## DECISION



## THE COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20548

FILE: B-191789

DATE: September 12, 1978

MATTER OF: Teles Computing, Inc., and Proprietary Software Systems, Inc.

DIGEST:

Protest that Air Force has no basis for finding protester's proposal technically unacceptable is denied, since, absent showing that agency has been arbitrary or unreasonable, it is not GAO's function to make ind pendent judgment as to technical merits of proposal.

Telos Computing, Inc., and Proprietary Software Systems, Inc. (TPSS), protest the Air Force finding that their proposal submitted pursuant to request for proposals (RFF) No. F30602-77-R-0314 is technically unacceptable and not within the competitive range for the procurement.

The RFP, issued by the Rome Air Development Center, Griffiss Air Force Base, New York, solicited proposals for experimental, developmental and research work in connection with JOVIAL Compilers—complex computer programs that the Air Force requires to fulfill its defense mission. Advance notice of the procurement was published on February 15, 1977. The RFP was issued to 12 sources on August 31, 1977. Four proposals were received by the October 25, 1977, due date. A technical evaluation of these proposals by engineering and procurement personnel of the Software Sciences Section of the Rome Air Development Center (RADC) was completed on November 18, 1977. EADC found only the proposal submitted by Softech, Inc., technically acceptable. Negotiations with Softech were concluded on March 10, 1978. The preaward notice to unsuccessful bidders was mailed on April 11, 1978.

By telephone on April 25, 1978, TPES notified the contracting officer of its dissatisfaction with the Air Force decision that its proposal was unacceptable.

TPSS requested an immediate formal descriefing, but was advised by the contracting officer that this was not possible because Armed Services Procurement Regulation (ASPR) § 3-508.4(b) (1976 ed.) only provides for debriefing after award. However, the contracting officer agreed to research the contract file and, as permitted by ASPR § 3-508.2, to advise TPSS in general terms of the basis for the preaward notice.

On the next day, April 26, 1978, the contracting officer discussed TPSS's dissatisfaction with RADC technical and procurement personnel who reviewed TPSS's technical proposal and concluded that it would require a major rewriting of the proposal to correct the deficiencies that had been detected. Later that day, the contracting officer telephoned TPSS to outline in general terms the major deficiencies which had caused RADC to find its proposal unacceptable. According to RADC, the primary deficiency in the TPSS proposal was the failure to meet the delivery date for an interim compiler which the RFP required to be delivered 150 days after the contract was awarded. TPSS dismissed most of the deficiencies as unimportant and argued that it had in fact proposed to deliver in 150 days. The contracting officer indicated he would look into the matter further and telephone TPSS again the next day.

On April 27, 1978, the contracting officer and the technical and procurement personnel met again to discuss the TPSS contention. The RADC project engineer concluded that TPSS must have misunderstood the requirement in paragraph 4.1.4.1 of the RFP's Statement of Work. That requirement calls for "a capability to compile J73 programs on and generate code for an IBM equivalent Computer" (emphasis added). The key elements of this requirement are the words "on" and "generate." The Air Force intended that both these tasks should be accomplished by the interim compiler that was to be delivered 150 days after award. Yet, in its evaluation of the TPSS

proposal, RADC concluded that TPSS was addressing these two functions separately so that the "on" capability was to be delivered in 150 days in one compiler and the "generate" capability was to be delivered in another compiler 150 days later, thus taking 300 days to deliver what the RFP required in a maximum of 150.

After the completion of this meeting, the contracting officer telephoned TPSS. The RADC project engineer participated in the conversation. The project engineer explained the requirement. TPSS indicated that it did not agree with the interpretation. Moreover, TPSS stated that, if the Air Force was correct, TPSS could not meet the 150-day delivery date, but would need 7 or 8 months. TPSS stated that if it had made a mistake, it would acknowledge it and withdraw the protest that had been filed with our Office earlier that day. TPSS said it would research the RFP and reply orally on May 1, 1978.

When TPSS did not telephone on May 1, the contracting officer called TPSS. TPSS indicated it was no longer willing to withdraw its protest. According to the contracting officer's memorandum of the conversation, TPSS would neither confirm nor deny the Air Force's interpretation of the requirement in question, but generally wished to dismiss the requirement as unimportant and work out some other delivery arrangement. With TPSS unwilling to withdraw its protest, the contracting officer concluded that any additional discussion would be useless. The contract was awarded to Softech on July 31, 1978, as authorized by ASPR 5 2-407.8(b)(2).

