INEFFECTIVE USE OF THIS INFORMATION

1. Evaluate the adequacy of the Defense Contract Audit Agency preaward audits of the subcontractor's price proposal in terms of scope and depth of coverage. ASPR 3-801.5 and 3-809 contain guidance on the responsibilities of DCAA and other field pricing support personnel when reviewing contract pricing proposals. Obtain copies of the audit reports and review supporting working papers. The amount of audit effort expended by DCAA, degree of coverage, and any qualifications contained in either the working papers or the audit report should be considered in making this determination. Audit guidance is contained in Chapter 5 of DCAA's Contract Audit Manual. Where more than one preaward audit was performed, or where supplemental audit reports were issued, each audit should be evaluated. This step should include a determination as to whether DCAA performed an adequate evaluation of the forecasted business volume, which is often used to compute forecasted (proposed) indirect expense rates.

2. Note the timing of the preaward audit. Determine if the audit report or results were furnished to the DOD contracting officer and effectively used in prime contract negotiations. Where the preaward audit was not completed until after prime contract negotiations, determine if possible why the contracting officer did not defer negotiations or set aside the pricing of the subcontract estimate pending receipt of the report.

DCAA preaward audits performed on behalf of the prime contractor and completed subsequent to prime contract negotiations will benefit DOD if the prime contract is a cost type or a flexibly priced award. Effective use of the audit results by the prime contractor in negotiating lower subcontract prices will, in turn, result in lower cost to DOD upon final redetermination of the contract price. However, if the prime contract is a firm fixed-price award, DCAA audits performed after prime contract negotiations may only be useful if a follow-on contract is awarded.

3. Review DCAA audit reports submitted after prime contract negotiations to determine disclosures by DCAA of subcontractor data that possibly should have been known prior to prime contract negotiations.

4. Review the DCAA preaward audit report of the prime contractor's proposal to determine the status of DCAA subcontract audits; also, evaluate the DOD contracting officer's record of negotiation to determine the extent to which subcontract audit reports were used or relied upon during prime contract negotiations.

5. Determine if a DCAA postaward audit of the subcontract estimate or award has been performed or scheduled. If completed, evaluate the adequacy of the work performed and the information developed.

6. Determine if the cognizant DOD contract administration office performed a technical evaluation of the subcontractor's estimate that formed the basis for prime contract negotiations.

Where the evaluation was not completed until after prime contract negotiations, refer to "2" above. Analyze the results in the same format as discussed for the DCAA audits.

7. Determine whether the prime contractor performed a cost analysis or technical evaluation of the subcontractor's proposal. Assess the adequacy of the scope and depth of coverage if the reports are available.

The following excerpts from our report "Improvements Needed in Making and in Reporting on Technical Evaluations of Noncompetitive Price Proposals" (B-168450 dated May 8, 1975) are examples when technical evaluations were considered inadequate.

CHAPTER 2

IMPROVEMENTS NEEDED IN MAKING EVALUATIONS

We examined 40 technical evaluations involving proposed direct costs of \$59.7 million. Evaluations of \$35.8 million, or 60 percent, of this total were adequately reviewed. In contrast, evaluations of \$23.9 million, or 40 percent, of the total were inadequate, even though some review work had been done. There is no assurance in these latter cases that contracting officers had sufficient information to negotiate fair and reasonable prices.

Below is a summary of the results of our review.

Proposed Direct Costs Examined

<u>Results of review</u>	<u>Material</u>	<u>Manufac- turing labor</u>	<u>Engi- neering labor</u>	<u>Other</u>	<u>Total</u>	
					<u>Costs</u>	<u>Percent</u>
						(millions)
Adequate	\$25.9	\$ 5.1	\$2.8	\$2.0	\$35.8	60
Inadequate	<u>11.8</u>	<u>6.1</u>	<u>5.2</u>	<u>.8</u>	<u>23.9</u>	40
Total	<u>\$37.7</u>	<u>\$11.2</u>	<u>\$8.0</u>	<u>\$2.8</u>	<u>\$59.7</u>	

Evaluations were considered inadequate when (1) required reviews of cost or pricing data were not made and evaluators used less appropriate evaluation techniques, (2) portions of cost or pricing data were not reviewed, and (3) insufficient analyses were made.

