Ch 8 - Conducting Cost Realism Analyses

8.1 Evaluating Cost Realism

Pricing Responsibility (FAR 15.402(a), 15.405(b), and 16.103(a)). When negotiating a contract price, your primary concern should be the price that the Government will pay to obtain the required supplies or services from a responsible contractor. Your objective should be to negotiate a contract type and price (or estimated fee and cost) that will result in reasonable contractor risk and provide the contractor with the greatest incentive for efficient and economical contract performance.

Unrealistically Low Offers (FAR 3.501). Unrealistically low offers generally occur, because the offeror:

- **Does Not Understand Contract Requirements.** Government requirements may not be clearly stated or the offeror may be unfamiliar with common product terminology. If the offeror underestimates the magnitude or complexity of a proposed task, the estimated costs could be far below the probable cost of successful contract performance.
- **Did Not Properly Coordinate Proposal Preparation.** The cost proposal may not be consistent with the offeror's technical proposal. The inconsistency may occur as the result of inadequate coordination between the team preparing the technical proposal and the team preparing the cost proposal.
- **Consciously Understated The Proposed Cost/Price.** In the face of competitive pressure, an offeror may submit an unrealistically low price in order to win a contract (i.e., use a buy-in pricing strategy).
    - On cost-reimbursement contracts, the contractor may expect to recoup all or most of the costs related to any cost overrun that may occur.

    - On fixed-price contracts, the contractor may hope to:
    - Increase the contract amount after award (e.g., through unnecessary or excessively priced contract modifications), or
    - Receive follow-on contracts at unrealistically high prices to recover losses on the buy-in contract.

Cost Realism Analysis (FAR 15.101, 15.401, and 15.404-1(d)). Cost realism analysis is the process of independently reviewing and evaluating specific elements of each offeror's proposed cost estimate to determine whether the estimated proposed cost elements:

- Are realistic for the work to be performed;
- Reflect a clear understanding of contract requirements; and
- Are consistent with the unique methods of performances and materials described in the offeror's technical proposal.

Based on the offeror evaluation criteria stated in the solicitation, you can then use the results of your analysis in selecting the offer that provides best value to the Government.

Situations for Cost Realism Analysis (FAR 15.404-1(d)). When evaluating competitive offers for a:

- Cost-reimbursement contract, you must use cost realism analysis to determine the probable cost of performance for each offeror.
- Fixed-price incentive contract or (in exceptional cases) other fixed-price contract, you may use cost realism analysis to assess offeror responsibility and contract performance risk when:
    - New requirements may not be fully understood by competing offerors;
    - There are quality concerns; or
    - Past experience indicates that contractors proposed costs have resulted in quality or service shortfalls.

Standard for Cost Realism Analysis (Cardinal Scientific, Inc., CGEN B-270309, Feb. 12, 1996 and ManTech Envir. Tech., Inc., CGEN B-271002.3, June 3, 1996).

Many protests to the Comptroller General (CGEN) have challenged Government cost realism analyses. The CGEN has generally sustained the contracting officer's judgment on cost realism -- as long as that judgment is:

- Informed;
- Accurate;
- Sufficiently thorough for the acquisition situation;
- Reasonable -- not arbitrary; and
- In accordance with evaluation criteria stated in the solicitation.

Clear documentation is essential, because it is the documentation that demonstrates to others the basis for your analysis. You can use clear documentation to guide your efforts to resolve offeror disagreement with the results of your analysis, before that disagreement becomes a formal protest. If you are faced with a protest, clear documentation will greatly affect your chances of success in a sustaining an award decision.

Cost Realism Analysis Process. Consider the following process whenever you perform cost realism analysis:

- Assure that the solicitation states how cost realism analysis will be used in the contract award decision.
- Obtain information other than cost or pricing data needed to support cost realism analysis.
- Obtain other information necessary to support analysis.
- Obtain analysis support from other members of the Government Acquisition Team.
- Identify costs/prices that are understated for the required contract effort.
- Estimate the probable cost of contract performance (when necessary).
- Use your cost realism analysis in offer evaluation.

Award Criteria and Cost Realism Analysis (FAR 9.103(c), 9.104-1, 15.101-1, 15.101-2, 15.206, 15.404-1(d), and DCAM 9-311.4a). If you plan to consider cost realism in evaluating offers for contract award, your solicitation must define how it will be considered. Normally, you should make this decision during acquisition planning. However, you may decide that cost realism analysis is necessary after evaluating the offers received. At that point, you may issue an amendment revising offer evaluation criteria for contract award and requiring each offeror to submit the information required for analysis.

However, remember that changing award criteria after receipt of proposals is likely to raise questions about the fairness of the proposal evaluation process.

- For cost-reimbursement contracts, you:
  - Must use the probable cost of contract performance developed in cost realism analysis to determine best value. An award based on an unreasonably low cost proposal would be false economy, because the final price paid by the Government will depend on final contract cost.
  - May also use cost realism analysis as a factor in evaluating the offeror's understanding of contract technical requirements and the risk associated with the offeror's technical proposal.
- For fixed-price contracts, you must not adjust offered prices as a result of your analysis. However, you may use cost realism analysis in assessing:
  - Contract performance risk. An unrealistic price will normally increase the risk of successful contract completion. Evaluators should consider this increased level of risk when assessing best value.
  - Offeror responsibility. An unrealistic price:
  - Will put additional pressure on the offeror's financial resources available to support contract performance.
  - May indicate that an offeror cannot comply with the required or proposed schedule for contract performance.
  - May indicate that an offeror does not have the organization, experience, and technical skills needed to perform the contract.

Obtain Necessary Information Other Than Cost or Pricing Data (FAR 15.403-5).

Once you decide to use cost realism analysis, you must decide what information other than cost or pricing data you will need to complete your analysis. In particular, you must decide what information to require from offerors. Normally, you should make this decision during acquisition planning and identify necessary cost information requirements in the solicitation. You may establish the requirement after receipt of offers, but the acquisition will be delayed while offerors gather and submit the information required.

