United States General Accounting Office

GAO

Report to the
Honorable William V. Roth, Jr.,
U.S. Senate

September 1989

CONTRACT PRICING

Dual-Source Contract Prices

GAO/NSIAD-89-181

GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-219741

September 26, 1989

The Honorable William V. Roth, Jr.
United States Senate

Dear Senator Roth:

In response to your October 31, 1988, request and subsequent discussions with your staff, we reviewed eight dual-source contracts to determine whether contracting officers had a sound basis for negotiating fair and reasonable contract prices. The contracts were awarded to four major defense contractors for the procurement of three Department of Defense (DOD) weapon systems.

Results in Brief

On four of the eight dual-source contracts we reviewed, contracting officers accepted the prices proposed by contractors as fair and reasonable because they believed that adequate price competition existed. However, our review shows that contracting officers would have had a sound basis for seeking reductions in the prices of three contracts by as much as $28.9 million had they obtained insight into contractors' estimating methodologies, pricing strategies, and supporting cost information. The three contracts were awarded for about $390 million. The proposed price on the fourth contract was $2.4 million below the negotiation objective[1] that could have been established had the contracting officer obtained insight into the proposed price.

Contracting officers employed pricing safeguards normally used on noncompetitive procurements to evaluate proposed prices on the four other contracts. Use of the safeguards allowed contracting officers to negotiate contract prices that were more than $30 million below the amounts contractors' proposed.

The Deputy Assistant Secretary of Defense for Procurement issued policy guidance in December 1988 citing the need for contracting officers to exercise "deliberation and thorough review" when determining whether adequate price competition exists on dual-source contracts. The Defense Federal Acquisition Regulation (DFAR) Supplement was subsequently

[1]The negotiation objective represents the price the contracting officer believes can be achieved in negotiations. Due to the give-and-take bargaining that occurs during negotiations, the contracting officer may or may not achieve the negotiation objective.

Importance of Pricing Safeguards

On competitive awards, contracting officers rely on a combination of a competitive marketplace and price analysis to ensure that the prices paid are fair and reasonable. Price analysis is the process of examining and evaluating a price without looking at the estimated cost elements and profit proposed by an offeror. Price analysis may involve (1) comparing one contractor's proposed price with a competing contractor's price, (2) comparing proposed prices with government estimates, or (3) comparing proposed prices with prices negotiated on prior contracts.

In contrast, in the absence of competition, contracting officers rely on a number of safeguards to establish fair and reasonable prices and minimize the possibility of overpricing. For example, contracting officers normally rely on a team of experts, including auditors, price analysts, engineers, and production specialists to perform a cost and technical analysis of contractor proposals. Contracting officers also have the Truth in Negotiations Act as a safeguard against inflated contractor cost estimates.

On noncompetitive contracts where cost or pricing data are required, a cost analysis is performed to evaluate the reasonableness of individual cost elements. Cost analysis differs from price analysis and involves an element-by-element examination of the estimated costs of contract performance, including cost or pricing data and judgmental factors applied in projecting estimated costs. It also involves analyzing design features, materials, manufacturing processes, organization and manning, and estimating assumptions—all of which contribute to the total cost of a contract.

Cost analysis is used to establish the basis for negotiating contract prices when price competition is inadequate or lacking altogether, and when price analysis, by itself, does not ensure the reasonableness of prices. In short, cost analysis is used in the absence of price competition to achieve what competition is presumed to achieve—a fair and reasonable price.

Contracting officers may also request a should cost evaluation. Should cost is a specialized form of cost analysis that allows a more in-depth evaluation of a contractor's proposal. Should cost goes beyond reviewing historical costs and includes consideration of attaining additional economies and efficiencies in contractors' management and operations.

We support the Deputy Assistant Secretary's view that adequate price competition determinations on dual-source contracts must be made on a case-by-case basis and that contracting officers need to exercise deliberation and thorough review. However, the DFAR Supplement revision that was intended to implement the Deputy Assistant Secretary's policy falls short of providing adequate guidance to contracting officers for making such determinations.

Need for Contracting Officers to Obtain Insight Into Estimating Methodologies and Pricing Strategies Not Addressed

The DFAR Supplement revision states that adequate price competition will normally exist on dual-source contracts when prices are solicited across a full range of step quantities,[3] from at least two offerors who are individually capable of producing the full quantity, and

- the award is made to the offeror with the lowest evaluated price; or
- when the award is split, the combined price of both awards is the lowest evaluated price in the range of offers submitted; or
- when the combined price of both awards is not the lowest evaluated price in the range of offers submitted, the price reasonableness of all prices awarded is clearly established on the basis of price analysis.

