



**Comptroller General
of the United States**

Washington, D.C. 20548

Decision

Matter of: Aydin Vector Division

File: B-243430

Date: July 22, 1991

Lee Curtis, Esq., Howrey & Simon, for the protester.
Paul Shnitzer, Esq., and Robert P. Davis, Esq., Crowell & Moring, for SCI Systems, Inc., an interested party.
Jonathan H. Kosarin, Esq., Department of the Navy, for the agency.
David Ashen, Esq., and John M. Melody, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

DIGEST

1. Protest of award of contract for test instrumentation to be placed aboard aircraft is denied where evaluators reasonably determined that protester's proposed system made less efficient use of limited space available, offered less flexibility in installation, and would require more work to install and maintain than awardee's; although narrative evaluation did not specifically discuss every difference in scoring, point scores are merely guidelines, and the perceived significant relative weaknesses in protester's proposal supported selection of awardee's proposal.

2. Contracting agency was not required to discuss weaknesses in protester's proposal for airborne instrumentation relative to the merits of awardee's proposal, and would have acted improperly had it disclosed awardee's approach to reducing wiring and maximizing the use of limited space aboard aircraft; agencies cannot disclose in discussions information that would result in revealing one offeror's approach to another, and need not discuss every element of a technically competitive proposal receiving less than the maximum possible score.

DECISION

Aydin Vector Division protests the Department of the Navy's award of a contract to SCI Systems, Inc., under request for proposals (RFP) No. N00421-90-R-0001, for the Common Airborne Instrumentation System (CAIS). Aydin challenges the evaluation of proposals and contends that the agency failed to

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conduct meaningful discussions with Aydin concerning perceived weaknesses in its proposal.

We deny the protest.

BACKGROUND

The CAIS solicitation requested proposals for the development of a common, general purpose flight test data acquisition system; the system, consisting of an airborne subsystem to be placed aboard aircraft under test and a ground support subsystem, is intended to meet the majority of flight test instrumentation requirements of the Air Force, Army, and Navy. The solicitation required that the airborne component of the system include: data acquisition units, which receive inputs from a number of aircraft sensors; a central airborne system controller, which controls the data acquisition units and receives test signals from them; and a data transmission bus connecting the data acquisition units to the airborne system controller, and consisting of a control unit, terminal units, and wire or fiber optic media connecting the units.

The CAIS specification, noting that aircraft designers do not allocate space for flight test instrumentation equipment, stated that "it is therefore important that the size of [the] CAIS airborne subsystem be as small as practical." The specification specifically called for reduction in the length and size of signal wire bundles and required that the CAIS bus configuration "be designed so as to minimize the number of conductors required to complete the . . . interface between data acquisition units and the airborne system controller." The specification noted that there were two acceptable general approaches to be considered for housing CAIS equipment, including one approach using fixed volume assemblies and another variable volume approach using stackable, modular assemblies, the size of which varies with the equipment to be housed; it also suggested that "consideration [be] given to selecting envelope shapes that have the best potential for efficient use of available space." The statement of work added that the CAIS system should be "developed with maximum utilization of common off-the-shelf equipment and technology."

The solicitation provided for award to the responsible offeror whose acceptable proposal represented the greatest value to the government, considering both technical factors (70 points) and the proposed cost plus fixed-fee (30 points). Technical proposals were to be evaluated under four factors, including technical approach (49 evaluation points), management (10.5 points), corporate experience (8.4 points), and facilities (2.1 points). Of significance to this protest, the factor for technical approach included subcriteria for achieving modularity, minimizing packaging size, and for the

proposed approach toward using commercial, off-the-shelf hardware and software.