The solicitation requirement for information other than cost or pricing data:

- Should be limited to the data that you anticipate will be needed for cost realism analysis. For example, if you are primarily concerned about the realism of labor estimates, you may limit the information requirement to labor rate and labor hour estimates. In that situation, you need not require submission of information on material, indirect costs, or profit.
- Should permit each offeror to determine its submission format unless you need a specific format for efficient and effective analysis. For a commercial item acquisition, limit information requirements, to the maximum extent practicable, to information in the form regularly maintained by the offeror in its commercial operations.
- Should require each offeror to submit information that is sufficiently current to permit effective cost realism analysis.
- May include specific information requirements adapted from FAR Table 15-2.

Obtain Other Information Necessary to Support Analysis (FAR 15.403-3(a), 22.404, and 22.1002).

You should not require offerors to provide more information than necessary. Obtain additional information from other sources to support your analysis.

- A detailed and well-documented Independent Government Estimate is a valuable tool for supporting cost realism analysis. It provides a:
  - Model to identify the offeror information required for cost realism analysis, and
  - Primary benchmark for cost realism analysis.
- Sources of market cost information include:
  - Cost estimating relationships or pricing models; or
  - Wage determinations under the Davis-Bacon Act or Service Contract Act; and
  - Published cost/price indexes.

Obtain Other Information Necessary to Support Analysis (FAR 15.306(e)(2) and 15.404).

- Sources of information about specific offerors include:
    - Technical evaluations of offeror proposals for similar contract requirements;
    - Audit reports on recent proposals;
    - Forward pricing rate proposals and any forward pricing rate recommendations, or current forward pricing rate agreements;
    - Contract and program histories related to the current acquisition; and
    - Results from related cost estimating system reviews.
- DO NOT use data from one offeror's proposal to question the realism of another offeror's proposal. The two proposals are based on different cost accounting systems and may be based on entirely different technical approaches.

Obtain Government Acquisition Team Support (FAR 3.104-5(a), 15.207, 15.306(e), and 15.404-2(a)(3)).

The contracting officer is ultimately responsible for performing the cost realism analysis, but the contracting officer cannot be an expert in all the disciplines involved in proposal preparation and analysis. Support from both in-house and field members of the Government Acquisition Team can be invaluable in evaluating proposal cost realism. Communicate with team members early in the acquisition process to determine the information already available, extent of assistance required, specific areas where assistance is needed, and information necessary for an efficient and effective review.

Assure that the Government personnel supporting the analysis are aware of their responsibility to safeguard sensitive contractor information. During the evaluation process, disclosure of proprietary offeror information must be governed by FAR procedures and applicable agency regulations governing the disclosure, protection, and marking of proprietary and source selection information. Government personnel must not visit any offeror or discuss the proposal with any offeror without proper approval.

Only request the support needed to evaluate the offers received. As the number of personnel involved in the evaluation process increases, the chance of unauthorized disclosure of proprietary proposal information also increases.

- **In-House Support.** Technical specialists and others familiar with specific contract requirements, are typically the Government personnel best qualified to evaluate technical proposals. They can also raise key questions about apparent inconsistencies between offeror's technical and pricing proposals. For example, the technical proposal describes the type of work typically performed by a top scientist, but the pricing proposal is based on using journeyman engineers. Are journeyman engineers likely to be able to perform the required tasks normally in a timely and cost effective manner?
- **Audit Support.** Their familiarity with offeror cost accounting information, puts auditors in a unique position to question inconsistencies in proposed costs. For example, an auditor may question proposed indirect cost rates that are significantly lower than the rate projections supported by available cost data.

Before requesting an audit, contact the auditor to determine how the audit office can efficiently and effectively support the cost realism analysis. A proposal audit may not even be necessary to meet your analysis objectives. For example, you may be able to verify the realism of proposed labor rates over the telephone, based on information already available to the auditor. If an audit is necessary, only request audit support in areas where adequate analysis information not already available.

- **Field Support.** The contract administration team can include administrative contracting officers, price analysts, quality assurance personnel , engineers, plus small business and legal specialists. These specialists can use their unique understanding of offeror operations to raise questions about the proposal or help answer questions raised by in-house personnel.

Before requesting field pricing support, contact field Acquisition Team members to determine how they can efficiently and effectively support the cost realism analysis. Only request field support in areas where adequate analysis information is not already available.

Identify Understated Costs/Prices (DCAM 9-311.4a). Ask the following questions to determine whether proposed costs/prices are significantly understated for the required contract effort.

- ***Does the information other than cost or pricing data submitted by the offeror satisfy the solicitation requirements?***

The information submitted must be adequate for proposal analysis. Inadequate information could indicate a lack of understanding of contract requirements or an attempt to hide weaknesses in proposal development.

- ***Does the offeror's cost/price appear realistic based on a comparison with the Independent Government Estimate?***

A detailed and well documented Independent Government Estimate (IGE) serves as the **initial benchmark** against which all proposals are measured.

  - Analyze any significant differences between the proposal and the IGE.
  - If you believe that the IGE is reasonable, require the offeror to demonstrate why its proposal is appropriate for the contract.
  - If you determine that the IGE is not reasonable (e.g., a major element was omitted), you should take action to correct the estimate before completing your analysis.

- ***Do the proposed costs/prices reflect an accurate understanding of contract requirements?***

With the assistance of other Government Acquisition Team members, determine if the proposal is consistent with the technical and other solicitation requirements. Inconsistencies need to be identified and clarified. A lack of understanding of the technical requirements can lead to severe contract over or under pricing. Further, a lack of understanding can jeopardize successful contract completion.

- ***Are the proposed costs/prices consistent with the various elements of the technical proposal?***

The cost/price proposal should be a dollars and cents representation of the technical proposal and must be consistent with the technical proposal. Inconsistencies may be identified in any element of the offeror's cost estimate (e.g., direct labor cost, direct material cost, or indirect cost).