USE OF INAPPROPRIATE TECHNIQUES

DOD regulations provide that cost analysis be made when cost or pricing data is required to be submitted. They define cost analysis as the review and evaluation of such data. In 18 cases, evaluators did not review cost or pricing data supporting all or some cost estimates. Instead they evaluated the estimates by (1) comparing them with estimates submitted for prior procurements or independent Government cost estimates or (2) using personal judgment based on claimed familiarity with the tasks to be performed, contractor's operations, or product or service to be provided. Although these techniques are acceptable as a supplement to cost analysis, they should not be used as a substitute for DOD's required review of cost or pricing data.

For example, a contractor submitted a proposal to expand the capability of a multipurpose automatic inspection and diagnostic system for automotive engines and transmissions to include another type of engine. The contractor quoted a price but did not submit any cost or pricing data. The evaluator then developed an independent estimate without benefit of the contractor's data. Subsequently, the contractor submitted a detailed price proposal totaling \$221,073 supported by cost and pricing data. The evaluator's review of the detailed proposal involved only comparing the contractor's price with his own estimate, which was similar, and did not include a review of the cost and pricing data.

However, our examination of the contractor's proposal showed that the proposed direct engineering labor hours were about 15 percent higher than those included in the Government estimate. The evaluator, in his report, did not mention the difference in direct labor hours but stated only that the proposed price compared favorably with the Government estimate.

PORTIONS OF COST OR
PRICING DATA NOT REVIEWED

DOD regulations state that the contracting officer will initiate requests for pricing assistance and will clearly stipulate specific areas of the proposal for which assistance is required. If cost analysis is requested, DOD regulations state that it will be a review and evaluation of the contractor's cost or pricing data and of the judgmental factors applied in projecting from the data to the estimated costs.

The Defense Supply Agency and an Air Force headquarters command have published procedures for assigning responsibility for determining the need for technical review and the specific proposal areas to be covered by such a review. Purchasing and project offices and Navy activities included in our review had no such procedures issued by a headquarters command although some local activities had developed some procedures.

The procedures issued by the Defense Supply Agency and the Air Force state that price analysts or administrative contracting officers are responsible for determining the need for technical review and areas to be reviewed. The technical evaluator's review, therefore, should be responsive to the requestor's instructions. The procedures also state that the administrative contracting officer or price analyst is the focal point for coordinating all pricing assistance work. Therefore, if an evaluator believes that all requested coverage cannot be provided, the reasons should be discussed with the requestor, documented in the evaluation file, and mentioned in the evaluation report.

In 20 cases, technical evaluators did not review some portions of the contractor's cost or pricing data although requested to do so. Incomplete evaluations included (1) not analyzing some cost categories, (2) not reviewing accuracy and applicability of historical data included as part of cost or pricing data, and (3) not reviewing the basis for labor hour standards, adjustments to standards, or some percentage factors used by contractors in formulating estimates.

For example, a contractor included 51,280 labor hours, at a proposed cost of \$221,016, for assembly and reliability burn-in testing as part of a proposal for improving radar altimeter systems. The price analyst requested evaluation of these hours, but no analysis was made. The need to perform other workload requirements was cited by officials of the evaluating activity as the probable reason for nonperformance. However, agreement to limit the evaluation was not obtained from the price analyst, and the evaluation report did not mention that the hours were not reviewed.

INSUFFICIENT ANALYSIS MADE

If insufficient analysis is made, the evaluator may not be able to develop sufficient data to make meaningful recommendations on the reasonableness of estimates, and the contracting officer may only have limited information for negotiating a fair and reasonable contract price. In 11 cases, evaluators made insufficient analyses when they based their recommendations on reviews of incomplete cost or pricing data and/or inadequate sample results.

Evaluating incomplete cost or pricing data

If an evaluator does not get the data used by the contractor in developing estimates, he is handicapped in making a thorough and effective evaluation. For six cases, evaluators' recommendations were based on reviews of incomplete cost or pricing data.