TPSS contends that the Air Force has never adequately explained why the TPSS proposal was found technically unacceptable. Believing itself "eminently well-qualified for this effort," TPSS maintains that the Air Force has not given its proposal adequate consideration and may not have considered it at all. Further, TPSS contends that the deficiencies the Air Force cites are no basis for disqualification, especially its failure to meet

B-191789

the delivery date for the interim compiler which TPSS believes it misinterpreted due to 'a very ambiguous schedule requirement."

The purpose of this procurement is to develop compilers, as well as a tool for facilitating the implementation of compilers, for the computer programming language known as JOVIAL (J73/I), commonly called J73 or J73/1. A compiler is a complex computer program which translates a "high lever language" such as 173 (which is close to natural language) into a low level code which a computer understands. Since it has proven more advantageous to use high level languages rather than have programmers write programs in the tedious code computers understand, the Department of Defense (DOD) has ordered that all computer programs that are part of weapons and defense systems be written in a high level computer programming language such as J73. This means, however, that reliable compilers must be available to translate these programs into low level code. Yet, experience has shown that compilers are complex, expensive, take a relatively long time to develop, and have traditionally been of questionable quality. In addition, DOD's use of many different brands of computers also requires the development of many different JOVIAL (J73/I) compilers to perform the translation.

This procurement, entitled "JOCIT/J73," is intended to counter the problems of cost, complexity, leadtime and quality presently associated with J73 compilers by having an automated tool developed which can handle the time-consuming and error-prone tasks connected with compiler building. RADC successfully completed a similar development several years ago which resulted in a high quality compiler for the JOVIAL J3 language. In addition to this compiler-building-tool, the procurement also calls for the delivery of six compilers. Four of these are to be built with the tool, but the other two are intended to be "interim compilers" which will

**L**-191789 5

provide the Air Force with a J73 compiler for a computer (the IBM 370 equivalent computer) that is widely available in both the Air Force and DOD inventories. There is presently no such J73 compiler in use and, consequently, these interim compilers will provide a capability not currently available to DOD.

In light of the pressing need for a J73 compiler, RFP paragraph 54, in portinent parc, set out a delivery schedule for the six compilers as follows:

"The offeror's technical proposal is to include a milestone chart showing his proposed schedule based on time elapsed from date after receipt of contract covering the following major events as compared to the Government required milestone as set forth below:

- e. "Interim J73 Compiler (See SOW Para 4.1.4.1) 150 days after contract
- f. "IBM EQV. J73 Compiler (See para 4.1.4.2) 300 days after contract
- g. "JOCIT on IBM EQV Computer (See para 4.1.4.3) 450 days after contract
- h. "JOCIT Compiler on IBM EQV (See SOW Para 4.1.4.4) 450 days after contract
- i. "Compiler (See SOW Para 4.1.4.5) 630 days after contract
- j. "Compiler (See SOW Para 4.1.4.6) 660 days after contract"

As indicated above, the first interim compiler must be delivered 150 days after the contract award although the second compiler does not have to be delivered until 300 days after award. The reason for this difference in delivery is that the second compiler must also be able to translate new programming language features which are identified in Annex 2 of the RFP and included in the compiler by paragraph 4.1.1 of the Statement of Work.

In regards to the first compiler, moreover, paragraph 4.1.4.1 of the Statement of Work provides in pertinent part:

"The contractor shall deliver a capability to compile J73 programs on and generate code for an IBM equivalent computer. \* \* \* In any event, the contractor shall supply, as a minimum, the capability to compile and execute programs written in the language described in M1L-STD-1589 [the official specification of JOVIAL (J73/I)] \* \* \*."

As mentioned earlier, the key elements in the above provision are the words "on" and "generate." Thus, to Julfill this requirement, a contractor must deliver an interim compiler which has the capacity to have the computer that is doing the compiling (translating) of the program also being the computer that is running the program (executing the instructions). In other words, one computer must perform both tasks, and the compiler needed to bring this about must be delivered 150 days after award as required by kFP paragraph 54e.