    - **Example 1.** The offeror has submitted a proposal on a contract that is part of a complex on-going research program to develop and test a state-of-the-art analysis system. In the technical proposal, the offeror has proposed to use 10 doctoral level engineers in completing the effort over a 12-month period. Instead of the market labor rate for doctoral engineers, the offeror has proposed the market labor rate for engineering assistants. It appears impossible to hire the proposed types of engineers at that labor rate.
    - **Example 2.** The offeror has proposed to integrate a top-of-the-line material handling unit into a new system being designed for the Government. However, the price proposed is 50 percent less than the lowest known sales price for the item.
    - **Example 3.** The offeror has proposed to conduct a stringent test program in a special test facility located in the contractor's plant. However, the proposal does not include the overhead cost normally applied to test units using the test facility.

- ***How have the offeror's actual contract costs on previous contracts compared with the price proposed?***

Past performance can be a strong indicator of future performance. However, if records indicate historically poor cost performance, provide the offeror an opportunity to demonstrate that past problems were beyond the firm's control or that improvements have been made in the firm's cost estimating system.

- ***Is the contractor likely to satisfactorily meet all contract requirements at the proposed price?***

Even if the proposal is internally consistent and reflects an accurate understanding of the work, the offeror may still have underestimated the cost of completing the contract. Assess the probability that the offer can complete the contract on time at the proposed price.

Estimate Probable Cost (FAR 15.404-1(d)(2), Ryan Assoc., Inc., CGEN B-274194.3, Nov. 26, 1996, and The Jonathan Corp & Metro Mach. Corp, CGEN B-251698.4, May 17, 1993).

The probable cost is the Government's estimate of what it will cost for the offeror to complete the contract based on the Government's evaluation of the offeror's technical proposal and proposed costs.

- **Decide If A Probable Cost Estimate Is Necessary.** Depending on the solicitation award criteria and the offeror's proposal, you may or may not need to develop a probable cost estimate.
    - If you are performing a cost realism analysis of a proposal for a cost-reimbursement contract, you must develop a probable cost estimate to support your analysis of best value.
    - If you are performing a cost realism analysis of a proposal for a fixed-price contract, you may develop a probable cost estimate to assess contract performance risk or contractor responsibility. However, you may be able to analyze key areas of performance risk without a probable cost estimate.
- **Consider General Points For Probable Cost Development.** Whenever you develop a probable cost estimate, consider the following points.
    - As you collect the information required to evaluate the realism of the offeror's cost/price estimate, you are also collecting the information required to develop your own estimate of the most probable contract cost.
    - In developing your estimate, adopt the portion of the offeror's estimate that appears realistic and modify the portion of the estimate that you believe is unrealistic. For example, you may accept proposed labor hours and adjust the labor rate based on an audit recommendation. Adjustments may increase or decrease cost estimates
    - Use relevant estimating tools and techniques.

    - As you complete your estimate, assure that you clearly document your rationale for any adjustment.
- **Assure That Assessment Is Reasonable.** The Comptroller General has repeatedly found that cost realism analysis is a judgmental process and review should be limited to assuring that the analysis is reasonable and not arbitrary.
- **Develop A Probable Cost Estimate For Each Offer.** Each probable cost estimate must consider the unique characteristics of the offeror and the technical proposal. For example, in 1993, the Comptroller General rejected a cost-plus-fixed-fee contract award decision based on probable cost, because the agency failed to consider each offeror's individualized approach and instead mechanically adjusted proposed labor hours and material costs. In that case, the Comptroller General found that:
    - The agency's cost analyst entered into a computer each offeror's labor hour and material cost estimate for the 100 work items in a work package.
    - The computer was programmed to compare the offeror's proposed labor hours and material costs with the Government's labor hour and material cost estimates for each work item.
    - The computer automatically accepted those offeror estimates that were within a predefined percentage of the Government's estimate. For all offeror estimates outside the predefined percentage range, the computer adjusted the offeror's estimate by means of a mathematical formula which approximately split the difference between the contractor estimate and the Government estimate.

Contract Decision Making. Consider the results of your cost realism analysis in offer evaluation, in accordance with the contract award criteria identified in the solicitation. Later sections of this chapter provide examples of how you can consider cost realism analysis in contract award decisions.

8.2 Considering The Uncompensated Overtime Effect On Cost Realism

Uncompensated Overtime Affects Analysis (Fair Labor Standards Act, § 213). The Fair Labor Standards Act (FLSA) establishes the national minimum wage and maximum hour requirements that apply to firms involved in interstate commerce. However, the FLSA exempts numerous labor categories in a wide range of industries from its mandatory requirements. Cost realism analyses for services acquired based on the number of labor-hours to be provided rather than the task to be performed are particularly affected by the FLSA's exemption of bona fide executive, administrative, and professional workers from wage and maximum labor-hour requirements.

- Many service companies strongly encourage or even require FLSA-exempt employees to accept "uncompensated overtime" -- work in excess of an average of 40 hours per week by FLSA-exempt employees without additional compensation. Compensated personal absences (e.g., such as holidays, vacations, and sick leave) are included in the normal work-week for purposes of computing uncompensated overtime.
- Not all of the firms that encourage or require uncompensated overtime account for it in the same way.
- Other firms compensate each person working overtime with overtime pay or compensatory overtime.

These differences in use and accounting for uncompensated overtime can complicate cost realism analysis of both direct labor cost and the allocation of related indirect cost. Accordingly, the issues surrounding the analysis of uncompensated overtime are given special attention here.

Forty-Hour Accounting System. Here, the term "forty-hour accounting system" refers to a labor accounting system that only charges cost objectives for forty hours per week of each employees time no matter how many hours the employee works. The hourly labor rate is based on one/fortieth of the employees weekly salary. When an employee works more than 40 hours, only 40 hours of labor cost can be charged to cost objectives.