Inadequate samples

Contractors often submit detailed lists of items as support for proposed direct materials. Some of these lists are very long, and reviewing all the items would be time-consuming. Consequently, the use of sampling is justified.

Many types of samples can generally be classified as either judgment or probability samples. The usual goal of any sample is that it be representative of the entire group of items about which information is desired. Judgment samples are based on subjective methods of sample selection, using personal judgment, and often do not provide assurance that the sample is representative of the entire group. Probability samples are based on a body of accepted theory which makes it possible to measure the reliability of sample results.

For six cases, evaluators used judgment samples when evaluating direct materials. In our view, the methods of selecting the sample did not provide assurance that sample results represented total items being evaluated. For example, an evaluator was asked to review direct materials supported by a detailed bill of materials having a proposed cost of about \$5.2 million. The bill of materials was voluminous. The evaluator had no documentation showing how he reviewed materials. He told us his method was to scan the list until he found an item he was familiar with, then to check the listed quantity of that item for accuracy. This method of sampling provided little assurance that the bill of materials was reasonable.

CHAPTER 3

MORE INFORMATION NEEDED IN EVALUATION REPORTS

Technical evaluations are made to help the contracting officer establish a price objective to be used in negotiating the contract price. Many evaluation reports should contain more information.

Our August 1974 report to the Congress ^{1/} stated that many technical evaluation reports did not adequately describe the scope and depth of work performed, and specific data analyzed nor cite sufficient data and rationale to support exceptions taken to the proposal.

In our current review, we also found that many reports did not contain adequate information to support recommendations for acceptance and nonacceptance of proposed amounts. Consequently, contracting officers did not have assurance that evaluators' recommendations of acceptance or nonacceptance of proposed costs were well-founded.

For example, a contractor proposed the use of 20,525 engineering labor hours, at an estimated cost of \$146,998 to perform 50 tasks to provide items of ground support equipment. The proposal was to definitize the price for a previously issued unpriced order, and production was underway at the time the proposal was evaluated.

Reporting was inadequate for a large portion of the accepted hours because the scope and depth of work performed or the specific data analyzed were not adequately described. It was also inadequate for most of the hours not accepted because the recommendation for nonacceptance was not properly supported.

After price negotiations, but before it approved the negotiated price, a DCAS board of review analyzed the contract negotiator's price negotiation memorandum and all advisory reports, including the technical evaluation report. The board recommended that the administrative contracting officer make no award until he obtained a favorable reevaluation by the board. The board stated that the negotiation memorandum contained no information justifying the reasonableness of the negotiated price and that one reason it questioned the negotiations was because of inadequacies in the technical evaluation report. It was further stated that the report presented no firm conclusions on most labor categories because the basis

^{1/}Improvements Still Needed in Negotiating Prices of Noncompetitive Contracts Over \$100,000 (B-168450).

for judgmental conclusions and assumptions was not adequately explained, rationale used was unclear or incomplete, and how the evaluation was accomplished was not explained. The evaluators who prepared the report told us that, in their opinion, the deficiencies in reporting occurred because of lack of training and experience.

Our August 1974 report (see p. 8) recommended that the Secretary of Defense require that activities making technical evaluations of price proposals include in their reports the scope of the evaluations, data analyzed, and data and rationale supporting conclusions and recommendations. In their comments, DOD officials stated that our recommendation would be referred to the military services and to the Defense Supply Agency as an example of a matter of concern in their effort to improve the procurement process within their organizations.

Although the evaluations we examined during this review preceded this promised action, we believe our current identification of deficiencies in the reporting process confirms the need for action by the Secretary (see p. 14).

CHAPTER 4

REASONS FOR DEFICIENCIES IN EVALUATING AND REPORTING

Deficiencies in evaluating and reporting occurred because (1) DOD had no uniform standards for these functions, (2) planning was often ineffective, (3) supervisory reviews were often inadequate, and (4) many evaluations were made by evaluators who had not been formally trained for such work.