Four proposals were received in response to the solicitation; two of the proposals, those submitted by Aydin and SCI, were included in the competitive range. After written discussions with offerors, the agency requested best and final offers (BAFO). Based upon evaluation of the BAFOs, the Navy determined that SCI's proposal offered the greatest value to the government. Although Aydin proposed a slightly lower cost-plus-fixed-fee (\$20,019,003) than SCI (\$21,093,577) and accordingly received a slightly higher cost score (30 versus 28 points), SCI's technical score of 59 was 10 points higher than Aydin's score (49 points), resulting in an overall score of 87, 8 points higher than Aydin's overall score of 79. SCI's higher score under the technical approach factor accounted for approximately 9.1 of its 10-point technical advantage relative to Aydin.

While both offers were determined to be acceptable in all regards, the Navy found Aydin's technical approach less advantageous than SCI's in three significant respects. According to testimony given by the agency's lead engineer on the CAIS program during the hearing on this matter, Aydin's approach to the CAIS bus architecture represented "the most significant weakness" in Aydin's proposal; in response to a question, the engineer agreed that Aydin's approach in this regard posed real problems for the agency. Transcript (TR) at 156 and 158. Again, the CAIS specification required a bus design that minimized the number of conductors (wires). SCI proposed a bus system using just four wires. Although Aydin proposed a bus system in which the airborne system controller would be connected to splitter devices by only 4 wires, the splitter devices in turn were to be connected to the data acquisition units by a 10-wire bus. Aydin's 10-wire bus would require significantly more connections than SCI's 4-wire system. Aydin's proposed data acquisition units were to be sequentially connected, that is, they were to be connected daisy-chain fashion, with the CAIS bus connecting into and out of each unit; therefore, a total of at least 20 connections would be required for each data acquisition unit, 12 more than would be required for a 4-wire system. Further, additional connections would be required where the bus passes through sealed aircraft bulkheads. The agency estimates that for a full CAIS airborne system, Aydin's 10-wire bus would require approximately 1,250 connections, while a 4-wire bus would require only 500 connections. The Navy determined that Aydin's proposal of a data bus with more conductors, while technically acceptable, nevertheless represented a relative weakness because the additional connections would increase the effort and cost required to install, and later to modify, the CAIS system.

The Navy also found Aydin's approach to packaging CAIS airborne equipment to constitute a weakness. Aydin initially proposed fixed-volume packaging, with standard-size connectors, for all components other than two types of data acquisition units. For the latter two units, Aydin initially proposed as its primary approach the use of stackable, modular assemblies, with smaller microminiature connectors; it also offered as an option various sizes of fixed-volume assemblies with standard connectors. The user community for the proposed CAIS system, however, had strongly objected to using microminiature connectors because their smaller size required the splicing of the wires onto the connector and did not permit the use of a simple, less cumbersome direct connection. TR at 45-46. As a result, the CAIS specification provided that "microminiature connectors shall not be used without government approval," and the agency advised Aydin during discussions that "the 'optional' [data acquisition units] . . . are closer to the specification/statement of work requirements than the priced standard product solutions." Aydin responded by proposing only its "optional" approach, which would involve using various-sized fixed-volume assemblies for the two data acquisition units. In contrast, SCI proposed a modularly expandable approach to housing key components. The Navy found Aydin's proposal of a variety of fixed-volume housings to be less advantageous than SCI's use of modular, expandable housing for key components because fixed-volume housings generally make less efficient use of space than modular housings, which occupy only the space required by the enclosed equipment, and because Aydin's approach would require the agency to keep in stock multiple sizes of housings.

Further, the Navy found Aydin's proposed spacing between data acquisition units to represent a relative weakness in its technical approach. In its initial proposal, Aydin described a CAIS system in which each active splitter device supported eight clusters of eight data acquisition units each. During discussions, in response to a question by the agency as to the maximum allowable separation between data acquisition units, Aydin stated that the maximum separation between units in a cluster would be 5 feet in a cluster of eight units and 40 feet in a cluster of two units. The Navy concluded, however, that it would not always be possible to install data acquisition units within 5 feet of each other and that, as a result, the limit in Aydin's proposal on separation between units would often preclude placing eight data acquisition units in a single cluster. The agency concluded that Aydin's bus system therefore would require more clusters of data acquisition units and thus more wiring, that the limitation on spacing would reduce flexibility in installation, and that this would increase the required design effort on the part of the agency. In contrast, SCI proposed a previously developed

bus system that the agency determined offered more flexible unit-to-unit spacing. Accordingly, while the Navy found Aydin's approach in this regard to be technically acceptable, the agency viewed it as less advantageous than SCI's more flexible approach.