- Some forty-hour accounting systems charge labor costs only to cost objectives worked on during the first eight hours of the work-day.
- Others permit employees to select which cost objectives will be charged.

Forty-Hour Accounting System Gaming.

- Either method for distributing labor costs under a forty-hour accounting system provides the opportunity for employees or management to manipulate the allocation of labor costs and the indirect costs allocated based on labor hours or labor dollars.

For example: Suppose an employee works ten hours a day five days a week. One day the employee spends five hours working on a firm fixed-price contract and five hours working on a cost-reimbursement contract. If the employee can only charge eight hours, where should they be charged?

- **Method 1.** The firm requires employees to distribute labor costs only to cost objectives worked on during the first eight hours of the work-day. If the firm fixed-price contract were scheduled first:
  - The cost of five hours would be allocated to the fixed-price contract;
  - The cost of three hours would be allocated to the cost-reimbursement contract; and
  - The final two (uncompensated) hours would not be charged.
- **Method 2.** Given the same situation, the contract charges could be manipulated by scheduling the employee to work on the cost-reimbursement contract first. Then, the cost of:
  - Five hours would be allocated to the cost-reimbursement contract;
  - Three hours to the fixed price contract; and
  - The final two (uncompensated) hours would still not be charged.
- **Method 3.** The opportunity for cost manipulation would be even greater if the employee could choose which contract to charge. In that situation, the five hours would almost certainly be charged to the cost-reimbursement contract, because that would maximize contractor income.

Full-Time Accounting (FAR 31.201-4, DCAM 6-410.4, and 6-410.5). Other contractors require their employees to charge for every hour worked. The Defense Contract Audit Agency (DCAA) and others contend that total time accounting is required for compliance with FAR 31.201-4, Determining Allocability; CAS 401, Consistency in Estimating, Accumulating, and Reporting Costs; and CAS 418, Allocation of Direct and Indirect Costs.

- The DCAA Audit Manual recognizes three acceptable methods of accounting for uncompensated overtime:
  - Calculating a separate average labor rate for each labor period, based on the salary paid divided by the total hours worked, and distributing the salary costs to all cost objectives based on that rate.
  - Determining the percentage of total hours worked on each cost objective during the labor period and distributing salary cost based on the percentage allocation. For example, if an employee was paid on a weekly basis and worked 20 hours on one project and 30 hours on another, 40 percent of the employee's salary would be charged to the first cost objective and 60 percent to the other.
  - Computing an estimated hourly rate for each employee for the entire year based on the total hours the employee is expected to work during the year and distributing the salary costs using the estimated hourly rates. Any variance between the actual salary costs and the amount distributed, is charged/credited to overhead.
- The DCAA Audit Manual also recognizes that other methods of uncompensated overtime accounting may be acceptable -- subject to audit review. Examples include:
  - Distributing the salary cost to all cost objectives based on a labor rate calculated based on an 8-hour day and 40-hour week, with the excess amount distributed to overhead.
  - Determining a percentage allocation of hours worked on each cost objective each day and distributing the daily salary cost using the calculated percentages. However, the manual warns that the daily allocation may increase the possibility of employee or management manipulation of the allocation.

Forward Pricing With Full-Time Accounting. If the salary and overhead costs are always the same, how should the contractor calculate the labor and indirect cost rates for forward pricing? Most firms that use this method use average historical experience for forward pricing rate development.

Solicitation Uncompensated Overtime Requirements (FAR 37.115-2 and 37.115-3). Labor accounting differences can create substantial problems in the evaluation of offeror projections of the cost and quality of contract performance. For example, given the same annual salary, overhead costs, and indirect cost rates based on labor hours or labor cost, a firm basing its estimate on 50-hours week could offer a lower contract cost than a firm basing its estimate on a 40-hour week. Would the quality of product be the same? It is difficult or impossible to tell. Is a person working a 50-hour week as productive as a person working a 40-hour week? Are the employees of the contractor with the estimate based on the 40-hour week actually working 50 hours a week?

To improve competitive proposal evaluation, solicitations for professional or technical services based on the number of hours provided (rather than the task to be performed) must require offerors to identify uncompensated overtime hours and the uncompensated overtime rate for direct-charge FLSA-exempt personnel included in the prime and subcontract proposals. This includes uncompensated overtime hours that are in indirect cost pools for personnel whose regular hours are normally charged as a direct cost.

For solicitations above the simplified acquisition threshold for such services, you must use the following provision (FAR 52.237-10):

IDENTIFICATION OF UNCOMPENSATED OVERTIME (OCT 1997)

a. Definitions.

As used in this provision--

1. Uncompensated overtime means the hours worked without additional compensation in excess of an average of 40 hours per week by direct charge employees who are exempt from the Fair Labor Standards Act. Compensated personal absences, such as holidays, vacations, and sick leave, shall be

included in the normal work week for purposes of computing uncompensated overtime hours.
2. Uncompensated overtime rate is the rate that results from multiplying the hourly rate for a 40-hour work week by 40, and then dividing by the proposed hours per week. For example, 45 hour proposed on a 40-hour work week basis at $20.00 would be converted to an uncompensated overtime rate of $17.78 per hour. ($20 x 40 divided by 45 = $17.78)

b. For any proposed hours against which an uncompensated overtime rate is applied, the offeror shall identify in its proposal the hours in excess of an average of 40 hours per week, by category at the same level of detail as compensated hours, and the uncompensated overtime rate per hour, whether at the prime or subcontract level. This includes uncompensated overtime hours that are in indirect cost pools for personnel whose regular hours are normally charged direct.
c. The offeror's accounting practices used to estimate uncompensated overtime must be consistent with its cost accounting practices used to accumulate and report uncompensated overtime hours.
d. Proposals that include unrealistically low labor rates, or which do not otherwise demonstrate cost realism, will be considered in a risk assessment and evaluated for award in accordance with that assessment.
e. The offeror shall include a copy of its policy addressing uncompensated overtime with its proposal.