The DFAR Supplement revision presumes that adequate price competition normally exists on dual-source procurements. It does not recognize there may be situations where some cost data may be needed to make adequate price competition determinations or that certified cost or pricing data needs to be obtained when adequate price competition does not exist. Rather, the DFAR Supplement revision encourages contracting officers to make dual-source awards solely on the basis of price analysis.

Our work showed that price analysis alone was not sufficient to ensure that fair and reasonable prices were obtained. We found that when contracting officers did not have a thorough understanding of contractors' estimating methodologies, pricing strategies, and cost information they lost the opportunity to seek reductions in contractors' proposed prices. Conversely, when contracting officers had such insight they negotiated substantial reductions.

Results of our work are discussed in the following sections of the report.

[3]Step quantities refer to the various quantities for which the government solicits prices. For example, the government solicitation may request prices for quantities like 30, 50, 70, and 100 percent of the total requirement.

what the company proposed. However, lacking adequate insight, the contracting officer accepted the proposed price as fair and reasonable.

We found similar conditions involving another contractor's dual-source contract proposal. In this case, had insight been obtained, the contracting officer could have established a negotiation objective about $11.5 million lower than the price that was proposed and accepted as being fair and reasonable.

Contractors Employed a Mix of Competitive and Noncompetitive Pricing Techniques

On two other contracts, we found that contractors employed a mix of competitive and noncompetitive pricing techniques to develop their contract proposals. In one case, the proposed price was significantly higher than the negotiation objective the contracting officer could have established. In the other case, the proposed price was significantly lower.

In the first case, we found that although the contractor employed competitive pricing techniques to develop a portion of its dual-source proposal, the resulting reductions were more than offset by errors or noncompetitive pricing techniques used elsewhere in developing the proposal. The contractor's competitive pricing techniques resulted in lower proposed estimates for material quantity discounts, labor hours, and a bottom-line management price reduction. However, we found the reductions resulting from these competitive techniques were more than offset by

- material pricing errors,
- labor and indirect expense rates that were higher than those recommended by the cognizant government contract administration agency, and
- a profit rate that was higher than the rate negotiated with the contractor for the previously awarded noncompetitive contract for the same item.

Had insight into the contractor's pricing techniques been obtained, the contracting officer could have established a negotiation objective about $10.1 million lower than what the company proposed. However, lacking insight, the contracting officer accepted the proposed price as fair and reasonable.

In the second case, the contractor developed its proposed dual-source price primarily using pricing techniques normally found in a noncompetitive procurement. For example, the contractor did not fully consider

Substantial Reductions Were Negotiated When Contracting Officers Used Pricing Safeguards

When contracting officers employed the safeguards normally associated with noncompetitive procurements in pricing the remaining four contracts we reviewed, reductions in the contractors' proposals totaling more than $30 million were achieved. The four contracts were awarded for about $330 million.

Safeguards included (1) requiring contractors to submit cost or pricing data supporting their proposed prices and certifying that the data submitted were accurate, complete, and current, (2) Defense Contract Audit Agency reviews of the contractors' cost representations, (3) technical evaluations[4] of contractors' proposals, and (4) should cost evaluations of contractors' proposals. Use of such safeguards gave contracting officers an understanding of the basis of contractors' proposed prices and allowed contracting officers to negotiate substantial price reductions on all four contracts.

The circumstances surrounding the pricing of one contract in particular, shows the necessity and benefit of understanding the basis for contractors' proposed prices. In this case, the contracting officer performed a price analysis and concluded that "the forces of competition have existed . . . and that competition has provided fair and reasonable prices for the high and low quantity awards." The contracting officer recommended award of the contracts at the proposed prices.

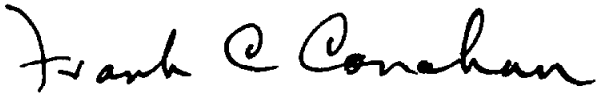
However, because of the significant disparity in proposed prices between the two contractors, the head of the buying activity directed further analysis to determine the reasonableness of the higher proposed price for the low quantity. Accordingly, the contractor was requested to submit detailed supporting cost or pricing data. A fact-finding trip to the contractor's plant was made, a technical evaluation performed, and the Defense Contract Audit Agency reviewed the contractor's cost or pricing data. Based on the information obtained through these efforts, the contracting officer questioned various cost elements of the contractor's proposal. The contractor ultimately agreed to a price that was about $4.6 million lower than the price that was initially determined to be fair and reasonable by the contracting officer's price analysis.