The Navy determined SCI's proposal to be superior in other areas as well. The agency found that SCI's proposed CAIS system permitted the connection of approximately 40 percent more data acquisition units than did Aydin's. The agency also considered it a strength that previously procured hardware would be compatible with, and available for integration into SCI's system. Further, the agency considered SCI's experience with comparable projects to be greater than Aydin's; it concluded that therefore SCI's development risk would be less. The Navy determined that in view of SCI's overall technical superiority, award to that firm would be in the best interest of the government notwithstanding its slightly higher estimated cost. Upon learning of the ensuing award to SCI, Aydin filed this protest with our Office.

TECHNICAL EVALUATION

Aydin generally questions whether the agency's detailed point scoring under the factor for technical approach was adequately supported in the narrative evaluation. Aydin argues that the evaluation failed to take into account the relative risk associated with the respective proposals. In addition, Aydin challenges the agency's conclusion that SCI's experience was slightly superior; it maintains that the evaluation should have taken into account the fact that a prior SCI contract with the Air Force for test instrumentation had been terminated by the government.

The evaluation of proposals is primarily within the discretion of the procuring agency and not our Office; the agency is responsible for defining its needs and the best method for accommodating them and must bear the burden resulting from a defective evaluation. Litton Sys., Inc., B-239123, Aug. 7, 1990, 90-2 CPD ¶ 114. The protester has the burden of affirmatively proving its case, and its mere disagreement with an evaluation does not satisfy this requirement. Walton County Assoc. for Retarded Citizens, Inc., B-242009, Mar. 21, 1991, 91-1 CPD ¶ 309.

We find the agency's overall evaluation of proposals to have been reasonable. Numerical point scores are useful only as guides to intelligent decision-making and generally are not controlling because they often reflect the disparate subjective judgments of evaluators. See Midwest Research Institute, B-240268, Nov. 5, 1990, 90-2 CPD ¶ 364. Although not all of the differences in point scores under each of the

many evaluation subcriteria under the factor for technical approach were specifically explained in the agency's narrative evaluation, the contemporaneous evaluation upon which the award determination was based in fact described the principal points of differentiation between the proposals. The evaluation specifically identified the relative weaknesses in Aydin's proposal with respect to its proposal of more wires (and thus more connections), fixed equipment housings that would make less efficient use of space than would SCI's modular housings, and more restrictive limitations on the spacing of data acquisition units, which would necessitate more wiring. Again, the solicitation specifically called for the CAIS airborne subsystem to be as small as practical, minimizing the number and length of wires and maximizing the efficient use of space; Aydin does not dispute that its proposal was less advantageous in this regard.

As for Aydin's contention that the agency failed to take into account relative risk, the Navy maintains that SCI's proposal presented no more significant risk than Aydin's, and that in fact neither proposal presented significant technical risk. According to the agency, Aydin, as well as SCI, would be required to undertake additional development work if it received the contract; the agency reports that, at the time of evaluation, major portions of Aydin's system, including the critical airborne system controller, required further development to meet the specification. Although Aydin denies that its proposed system requires significant development effort, we note that its proposal generally provided for a design and development phase, that Aydin proposed developmental costs approximately only 2 percent lower than SCI's, and that during discussions Aydin specifically indicated that its breadboard (prototype) version of an airborne system controller was only operating at two-fifths of the required speed. TR at 150. Since additional development was required on the part of both firms, and since SCI proposed a system permitting the use of and integration with equipment previously produced for the government, presumably thereby reducing development risk, we find no basis on the record for concluding that Aydin's proposal presented significantly less risk than SCI's. Therefore, in view of the relative weaknesses in Aydin's proposal as identified in the evaluation, we conclude that the agency reasonably determined SCI's proposal to be superior under the factor for technical approach.