Evaluate Uncompensated Overtime Proposals. As you perform cost realism analysis, use the information provided by the offeror to consider the risks to contract performance associated with proposed uncompensated overtime. In particular, consider risks associated with:

- Unrealistically low rates, direct or indirect, that may result in quality or performance shortfalls.
- Unbalanced distribution of costs, direct or indirect, associated with uncompensated overtime accounting practices.

Solicitation Professional Employee Compensation Requirements (FAR 22.1102, 22.1103, and 52.222-46).

Include the FAR provision, Evaluation of Compensation for Professional Employees, in any solicitation for a negotiated service contract expected to exceed $500,000 and when contract performance will require meaningful numbers of professional employees.

A professional employee is any employee who is a member of a profession having a recognized status based upon acquiring professional knowledge through prolonged study. Examples include accountancy, actuarial computation, architecture, dentistry, engineering, law, medicine, nursing, pharmacy, the sciences (e.g., biology, chemistry, and physics), and teaching. To be a professional employee, a person must be a professional and must be involved essentially in the discharging of professional duties.

This provision requires offerors to submit total compensation plan setting forth proposed salaries and fringe benefits for professional employees working on the contract. Supporting information should include data -- such as recognized national and regional compensation studies of professional, public and private organizations -- that were used in establishing the total compensation structure.

Evaluate Professional Employee Compensation Plans (FAR 52.222-46). The offerors compensation plan should provide valuable information for your cost realism analysis of proposed labor rates. Evaluate the plan to assure that it reflects a sound management approach and understanding of the contract requirements.

- Assess the offeror's ability to provide uninterrupted high-quality work.
- Consider the professional compensation in terms of its:
    - Impact upon recruiting and retention,
    - Cost realism, and
    - Consistency with a total plan.
- Assess whether the proposed compensation levels reflect:
    - A clear understanding of the contract effort, and

    - The capability of the proposed compensation structure to obtain and retain suitably qualified personnel.
- Evaluate the ability of offerors proposing compensation levels lower than those of predecessor contractors for the same work to maintain program continuity.

8.3 Considering Cost Realism In Cost-Reimbursement Proposal Evaluation

Cost Realism Analysis in Cost-Reimbursement Proposal Analysis (FAR 15.404-1(d)(2)).

- For cost-reimbursement contracts, you:
- Must use the probable cost of contract performance developed in cost realism analysis to determine best value. An award based on an unreasonably low cost proposal would be false economy, because the final price paid by the Government will depend on final contract cost.
- May also use cost realism analysis as a factor in evaluating the offeror's understanding of contract technical requirements and the risk associated with the offeror's technical proposal.

Not Limited to Downward Adjustment (DCAM 9-311.4a and EDAW, Inc., CGEN B-272884, Nov. 1, 1996).

Even though the primary objective of cost realism analysis is to ensure proposed costs are not understated, you are not limited to making upward adjustments as you develop a probable cost estimate.

For example: In a 1996 case, EDAW, Inc. protested the award of a contract to Dames & Moore (D&M) under a request for proposal (RFP) issued by the Department of the Interior, Bureau of Reclamation (Reclamation), for the preparation of resource management plans (RMPs) in the Columbia Basin Area of Washington State.

- EDAW contended that:
    - The agency arbitrarily deleted proposed contingency labor hours and costs from D&M's proposal.

    - It was improper for the agency to eliminate D&M's contingent labor costs because under the terms of the RFP, offerors could include contingency labor costs in their proposals and D&M certified that its proposed costs for contingency hours were consistent with its cost accounting standards.
    - Without this "contrived" reduction, EDAW's proposal rather than D&M's would have had the lowest evaluated costs.
- The Comptroller General found that:
    - While EDAW was correct that the RFP allowed an offeror to propose contingency labor hours, there was nothing in the solicitation which precluded the agency from deleting these labor hours.
    - The record showed that in conducting a cost realism analysis of D&M's proposed costs, the agency considered the extent to which D&M's proposed costs represented a reasonable estimation of future costs.
    - In the agency's judgment, the contingency hours were not related to D&M's ability to successfully perform the various RMP tasks. Stated differently, the agency concluded that proposed total labor hours were all that were necessary, given D&M's technical approach to accomplishing the work.
    - The agency's position was bolstered by the fact that, even without these contingent hours, D&M's proposal contained more labor hours than EDAW proposed.
    - It did not make sense for the agency to include contingent labor hours and costs, which it believed were not necessary for contract performance, simply because D&M certified that these costs were consistent with its cost accounting standards. D&M's certification that the costs proposed are consistent with its cost accounting standards simply was not relevant to the issue of whether the proposed contingency hours will actually be necessary for contract performance.
    - The protester did not show that the deletion of the contingency hours was unreasonable.
- The Comptroller General denied the protest.

Adjustments May Be Large Relative to Proposed Costs (Westinghouse Electric Corp., CGEN B-250486, Feb. 4, 1993).

Even firms with sophisticated estimating systems can submit unrealistic cost proposals. As you estimate probable cost, the difference between the probable cost and the offeror's proposed costs may be quite large as long as the difference is supported by the facts of your analysis.

For example: In a 1993 case, Westinghouse Electric Corporation protested award of a cost-reimbursement contract to Raytheon Company under a request for proposals issued by the Department of the Army for ground-based radar.

- Westinghouse challenged the agency's cost realism methodology, contending that the agency used a flawed, inaccurate, and out of date tri-service cost model in estimating certain costs. The protester stated that:
  - The agency admitted the flaws in its cost model; and
  - The unreasonableness of the methodology was evidenced by the agency's conclusion that three sophisticated offerors had all submitted unrealistically low cost proposals.
- The Comptroller General found that:
  - The agency report established that the cost model did not constitute the agency's primary methodology for evaluating cost realism.
  - The agency had performed a "bottoms-up" analysis, by which evaluators assigned to specific portions of the proposals estimated the cost of performance as proposed for each offeror.
  - The cost model, which the agency contends is not flawed, was only used along with other models to verify the "bottoms-up" analysis.
  - The agency adjusted the protester's $943 million proposal upward over by $520 million (over 55 percent). Of the $520 million, $470 million came in three areas -- $105 million in material cost; $69 million in subcontract costs; and $296 million in interdivisional transfer costs.
  - Extensive agency documentation and hearing testimony supported the agency probable cost estimates.
- The Comptroller General denied the protest.