[4]Technical evaluation refers to the examination and evaluation of proposed quantities and kinds of materials, labor, processes, facilities, and other factors set forth in a proposal in order to determine the need for and reasonableness of the proposed resources.

As agreed, we did not obtain formal agency comments on a draft of this report, but discussed the contents with DOD and contractor officials and incorporated their comments where appropriate. We also excluded contractor proprietary data from the report. Our objective, scope, and methodology are discussed in appendix I.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 15 days from its date. At that time we will send copies to the Secretaries of Defense, Air Force, Army, and Navy and the Director, Defense Logistics Agency. We will also send copies to interested parties and make copies available to others on request. This report was prepared under the direction of Paul F. Math, Director, Research, Development, Acquisition, and Procurement Issues, who may be reached on (202) 275-4587 if you or your staff have any questions. Other major contributors are listed in appendix II.

Sincerely yours,



Frank C. Conahan
Assistant Comptroller General

example, we assumed that contracting officers would have used government recommended labor and overhead rates and historical vendor price reduction factors to establish their negotiation objectives.

Our work was performed from December 1988 to August 1989 in accordance with generally accepted government auditing standards.

Requests for copies of GAO reports should be sent to:

U.S. General Accounting Office
Post Office Box 6015
Gaithersburg, Maryland 20877

Telephone 202-275-6241

The first five copies of each report are free. Additional copies are $2.00 each.

There is a 25% discount on orders for 100 or more copies mailed to a single address.

Orders must be prepaid by cash or by check or money order made out to the Superintendent of Documents.

Major Contributors to This Report

National Security and International Affairs Division, Washington, D.C.	David E. Cooper (202) 275-8400, Assistant Director Bradley C. Vass, Evaluator-in-Charge
Atlanta Regional Office	George C. Burdette, Regional Assignment Manager
Boston Regional Office	Paul M. Greeley, Regional Assignment Manager
Los Angeles Regional Office	Ronald A. Bononi, Regional Assignment Manager

Objective, Scope, and Methodology

Our objective was to determine whether DOD contracting officers had a sound basis for negotiating fair and reasonable dual-source contract prices. We reviewed eight dual-source contracts awarded to four major defense contractors involving the three weapon systems shown in table I.1.

Table I.1: Dual-Source Weapon Systems and Contractors

Systems	Contractors
Inertial Measurement Unit	Rockwell International Corporation, Anaheim, California
	Northrop Corporation, Hawthorne, California
Hellfire Missile	Martin Marietta Corporation, Orlando, Florida
	Rockwell International Corporation, Duluth, Georgia
Sparrow Missile	Raytheon Company, Lowell, Massachusetts

In addition to performing work at the contractor locations listed in table I.1, we also performed work at the Air Force Ballistic Systems Division, Norton Air Force Base, California; Army Missile Command, Huntsville, Alabama; and the Naval Air Systems Command, Crystal City, Virginia. We obtained data from and interviewed officials with the Defense Contract Audit Agency, cognizant resident defense contract administration services agencies, DOD Office of the Inspector General, the Office of the Deputy Assistant Secretary of Defense for Procurement, Office of the Secretary of the Navy for Shipbuilding and Logistics, Office of the Deputy Assistant Secretary of the Army for Procurement, and other DOD offices. We reviewed various government contract documents, including proposal solicitations, negotiation memorandums, technical reports, and other records related to dual-source and noncompetitive procurements.

We also analyzed material, labor, and indirect cost information supporting the contractors' proposed prices. We compared contractor proposed labor and overhead rates for dual-source awards to rates that were recommended by cognizant DOD contract administration agencies at the time the dual-source contracts were awarded. We also compared proposed material prices with contractors' supporting cost information.

We also evaluated contractors' estimating methodologies to determine whether they produced prices that were equal to or less than the negotiation objectives contracting officers could have established using noncompetitive pricing safeguards. In those cases where we found contractors did not employ competitive pricing techniques, we assumed that contracting officers would have used the same type of pricing information that is available to negotiate noncompetitive contracts. For

Contents

Letter 1

Appendix I: Objective, Scope, and Methodology 14

Appendix II: Major Contributors to This Report 16
National Security and International Affairs Division, Washington, D.C. 16
Atlanta Regional Office 16
Boston Regional Office 16
Los Angeles Regional Office 16

Table
Table I.1: Dual-Source Weapon Systems and Contractors 14

Abbreviations

DFAR Defense Federal Acquisition Regulation
DOD Department of Defense

Conclusion

Our work shows that contracting officers could not ensure that fair and reasonable prices were obtained on dual-source contracts through the use of price analysis techniques. When contracting officers obtained a thorough understanding of the bases for contractors' proposed prices, they were able to negotiate substantial reductions. Conversely, when contracting officers relied on price analysis alone, they lost the opportunity to seek reductions in contractors' proposed prices by as much as $28.9 million.