NO UNIFORM STANDARDS

Standards are general measures of the quality and adequacy of work. Technical evaluations are made by many activities, but DOD has not developed uniform performance and reporting standards. Some individual activities had some published standards, but these varied between individual activities or agencies. This absence of uniform standards contributes to variations in the quality of evaluations.

The Armed Services Procurement Regulation Manual for Contract Pricing is available for use by all DOD activities, but it does not contain cost analysis standards. Five of the activities in our review, either purchasing or project offices, made evaluations without the benefit of published standards. The remaining 15 activities had published standards issued by local activities, agency regional offices, and/or headquarters commands.

INEFFECTIVE PLANNING

Training guides used by the Navy and the Defense Supply Agency for instructing technical evaluators in cost analyzing state that evaluators should develop a plan of action after reviewing the contractor's proposal and before visiting the contractor site. Also, during the previsit phase of a review, evaluators should coordinate with other members of the pricing team to obtain information and advice that could be of value in planning work.

The training guides do not stipulate that action plans be written. We believe, however, that listing action steps is desirable because it will facilitate control over the work and create a permanent record of the evaluation coverage for supervisory personnel to use in insuring that an adequate evaluation was made. Our review showed that few evaluators developed systematic written work plans and that many did not coordinate with other members of the pricing team.

Developing systematic analysis plans

A systematic approach to planning for an evaluation should involve a preliminary review of the proposal to be evaluated and development of an action plan before initiating detailed work. However, in only two cases was a systematic written analysis plan prepared. Evaluators told us that work steps were generally formulated mentally on a continuing basis during the course of evaluation.

Coordination with other members of the pricing team

DOD regulations state that making a cost analysis should be a team effort. The team includes contracting officers, price analysts, cost auditors, and technical evaluators. Each member is a specialist in his area of responsibility, and technical evaluators should coordinate with other members to develop information that would be useful in planning work.

Other team members may be able to provide (1) previous technical evaluation and price analyst reports and proposals for like or similar items to those included in the proposal being evaluated, (2) information on the reliability or weaknesses in a contractor's estimating system, and (3) historical data obtained from a contractor's records. This information can be valuable to an evaluator in planning work because it may provide information on how a prior evaluation was made, areas in which a contractor may have developed unsupportable estimates, and previous cost or production data for like items. In many instances, evaluators did not coordinate with other members of the pricing team to obtain this kind of information.

INADEQUATE SUPERVISORY REVIEWS

The Defense Supply Agency recognized the need for supervisory review to insure an acceptable level of performance. Its published procedures require that supervisors review the evaluation report to insure that it contains sufficient information to support recommendations and that the technical analyst has made an examination of sufficient depth. Supervisors are also required to review supporting data developed by evaluators to insure that there is a complete documentation trail. We found that evaluators generally developed limited or no documentation for work done and to support report recommendations. Activities, other than DSA offices, in our review had no procedures detailing supervisor responsibility for reviewing technical evaluation work.

We found that, regardless of whether an activity did or did not have procedures covering supervisory reviews, most such reviews were cursory and did not always insure that acceptable levels of work were done.

In six cases, supervisors did not exercise any review function. Also, in 31 cases, supervisors did not review evaluators' supporting documentations to insure that report recommendations were supported.

MANY EVALUATORS NOT TRAINED

Technical evaluations should be made by adequately trained, proficient evaluators. Only recently, however, has DOD developed courses specifically designed to provide needed training. In April 1973 the Defense Supply Agency developed such a training course and distributed it to its 11 regions, but as of June 1974, only 4 regions had given the course. One region conducted a 40-hour training session and the other three conducted formal 2-day briefings for new employees.

The Navy also developed a course, entitled "An Introduction to Direct Cost Analysis," that was initially conducted in 1973. As of February 1974, the course had been given to 75 technical personnel, and it was expected that it would be given to 144 additional personnel by the end of calendar year 1974. The other military services have no formal courses for training technical personnel in price evaluating.

REPORTING

A index survey summary will be prepared for each subcontract surveyed, including conclusions and recommendations concerning the bases for performing a detailed examination of the subcontract. All detail reviews will be performed immediately following surveys of all subcontracts.