

PL II

DECISION



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

10,658

FILE: B-193329

DATE: July 3, 1979

MATTER OF: California Computer Products, Inc.

CNG00343

[Protest Alleging RFP Did Not Provide Sufficient Information to Permit Preparation of Proposal]

DIGEST:

1. Solicitation for off-line incremental plotter which was to include programmable controller, RS-232 communications interface, and tape transports with "write" capability, but which did not explain need for such features, left uncertain whether requirements were fully described, but uncertainty was resolved by agency's written answers furnished in response to protester's preproposal questions.
2. Requirement for RS-232 interface was not unduly restrictive because NASA was justified in believing that a standard industry communications interface was necessary to assure adaptability of incremental plotting system over 10-year projected service life. Moreover, NASA advised protester in writing that alternative approaches to particular "on-line" feature would be considered if proposed.

California Computer Products, Inc. (Calcomp) protests the terms of RFP 3-744813, issued by the National Aeronautics and Space Administration's Lewis Research Center (NASA) for an off-line incremental plotter system. In Calcomp's view, NASA did not provide sufficient information to permit preparation of a proposal. Moreover, Calcomp believes NASA included requirements which were unduly restrictive of competition. We find the protest is without merit.

As used in this type of application, plotting systems consist of several components which process computer generated data to produce the data on paper as a graphic display or "plot." Plotting systems can be designed to operate in an "on-line" or "off-line" mode. An on-line system is one which receives and processes data while connected to a source or "host" system, as distinguished

005780

from an off-line system designed to process information without being connected to a host system. NASA titled the specifications for this procurement, "Off-Line Incremental Plotting System."

According to NASA, it sought to replace two fourteen year old 12-inch plotters with a single 12- and 36-inch multicolor system. The specifications describe a system consisting of two magnetic tape transports (tape recording machines) coupled to two incremental plotters through a programmable controller. Also, the contractor is to provide industry compatible Fortran based software for use on IBM 360/67 and Univac 1100/42 equipment. This will permit NASA to prepare magnetic tapes to be read by the plotting system.

As stated in the specifications, the programmable controller was to include:

"1. An operator's console terminal, with a character output rate of at least 30 characters per second. The operator's terminal will perform the functions of starting plots, requesting multiple plots of the same data, requesting file searches of a magnetic tape for given plots, and serving as a system programmer's aid during a reprogramming or debug[ging] session.

"2. Random access memory of at least 16K words (16 bit words) or 32K (8 bit bytes), to include the operating system. This memory shall be capable of being expanded to at least 32K words (64K bytes) at a later date.

"3. An asynchronous RS 232 communication interface operating at speeds up to 9600 baud. [And]

"4. Interfaces and cabling to the two magnetic tape transports * * * and the two incremental plotters * * *."

As Calcomp explains, it has designed and manufactured digital plotting systems for many years. It manufactures both off- and on-line equipment. It manufactures equipment compatible with the RS-232 interface. Although Calcomp agrees with NASA that the RS-232-C interface is an industry standard, specifying the electrical characteristics and some data format limitations, it argues that there are many different ways to implement and support the interface. Without more detailed specifications, Calcomp protests, it is unable to properly assess the hardware and software support required. Calcomp also argues that the RS-232 specification is unduly restrictive on its face and because the one firm which submitted a proposal is the only firm with an "off-line" plotting system which as part of the controller has "on-line" RS-232 capability.

Calcomp's initial reaction to NASA's requirements was not unwarranted. Calcomp assumed that the equipment was meant to support some kind of on-line application, a reasonable assumption inasmuch as an interface is used to couple two pieces of equipment through an on-line connection. The RS-232 requirement was included in the controller portion of the specification. Calcomp assumed that the RS-232 interface was required to be an integral part of the controller. Consequently, it believed, the RS-232 interface had to permit on-line communication with the controller.

We also believe it was reasonable for Calcomp to question whether the specifications were complete. Not only did NASA insist that the controller be programmable, but the specifications stated that:

"The magnetic tape transports will be used primarily to read plotting tapes prepared on the host computers. They will also be used in a read/write capacity by the system programmer in future program development."
(Emphasis added.)

NASA did not explain what other uses the tape transports would be put to or what future program development would require. The specifications only stated that the Government

intended to acquire magnetic tape utility programs at a later date should the need arise.

We do not feel, however, that the specifications were unduly restrictive. Moreover, we also feel that NASA provided Calcomp with sufficient information before the initial closing date for receipt of proposals so that Calcomp should have been able to understand NASA's actual requirements.

The RS-232 interface presently is used to couple a substantial portion of the equipment used at the Lewis Research Center. Because the plotting system is to meet NASA's needs over a projected 10-year system life, NASA believed certain features, including the RS-232 interface, a software based ("programmable") controller, and tape "write" capability, were essential to give reasonable assurance that changing applications, or advances in the state-of-the-art, would not render the system prematurely obsolete. Thus, it appears the general RS-232 requirement meets a legitimate NASA need and is not unduly restrictive of competition.

With respect to Calcomp's more specific objection, NASA, responding to questions from Calcomp, explained in writing that it anticipated using the interface to support a Government-owned Teltronix 4014 graphics terminal, affording NASA a "quick look" capability with which the operator could preview or visually display a plot to determine whether it should be printed. NASA stated that it could conceive of other possible applications, including an eventual need to add additional plotters. NASA, however, did not insist that its communications (interface) requirement be met in any one particular way (i.e. through the controller), but advised Calcomp that alternative methods of interfacing equipment would be considered if proposed.

Further, we believe the written answers furnished Calcomp, with examples of possible interface applications, adequately explained why the described requirements were needed and should have removed the basis for Calcomp's initial assumptions. Although Calcomp still complains that NASA did not fully describe the tape transport system, NASA stated its actual requirement in

functional, and we believe, adequate terms. The tape transports were to interface with the controller. They were required to "read and write 9-track magnetic tapes at 800 and 1600 characters per inch using the standard IBM recording format," permit transfer rates of at least 20,000 characters per second, have overwrite protection, and contain certain normal tape control functions. Without more, a system including two such transports was acceptable if the transports would permit the system as a whole to function as an off-line plotter.

The protest is denied.


Deputy Comptroller General
of the United States