The DFAR Supplement does not provide contracting officers adequate guidance for determining when adequate price competition exists in dual-source contracts. Rather, it presumes that adequate price competition automatically exists on dual-source contracts and encourages contracting officers to make dual-source awards on the basis of price analysis only. We believe the virtual assurance of contract award in a dual-source environment is too important a consideration to assume adequate price competition automatically exists.

Recommendation

Accordingly, we recommend the Secretary of Defense direct appropriate personnel to revise the DFAR Supplement to provide contracting officers guidance for determining when adequate price competition exists in dual-source contracts. The guidance should address the need for contracting officers to obtain a thorough understanding of contractors' proposed prices before making adequate price competition determinations. We believe such guidance would be consistent with the Deputy Assistant Secretary of Defense's (Procurement) recognition that adequate price competition determinations on dual-source procurements should be made with deliberation and thorough review.

Contracting officers should not assume that adequate price competition exists in dual-source contracts before they obtain insight into contractors' proposed prices. Insight can be obtained by evaluating contractors' estimating bases, pricing strategies, and cost information. Such evaluations can be performed without requiring certified cost or pricing data, cost analysis, and intensive fact-finding leading to establishment of a negotiation objective. If the insight gained through such evaluations discloses competitive pricing, the contracting officer should presume that adequate price competition exists and award the contracts. However, if the evaluation discloses noncompetitive pricing techniques, the contracting officer should use the safeguards normally used to negotiate fair and reasonable noncompetitive contract prices.

reductions likely to be achieved in vendor negotiations and used indirect expense rates that were higher than those recommended by the cognizant government contract administration agency.

However, the contractor proposed a profit rate substantially below the profit rates negotiated on the prior year's dual-source contract and on similar noncompetitive weapon system contracts awarded to the company. The reduced profit rate offset the impact of the noncompetitive pricing techniques and resulted in a price about $2.4 million below the negotiation objective that could have been established had the contracting officer obtained insight into the proposed price.

DOD and Contractor Comments

Generally, DOD and contractor officials did not agree with our definition of competitive pricing techniques—that is, those that produced prices that were equal to or less than the negotiation objectives which contracting officers could have established through use of noncompetitive pricing safeguards. The officials stated that contracting officers' negotiation objectives are not usually achieved in negotiations. DOD officials at one procuring office told us that a "competitive situation" existed and that procurement regulations precluded them from using noncompetitive pricing safeguards. Contractor officials told us that the prices they proposed were competitive.

Our assessment did not presuppose that contractors employed either competitive or noncompetitive pricing techniques in developing proposed prices. Rather, we analyzed the contractors' estimating methodologies, pricing strategies, and supporting cost information to determine the bases for proposed prices. We recognize that a contracting officer's negotiation objective is not always achieved during the give-and-take bargaining associated with negotiations. However, it is not possible to accurately estimate how much of a negotiation objective would be achieved. Our work clearly indicated instances where noncompetitive pricing safeguards would have provided contracting officers a sound basis for seeking substantial reductions in proposed dual-source contract prices.

Contracting Officers Used Price Analysis to Evaluate Proposed Prices

On four of the eight contracts we reviewed, contracting officers accepted the prices proposed by contractors because they believed that adequate price competition existed. Instead of obtaining insight into the proposed prices, the contracting officers relied on price analysis techniques to ensure that the proposed prices were fair and reasonable.

On the four awards, we found contractors

- did not employ competitive pricing techniques on two contracts, but, instead, proposed prices that are typically reduced during noncompetitive negotiations and
- employed a mix of competitive and noncompetitive pricing techniques on the other two contracts. In one case, the contractor proposed a price significantly higher than the negotiation objective the contracting officer could have established; in the other case, the contractor proposed a price lower than the negotiation objective the contracting officer could have established.