Analysis May Be Limited to Substantial Costs (Allied Tech. Grp., Inc., CGEN B-271302.2; Jul. 3, 1996).

You may reasonably exclude costs that are not a substantial part of total contract cost from your probable cost estimate when the solicitation did not specifically state that these costs would be included.

For example: In a 1996 case, Allied Technology Group, Inc. (ATG) protested an award of a cost-plus-incentive-fee contract to Weiss Associates under a request for proposals issued by the Department of Energy for environmental restoration, decontamination and decommissioning, and waste management activities at the Laboratory for Energy Related Health Research (LEHR) and other selected sites in California.

- ATG contended that the agency's cost realism analysis was nonexistent or flawed, specifically contending that in evaluating Weiss's probable costs, the agency improperly failed to consider $1.5 million attributable to Weiss's subcontractors.
- The Comptroller General found that:
    - The agency evaluated cost proposals on the basis of the specified labor mix and level of effort.
    - The agency specified the level of effort and the skill mix necessary to perform the contract in the RFP and the offerors proposed costs on that basis.
    - Evaluators analyzed personnel labor rates, subcontractor costs, overhead rates, and general and administrative (G&A) rates, to determine whether they were reasonable or understated.
    - Evaluators took no exceptions to the costs proposed by Weiss or ATG.
    - The only issue identified by ATG with respect to Weiss's costs concerned the agency's evaluation of certain subcontract costs.
    - Weiss identified five subcontractors, two for which costs were proposed and three for which costs were not.
    - Weiss estimated that the cost for these three subcontracts would be "significantly less than $100,000."
    - Cost evaluators noted this and estimated the maximum potential impact as $1.5 million ($300,000 per year for 5 years), but did not include this cost in the probable cost estimate.
    - The cost evaluation board did advise the source selection official of its assessment that the

subcontracts were currently unnecessary and if used, would not cost nearly the $1.5 million estimate.

- The Comptroller General denied the protest, because:.
    - An agency is not required to verify each and every item in conducting its cost realism analysis.
    - An agency may rely on information contained in offerors' cost proposals in performing a cost evaluation without seeking additional independent verification of each item of proposed cost.
    - ATG was not prejudiced by the omission of these subcontractor costs in the cost realism assessment.
    - Reasonably construed, Weiss's proposal estimates the collective effort of these subcontractors as less than $100,000 per year, not $100,000 per subcontractor.
    - Accordingly, less than $500,000 ($100,000 for the five contract years) would be added to Weiss's proposal.
    - Since ATG's proposal was more than $2 million higher than Weiss's, the selection decision would not change.

Analysis in Technical Proposal Assessment (JWK Internat. Corp., CGEN B-256609.4, Sep. 1, 1994).

While cost realism is most commonly used to evaluate cost estimates, cost realism can also be included in the solicitation as a factor for evaluating the offeror's technical proposal.

For example: In a 1994 case, JWK International Corporation protested the award of a contract to Value Systems Services (VSS), a division of VSE Corporation, under a request for proposals issued by the Naval Air Systems Command (NAVAIR) for the acquisition of logistics support services for Navy and Marine avionics weapons systems.

- JWK contended that the Navy's determination that JWK's proposal presented a high performance risk was unreasonable because the Navy unreasonably determined that JWK's proposed salaries were too low and that JWK proposed excessive uncompensated overtime.
- The Comptroller General found that:

  - Offerors were required to propose fully-burdened, fixed hourly rates for each labor category set forth in the RFP.
  - The solicitation provided that proposed labor rates would be evaluated for realism and that a proposal determined to have unrealistic rates would be assessed as having high performance risk.
  - The agency determined that JWK's proposed salaries were too low to retain a qualified work force, based on comparisons of proposed labor rates and salaries with the rates and salaries on:
  - JWK's incumbent contract;
  - Other JWK contracts;
  - The Independent Government Estimate; and
  - The general schedule (GS) salaries of comparable civil service employees.
  - The agency found that JWK proposed to have its employees work 47 hours per week including 7 hours per week of uncompensated overtime.
  - The agency reached its conclusion that JWK would require its employees to work 47 hours per week despite representations in the JWK proposal that its employees would work 45 hours per week
  - The 2-hour difference related to understated indirect labor hours for leave and holidays.
  - The agency viewed 7 hours per week of uncompensated overtime as excessive and as contributing to the risk that JWK would be unable to retain its employees.
  - The Navy concluded JWK's proposed cost was unrealistic and its proposal presented a high performance risk, because of JWK's low salaries and excessive uncompensated overtime.
- The Comptroller General denied the protest.

Failure to Perform an Adequate Cost Realism Analysis (ManTech Envir. Tech., Inc., CGEN B-271002.3, June 3, 1996).

Whenever the resulting contract will be flexibly-priced, the contracting officer has a responsibility to conduct a cost realism analysis. If the contracting officer fails to perform an analysis or the results of that analysis are not reasonable, it is unlikely that the contract award decision will withstand scrutiny by The Comptroller General

For example: In a 1996 case, ManTech Environmental Technology, Inc. protested the award of a cost-plus-fixed-fee contract to Dynamac Corporation under a request for proposals issued by the Environmental Protection Agency (EPA) for technical support services.