Turning to the corporate experience evaluation, SCI's advantage under this factor accounted for less than one point of its overall 10-point technical advantage. Aydin itself admits that the difference with respect to the evaluation of corporate experience had little effect on the source selection decision and that the primary difference in evaluation concerned technical approach. Thus, it would appear that any

deficiency in the evaluation of experience did not have a material effect on the evaluation. In any case, we note that SCI's prior contract with the Air Force for test instrumentation was terminated for the convenience of the government, not for default, and that agency officials testified that the termination came after cost overruns caused by the government changing its requirements and not through any fault of SCI. TR at 167. (We note, moreover, that Aydin itself was a subcontractor to SCI under that contract.)

DISCUSSIONS

Aydin primarily contends that the Navy failed to conduct meaningful discussions concerning the perceived weaknesses in its proposal. Specifically, Aydin points out that the agency did not advise Aydin during discussions of its view that Aydin's offer of a 10-wire bus and Aydin's failure to offer modular housings for critical components were viewed as relative weaknesses. Indeed, Aydin maintains that the agency misled it into believing that the agency preferred fixed-volume housings. According to the protester, upon being advised during discussions that its optional proposal of housings for two of the data acquisition units, which was based on fixed-volume assemblies with standard connectors, was closer to the specifications than its primary proposal, which was based on modular assemblies with microminiature connections, it concluded that the agency was expressing a preference for fixed-volume assemblies. TR at 38 and 41-42. As for its proposed limits on spacing of data acquisition units, Aydin argues that the agency's inquiry during discussions as to the maximum allowable separation between units amounted to no more than "a clarification unrelated to a specification requirement," and did not furnish any notice that its approach was viewed as deficient.

Under the Competition in Contracting Act of 1984, 10 U.S.C. § 2305(b)(4) (1988), and Federal Acquisition Regulation (FAR) § 15.610(b) written or oral discussions must be held with all responsible sources whose proposals are within the competitive range. Such discussions must be meaningful, that is, agencies must point out weaknesses, excesses, or deficiencies in the offeror's proposal, Mikalex & Co., B-241376.3, June 5, 1991, 91-1 CPD ¶ ____; see SAMCO dba Advanced Health Sys., Inc., B-237981.3, Apr. 24, 1990, 90-1 CPD ¶ 413, unless doing so would result in disclosure of one offeror's approach to another--technical transfusion--or would result in technical leveling through successive rounds of discussions, such as by pointing out inherent weaknesses resulting from the offeror's lack of diligence, competence, or inventiveness. FAR § 15.610(d); see B.K. Dynamics, Inc., 67 Comp. Gen. 45 (1987), 87-2 CPD ¶ 429; Price Waterhouse, B-222562, Aug. 18, 1986, 86-2 CPD ¶ 190. Agencies are not obligated to afford offerors

all encompassing discussions, or to discuss every element of a technically acceptable competitive range proposal that has received less than the maximum possible score; rather, agencies generally must lead offerors into the areas of their proposal which require amplification. See Range Technical Servs., 68 Comp. Gen. 81 (1988), 88-2 CPD ¶ 474; Avitech, Inc., B-223203.2, Mar. 27, 1987, 87-1 CPD ¶ 351.