Competitive Pricing Techniques Not Evident on Two Dual-Source Contracts

Our review of contractors' cost-estimating methodologies and supporting cost information revealed that competitive pricing techniques were not used to develop the prices proposed on two dual-source contracts. For example, our review of one contract revealed the contractor's proposed price

- did not reflect a lower updated material cost estimate developed by the contractor shortly before making a final proposal to the contracting officer;
- was based on labor and indirect expense rates that were higher than those recommended by the cognizant government contract administration agency at the time of contract award;
- was based on a profit rate that was higher than negotiated on a similar noncompetitive weapon systems contract awarded to the contractor; and
- did not reflect material price reductions likely to be achieved during vendor negotiations although company documents recognized that 10 percent of production material costs could be "negotiate[d] below amount on written [vendor] quotes."

We believe each of these conditions is evidence of noncompetitive pricing techniques. Had the contracting officer obtained insight into the basis of the contractor's proposed price, the contracting officer could have established a negotiation objective about $7.3 million lower than

The Truth in Negotiations Act (P.L. 87-653) was passed by the Congress in 1962 to protect the government against inflated contractor cost estimates and place the government on an informational parity with contractors when negotiating noncompetitive contracts. The act requires contractors to submit cost or pricing data supporting proposed noncompetitive contract prices and to certify that the data submitted are accurate, complete, and current. The act allows the government to reduce a contract price if it is determined that the price was overstated because the data submitted were not accurate, complete, and current. The act's requirements apply to all noncompetitive contract actions of $100,000 or more.

DOD Inspector General Report on Dual-Source Contracts

In June 1988, the DOD Inspector General reported[2] that contracting officers had incorrectly determined that adequate price competition existed in the award of $8.8 billion of dual-source contracts and, as a result, the contracts were improperly exempted from the pricing safeguards used to ensure fair and reasonable prices on noncompetitive contracts. The Inspector General reported that contracting officers were treating dual-source procurements as though the introduction of a second source automatically created price competition and resulted in fair and reasonable prices and concluded that it was unwise to assume that prices proposed by dual-source contractors are fair and reasonable without some insight into the basis of the prices.

The Inspector General recommended that contracting officers be instructed to employ noncompetitive pricing safeguards on all dual-source contracts. In response to the DOD Inspector General's recommendation, the Deputy Assistant Secretary of Defense for Procurement issued a policy memorandum on December 21, 1988, addressing adequate price competition in dual-source programs. The policy memorandum stated:

"The determination of adequate price competition must be made on a case by case basis by the contracting officer. Where the contracting officer determines that adequate price competition exists, certified cost or pricing data need not be obtained. However, it may be appropriate, in certain cases, to obtain some cost data in support of the price analysis performed. Where adequate price competition does not exist, certified cost or pricing data should be obtained. It should be clearly recognized that the adequate price competition determination on dual-source procurements should be made with deliberation and thorough review."

[2]Dual-Source Procurement Techniques, DOD Office of the Inspector General Audit Report (No. 88-163) June 7, 1988.

revised, effective May 22, 1989, to implement the Deputy Assistant Secretary's policy. However, the revision does not address the need for contracting officers to exercise deliberation and thorough review. Rather, it presumes that adequate price competition exists and provides that contracting officers will make dual-source awards solely on the basis of price analysis. We believe the DFAR revision does not provide adequate guidance to contracting officers for ensuring fair and reasonable prices as price analysis techniques were not an effective safeguard in pricing the dual-source contracts we reviewed.

Background

Dual-source contracting anticipates that a government requirement will be split between two contractors, with the larger share usually going to the offeror submitting the lowest price. Therefore, by its nature, dual-source contracting is generally not a "winner-take-all" competition.

To assess whether contracting officers had a sound basis for negotiating fair and reasonable dual-source contract prices, we evaluated contractors' estimating methodologies, pricing strategies, and supporting cost information to determine whether competitive pricing techniques were employed in developing the proposed dual-source contract prices.

For purposes of our review, we defined competitive pricing techniques as those that produced prices equal to or less than the negotiation objectives that contracting officers could have established through use of the safeguards normally used on noncompetitive contracts. Conversely, we defined noncompetitive pricing techniques as those that produced prices higher than the negotiation objectives which contracting officers could have established.

We determined the negotiation objectives by using the same type of pricing information that contracting officers have available for negotiating noncompetitive contracts. For example, we used the labor and indirect expense rates recommended by cognizant government contract administration agencies when the dual-source contracts were awarded. We also used the latest material pricing information available to the contractors. In those cases where we found contractors did not use accurate, complete, and current cost information, we assumed a Defense Contract Audit Agency review would have identified the condition and recommended a reduction in proposed prices.