- ManTech raised a number of evaluation issues, primarily contending that the EPA failed to properly evaluate the realism of Dynamac's proposed costs. For example:
  - Dynamac's overall proposed costs were significantly lower than the Independent Government Estimate and the costs proposed by the other offerors.
  - Although the technical proposal reflected Dynamac's intent to hire "as many of the incumbent staff as possible," the direct labor rates proposed for "new hires" were lower than:
  - Those paid incumbent ManTech personnel; and
  - Current Dynamac personnel in comparable positions.
- The Comptroller General found that:
  - The agency cost advisory report, pre/post negotiation memorandum, and source selection decision were all based on the written and oral DCAA analyses which purportedly found Dynamac's direct labor rates to be realistic. However, the DCAA audit and cost advisory report were qualified and the information on which they were based was incorrect.
  - Notwithstanding the agency's reliance on DCAA, there is no evidence that the agency cost evaluators considered DCAA's qualification of its usual recommendation that the proposal was acceptable as a basis for negotiation of a fair and reasonable price.
  - This qualification was based on DCAA's need for technical assistance in mapping the proposed labor rates to the RFP and evaluating Dynamac's weighted labor rates.
  - DCAA had requested assistance from the agency in determining whether the personnel, at the rates proposed, were appropriate for the positions identified in the RFP.

- The agency did not provide any assistance.
- Dynamac advised DCAA that its proposal manager had reviewed the RFP and had selected qualified individuals for the proposal.
- DCAA verified that the labor rates for individuals named the cost proposal represented actual Dynamac 1995 labor rates.
- While this DCAA assessment provides a reasonable basis for accepting labor rates for the named individuals, EPA accepted DCAA's limited statement as verification of all direct rates.
- Since Dynamac had provided verifiable personnel rates for less than half of the 54 labor categories listed in its cost proposal, it was unreasonable for the agency to rely on this aspect of the audit to support a finding of cost realism for all direct rates.
- There was no way to gauge the reasonableness of the proposed rates based on the audit analysis.
- There was no indication that the agency attempted to assess the realism of the new hire rates.
- The agency explained that it had received oral information from DCAA indicating that DCAA had verified the new hire rates.
- During the protest, the agency learned that the DCAA auditor had confused this audit with another Dynamac audit being conducted at about the same time. The auditor did not verify the new hire rates proposed for the agency contract, believing that it was unnecessary because the other audit had verified the proposed rates.
- While agencies may ordinarily rely on the advice of DCAA when performing a cost realism analysis, a contracting officer's determination based on incorrect information is not rendered reasonable because the incorrect information was supplied by another organization such as the DCAA.
- The agency's cost evaluators qualified their evaluation by stating that they did not assess whether the personnel, at the rates proposed, met the RFP requirements.
- The technical evaluation panel (TEP) documented concerns about the low Dynamac labor rates.
- The TEP had noted that the rate proposed for a P-3 (second highest) level ecologist "seems very low" and that all the new hires were listed at low rates suggestive of entry level positions.

    - The TEP was concerned that "quality people cannot be hired at these rates" and observed that only a few existing employees worked at the rates identified for new hires.
    - Apart from relying on the DCAA audit information, written and oral, the agency apparently conducted no other cost realism analysis of Dynamac's direct labor rates. For example, the agency did not:
        - Conduct any independent reasonableness review of the proposed rates,
        - Question any of the rates in discussions, or
        - Seek substantiation of the rates through market surveys or historical cost data from similar contracts.
    - The record does not include any of the "other" information on which the evaluators said they relied and, at the time of the agency's cost review.
    - The only thing that is apparent is that Dynamac's realistic costs are higher than those it proposed, but it is not clear how much higher they should be.
- The Comptroller General sustained the protest and recommended that the agency conduct a reasonable and complete cost realism analysis of Dynamac's direct and indirect costs.

8.4 Considering Cost Realism In Fixed-Price Proposal Evaluation

Cost Realism Analysis in Fixed-Price Proposal Analysis (FAR 15.404-1(d)(3)). For fixed-price contracts, you must not adjust offered prices as a result of your analysis. However, you may use cost realism analysis in assessing:

- Contract performance risk. For example, you could use cost realism analysis:
    - As a factor in evaluating the offeror's relative understanding of contract technical requirements and the performance risk associated with the offeror's technical proposal.
    - Technical offer acceptability.
    - In conjunction with price reasonableness as a separate factor for proposal evaluation, using

words such as "Among those offers determined to be technically acceptable, award will be made to the responsible offeror who offers the lowest reasonable and realistic price."
- Offeror responsibility.

Cost Realism in Performance Risk Trade-Off Analysis (Cardinal Scientific, Inc., CGEN B-270309, Feb. 12, 1996).

Proposal trade-off evaluation criteria for a firm fixed-price contract may include cost realism analysis as one criterion for evaluation of the offeror's technical proposal. An unrealistic price may indicate deficiencies in the offerors understanding of contract quality and schedule requirements. A contract priced at a loss or at a minimal profit may represent a substantial performance risk.

For example: In 1996, Cardinal Scientific, Inc. (CSI) protested the award of a fixed-price contract to Defiance Electronics Inc. under an RFP issued by the Defense Logistics Agency (DLA), for portable x-ray darkrooms.

- CSI contended that the RFP contained defective evaluation factors and challenged the agency's evaluation of proposals.
- The Comp Gen found that:
  - The RFP stated that the agency would evaluate proposals based on proposed price and three factors (listed in descending order of importance): technical approach, management approach, and corporate experience/past performance.
  - Technical evaluation criteria provided that the agency would evaluate proposals for realism, as it relates to an offeror's demonstration that the proposed price provides an adequate reflection of the offeror's understanding of the requirements of the solicitation.
  - Only CSI and Defiance submitted proposals.
  - The agency was initially concerned about the significant price difference between the two proposals. Accordingly, it requested and obtained information other than cost or pricing data from both offerors.
  - Analysis of final proposal revisions (FPRs) revealed that both offers were technically acceptable:

    - CSI had three strong points under management approach and past performance;
    - Defiance had one strong point under management approach; and
    - Defiance's FPR was $894,658, approximately half as much as CSI's FPR.
    - A cost realism analysis found that Defiance's proposal demonstrated that its expected costs and overhead would allow it to successfully perform the contract and achieve a reasonable profit.
    - The contracting officer:
    - Concluded that Defiance's proposal represented the best value to the Government, because CSI's slight technical advantage did not warrant the payment of the significant price premium associated with CSI's proposal
    - Recommended award to Defiance and the source selection authority (SSA) concurred.
- The Comptroller General denied the protest.