TPSS, however, proposes to deliver an "Interim J73/1 Cross Compiler" in order to fulfill the above requirement. RADC has found this totally unacceptable. The term "cross compiler" means that there will be two computers: one to do the compiling and a second to run the program. RADC states that this arrangement is too costly and impractical for weapons system

development, since it not only requires two computers instead of one, but also increases the need for human intervention in the translating and running of a computer program. Although TPSS does propose to deliver a "Rehosted J73/I Compiler on IBM Equivalent" which RADC believes can perform the tasks required by paragraph 4.1.4.1, this item is not schedule. For delivery until 300 days after award rather than the 150 days required by the RFP. Moreover, it does not include the new programming language features called for by Annex 2 of the RFP.

While this failure to deliver a specific capability within the time required is the primary deficiency RADC has found in the TPSS proposal, it is not the only one that RADC relies on to support its decision that the TPSS proposal is technically unacceptable. All TPSS deficiencies, including the one mentioned above, were discovered during the technical evaluation of the TPSS proposal. This proposal and all the others submitted in response to the RFP were evaluated under specific technical factors. Section "D" of the RFP sets out these factors, in pertinent part, as follows:

"1. For the purpose of making an award under this solicitation, the technical factors rated below will be considered. The relative importance of the factors is indicated by the number in the space opposite each. Number one indicates the most important; number two, the second most important; three-third, etc. If two or more technical factors are rated of equal importance, the same number will be assigned to each equal factor.

<u> </u>	Understanding of Problem
11	Soundness of Approach
1	Compliance with Requirement

Ease of Maintenance (Hardware Buys Only)

- \_\_\_\_\_\_1 Special Technical Pactors as listed below:
- "(1) Does the bidder demonstrate expertise in the J73 language, development of compilers, practical implementation tools and a knowledge of tools such as meta-assemblers, universal assembly languages, and/or automated code generators.
- "(2) Does the bidder have the personnel with previous experience in maintaining/modifying compilers, experience with compiler optimizating and have experience in the development and specificating of mechanical languages?"

For the factor of "Understanding of Problem," TPSS was generally rated above average by the evaluators even though it was criticized for misunderstanding the meaning of one of the "J73 language updates" called for in Annex 2 of the RFP.

In "Soundness of Approach," TPSS was generally rated average. The evaluators believed that TPSS presented some high risk approaches to the development of the compiler-building-tool (JOCIT). In addition, the evaluators were also concerned with the relatively low significance TPSS placed on the quality assurance tasks (testing) required by the RFP.

For "Compliance with Requirement," TPSS was rated unacceptable. This was due largely to its noncempliance with the delivery dates for the interim computers, but also because of its failure to incorporate into the second interim compile the new programming language features found in Annex 2. TPSS was also found unacceptable here because of its failure to investigate new techniques for both the compilers and the compiler-building-tool.

Finally, in the area of "Special Technical Factors," TPSS was rated unacceptable because of the evaluators concern with the level of experience that both key and supporting personnel brought to the project. They concluded that the personnel TPSS will rely on to fulfill the contract lack experience in certain areas—for example, in the development of mechanical languages—which the RFP deems critical.

From the foregoing, it is obvious that there are no grounds for the allegation that the Air Force never read the TPSS proposal. The file submitted in conjunction with the agency report makes it clear that all the proposals submitted in response to this RFP were given a similar technical evaluation and that the TPSS proposal was found to be unacceptable for the reasons given.

In addition, we conclude that the delivery schedule for the interim compilers is not ambiguous as TPSS claims. RFP paragraph 54 clearly establishes that the first interim compiler is due "150 days after contract" and the second is due "300 days after contract."

Further, it is not the function of this Office to evaluate proposals or to make independent judgments as to the precise numerical scores which should have been assigned to proposals. Thus, determinations by procuring agencies regarding the technical merits of proposals will be questioned by this Office only upon a clear showing of unreasonableress, abuse of discretion or a violation of the procurement statutes or regulations. Management Information Technology, 8-190453, March 15, 1978, 78-1 CPD 205; K-MCC, Inc. Consultants, B-190358, March 10, 1978, 78-1 CPD 194. The fact that the protenter does not agree with the agency's evaluation does not render the evaluation arbitrary or illegal. Honeywell, Inc., B-181170, August 8, 1974, 74-2 CPD 87. We are unable to conclude from the record that the decision that the TPSS proposal was unacceptable was unreasonable, arbitrary or in violation of statute or regulation.