The discussions with Aydin were adequate. Aydin's proposal of a 10-wire data bus and fixed-volume housings did not represent deficiencies rendering its proposal unacceptable, did not involve the application of undisclosed evaluation criteria on the part of the agency, and did not give rise to uncertainties in Aydin's proposal which required amplification. Rather, these elements of its proposal represented fundamental design choices which were simply found by the agency to be less advantageous. Again, the solicitation advised offerors of the agency's desire that the number of connectors be minimized. Aydin understood that fewer connectors were better. TR at 90. The solicitation, however, required the capability to handle a high rate of data transmission, and Aydin concluded that meeting this requirement with a 10-wire bus system would involve less developmental risk than using 4-wire system. In other words, while SCI made one tradeoff based on its technical judgment, Aydin made a different tradeoff between the solicitation preference for fewer connectors versus the preference for more off-the-shelf, less developmental equipment. In our view, the agency was not required to discuss the conclusions it reached after examining the relative merits of the two proposed design approaches. Weaknesses in an offeror's own proposal relative to the merits of a competitor's offer are not for discussion, see Martin Advertising Agency, Inc., B-225347, Mar. 13, 1987, 87-1 CPD ¶ 285, and to have disclosed SCI's approach to meeting the data transmission requirement with only four wires would have been improper technical transfusion, i.e., the disclosure to a competitor of one offeror's innovative approach or solutions to problems. See Emerson Elec. Co., B-227936, Nov. 5, 1987, 87-2 CPD ¶ 448.

With respect to equipment housings, the solicitation permitted offerors to propose either modular (stackable) or fixed-volume housings, but enjoined them to consider such factors as producibility, production cost, aircraft mounting considerations, configuration flexibility and accessibility of connectors; it specifically stressed the importance of keeping the size of the CAIS airborne subsystem as small as practical by selecting envelope shapes that possess the best potential for the most efficient use of space. While SCI made one tradeoff and proposed a design approach using modular assemblies, it reasonably appeared that Aydin, after having been advised that an alternative to an approach coupling the

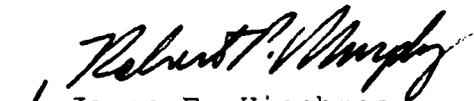
generally prohibited microminiature connectors with modular assemblies was more in conformance with the specifications, made a different tradeoff and proposed a design approach using fixed-volume assemblies. Again, both approaches were acceptable; the agency simply found SCI's approach more advantageous. In our view, the Navy was required neither to disclose the weakness in Aydin's approach relative to SCI's approach, nor to suggest an alternative approach.

As the protester states, it is axiomatic that the government does not satisfy its obligation to conduct meaningful discussions where it consciously misleads an offeror into lowering the evaluated quality of its proposal. See Unisys Corp., B-231704, Oct. 18, 1988, 88-2 CPD ¶ 360. There is no evidence of an intention by the Navy to mislead here, and we find that the discussions with respect to equipment housing were in fact not misleading. Because the solicitation specifically prohibited the use of microminiature connectors without government approval, Aydin was on notice that proposing microminiature connectors would call its proposal into question. Therefore, we believe that the agency statement that an alternative to coupling microminiature connectors with modular housing would be more in conformance with the solicitation most reasonably should have been interpreted, not as a preference for fixed-volume housings, but rather as a reminder of the general prohibition on microminiature connectors. Certainly, the agency was not required to disclose SCI's alternative approach of coupling standard connectors with modular housings.

We reach similar conclusions with respect to the limitations in Aydin's proposal on the permissible spacing between data acquisition units. The solicitation advised offerors of the agency's need to minimize wiring. Aydin's approach in this regard, although acceptable, was viewed as likely to result in additional wiring and to be less advantageous than SCI's approach, which was determined by the agency to be more flexible. The agency in fact led Aydin during discussions into this area, requesting amplification with respect to the agency's uncertainty regarding permissible spacing. Again, there was no requirement that the agency go further and discuss the weakness in Aydin's approach relative to that of another offeror.

Having found the evaluation reasonable and discussions adequate, we find no basis on which to object to award to SCI.

The protest is denied.


for James F. Hinchman
General Counsel