Cost Realism in Evaluating Technical Offer Acceptability. When award will be made to the low, technically acceptable, offeror, each offeror may be required to provide documentation supporting the realism of the prices proposed. If an offeror fails to furnish pricing documentation expressly requested and necessary for the agency to perform a cost realism analysis, the agency may properly reject the proposal, even though the offeror asserts that it could perform the required work at the proposed price.

For example: In a 1989 case, Industrial Maintenance Services, Inc. (IMS) (Ind. Maint. Svs., Inc. & Log. Suprt., Inc., CGEN B-235717.2, Oct. 6, 1989), protested the Department of the Navy's award of a firm fixed-price food service contract to United Food Services (USF).

- IMS contended that:
    - While its offered price did not include certain required fringe benefits, this omission did not warrant the rejection of its offer.
    - The solicitation only required the contractor to provide its employees with these fringe benefits, not that the offeror expressly include the costs for these items in its proposed price.
    - The agency's rejection of its offer must have been based on a finding that it was

nonresponsible--i.e., and should have been referred to the Small Business Administration under its certificate of competency (COC) procedures.

- The Comptroller General found that:
  - The solicitation required offerors to submit manning charts indicating the personnel that the contractor would employ to perform the contract.
  - Award criteria stated that award would be made to the low, responsive--that is, technically acceptable--offeror.
  - Twenty-seven firms responded to the RFP, submitting proposals ranging from a low monthly price of $39,485 to a high of $286,100.
  - The agency solicited final proposal revisions (FPRs) by amendment, and in view of the wide disparity in initial prices, also cautioned offerors that proposals found unrealistic in terms of price would be rejected.
  - The FPR prices still varied by more than $150,000 per month, and the agency, concerned that this continued disparity in price reflected a lack of understanding of the solicitation requirements, issued an amendment reopening the competition for a second round of FPRs and requiring offerors to include:
  - A breakdown of the projected daily man-hours necessary to perform the contract, as well as
  - An annotated, loaded compensation rate specifying the wage rates, fringe benefits and insurance to be paid employees as determined by the applicable wage determination.
  - The agency also advised offerors that the estimated minimum staffing level for contract performance was 14,000 man-hours per month, and warned that proposals containing less than 98% of this estimated manning level would be rejected as unrealistic.
  - IMS submitted the third low revised offer at a price of $114,540 per month, and UFS was seventh low at a price of $126,585 per month.
  - The agency rejected as unrealistic the proposals of the six low offerors (including IMS) finding that each had failed to provide documentation that the agency could use to determine that the proposed prices in fact were realistic.

  - For IMS, the agency determined that either IMS's price did not include amounts to pay employees according to the terms of the wage determination, or that if it planned to abide by the terms of the wage determination, its price was insufficient to support its proposed staffing level.
  - The agency then made award to USF as the low, acceptable offeror.
- The Comptroller General denied the protest.

Cost Realism as a Separate Evaluation Factor (Culver Health Corp., CGEN B-242902, Jun. 10, 1991).

A solicitation may establish cost realism as a separate evaluation factor to be considered along with price reasonableness in making the contract award decision.

For example: In 1991, Culver Health corporation protested the award of a contract to NES Government Services, Inc. under an RFP issued by the United States Army Health Services Command for the health-care services of General Medical officers at Army Medical Training Facilities across the United States. The award to NES was for Region II, which includes eight locations in the Western United States.

- Culver contended that:
  - Its offer was improperly evaluated.
  - Its prices and compensation rates were compiled after an extensive industry evaluation and discussions with prospective physicians and were realistic.
  - Because this is a fixed-price contract, all of the risk of Culver's alleged low prices would fall entirely on the contractor and that it was simply not reasonable to reject its low offer.
  - The contracting officer in evaluating the Region II proposals improperly relied upon the Government estimates which it points out were considered by the evaluators to be questionable in Region I due to the fact that all of the offers received for that region were below the estimate.
- The Comptroller General found that:
  - The RFP stated that cost/price would be one of three evaluation criteria considered in making

contract award. It also stated that "Price will be evaluated, but not scored, for reasonableness and realism."

  - Fifteen offerors responded to the solicitation.
  - During subsequent written discussions and the agency expressed its concern regarding Culver's compensation rates by stating: "At this time, the compensation rates you proposed appear to be unrealistically low. Request a complete review of your offer with cost realism in mind."
  - After three rounds of discussion and FPRs, Culver's was the lowest offer at a total price of $6,300,714, while NES's $7,215,410 offer was the next low of the seven offerors remaining. Both of the offers were considered acceptable under the two technical evaluation factors.
  - The evaluators were concerned that Culver's proposed hourly physician compensation for the Fort Hood, Carson, Polk, and Ord locations was significantly below the agency's estimates and thus recruitment and retention of physicians would become a problem. Further, the evaluators noted that Culver's total amount allowed for compensation in Region II, $5,167,959, was significantly lower than the agency's estimate of $5,860,900 and that its total price of $6,300,714 was also much lower than the overall agency estimate of $8,099,658 for Region II.
  - The evaluators concluded that Culver's "overall rates are not realistic and would have an adverse effect on much needed performance" and the agency rejected the offer as unrealistically priced.
  - NES's compensation total of $6,059,490 was higher than the Government's $5,860,900 estimate and it was more in line with the other offerors and was considered by the evaluators to be realistic, as was its $7,215,410 overall price.
  - NES was awarded the contract for Region II as the low acceptable offeror with realistic pricing.
- The Comptroller General denied the protest.