FILE: B-212914 DATE: September 5, 1984

MATTER OF: Sperry Univac

DIGEST:

Protest against compatibility limited procurement is denied. Requirement for system compatibility was reasonably based on use of acquired systems to augment existing government computer system.

Sperry Univac (Univac) has filed a protest against a negotiated procurement (request for proposals No. 3-500518) conducted by the National Aeronautics and Space Administration (NASA) for two computers to be installed at the NASA Lewis Research Center (Lewis). Univac contends that a requirement for the computers to be compatible with computers produced by the International Business Machines Corporation (IBM) unduly restricted the competition. NASA justified the compatibility limitation on the basis that these systems would be used to agument an existing IBM system. We deny the protest.

Prior to this procurement, NASA had two computer systems at Lewis. One, an older system used for administrative and batch-oriented scientific processing, was based on a Univac computer; a newer second system, combining an IBM and a Cray computer, was used for interactive scientific processing and CAD/CAM functions. (CAD/CAM is an acronym for Computer Aided Design/Computer Aided Manufacturing, mathematical and graphics tools for scientific and engineering design.) This second system employed an older and little-used operating system known as TSS, a timesharing system allowing multiple users to access the computer simultaneously. (See Amdahl Corporation, B-203882.2, May 5, 1982, 82-1 C.P.D. ¶ 421, aff'd., B-203882.3, Oct. 15, 1982, 82-2 C.P.D. ¶ 336.) NASA determined that this second system was saturated and would be unable to sustain the projected scientific workload at Lewis. To satisfy this requirement, NASA proposed to augment the existing scientific system with two IBM-compatible computers using a newer operating system known as MVS.

Under the provisions of the Brooks Act, 40 U.S.C. § 759 (1982), NASA requested authority from the General Services Administration (GSA) for a single IBM-compatibility limited procurement to acquire the two computers needed to augment the existing IBM/Cray system and two additional computers-one for NASA headquarters and one to replace the Univacbased administrative system at Lewis. NASA justified the IBM-compatibility limitation on the basis of a requirement for the scientific systems to be compatible with the existing IBM/Cray scientific system and also because this would avoid software conversion costs for its existing inventory of scientific software. (The CADAM software package which Lewis was using for the CAD/CAM function, for instance, operates only on IBM and compatible computers.) NASA did not provide substantial technical justification for the compatibility limitation for the headquarters and administrative machines. GSA declined to issue a delegation of procurement authority, at least partially because NASA had not justified the IBM-compatible requirement for the administrative and headquarters systems.

NASA subsequently segregated the administrative and headquarters systems from this acquistion and resubmitted its request to GSA for a delegation of procurement authority for two IBM-compatible systems to augment the existing IBM/Cray combination. GSA evaluated this request and issued a delegation of procurement authority with the stipulation that NASA provide for the evaluation of noncompatible alternatives if comparative cost and requirements analyses did not justify a compatibility limited procurement.

In response to the latter requirement, NASA performed a software conversion study weighing two alternatives: replacement of the IBM computer or augmentation of the existing system with additional IBM-compatible computers. In this study, NASA concluded that the cost of converting its IBM-based scientific software to a non-IBM-compatible system would be approximately \$49 million more than the cost of conversion to a newer IBM-compatible environment, or only slightly less than three times the estimated cost of the two computers in an IBM-compatible acquisition. Both this study and NASA's acquisition plan indicate that NASA was not planning to convert its entire inventory of scientific software from TSS if NASA remained within an IBM-compatible environment; instead, NASA proposed to migrate to the newer MVS operating system by continuing TSS for some existing applications, converting others, and requiring new applications to run under MVS.

We have been informally advised that the contract was awarded to Amdahl Corporation (Amdahl) in April 1984. Amdahl is a manufacturer of IBM-compatible computers. While Univac computers may be able to communicate with IBM computers, they are not "compatible."

Univac objects to NASA's requirement for IBM-compatibility. In this respect, Univac asserts that NASA failed to consider a Univac proposal for NASA to retain the existing IBM machine (for CAD/CAM and graphic activities) and upgrade the Univac-based administrative system to support the Cray and absorb the expected additional scientific workload. Univac contends that its proposal would have preserved NASA's investment in CAD/CAM and graphics software and avoided conversion costs for NASA's administrative software. Univac also suggests that NASA could have further reduced conversion cost had it used software written in FIPS (Federal Information Processing Standards) standard language, which would have been easier to transfer between systems. Univac also argues that NASA is going to incur some conversion costs, in any event, to move from the TSS operating system presently in use at Lewis to the newer MVS acquired in this procurement, and that NASA failed to consider these costs in its evaluation of conversion costs. Univac also notes that NASA's initial internal justification for the IBM-compatibility limitation was based partially on the assertion that IBM and compatible computers were projected to be more than 81 percent of the (large computer) market by 1984 and contends that this is no justification for limiting the competition.

NASA asserts that Univac's protest confuses NASA's initial justification for the originally proposed acquisition of both administrative and scientific/computational systems with the procurement actually conducted, which did not include the administrative systems. We agree with this observation and, therefore, the only issue we need consider is whether the IBM-compatibility limitation was proper in the procurement actually conducted.

We have held that agency officials, who are most familiar with the way in which equipment has been and will be used, are in the best position to determine an agency's mimimum needs; we will not disturb such determinations unless arbitrary or otherwise unreasonable. Eastern Marine, Inc., B-213945, Mar. 23, 1984, 84-1 C.P.D. ¶ 343. We also have recognized that agencies could legitimately restrict competition where the item being procured was required to be

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compatible with existing government-owned equipment.

S.A.F.E. Export Corporation, B-207655, Nov. 16, 1982, 82-2

C.P.D. 445; Autologic Incorporated, B-199015, Jan. 7, 1981, 81-1 C.P.D. 141.

We find three factors important here. First, we note that Univac's "proposal," to which we referred above, was little more than a letter, inadequate for evaluation, submitted in response to NASA's aborted effort to acquire both scientific and administrative systems. Second, contrary to Univac's assertion, NASA's conversion study does contemplate the conversion of a substantial portion of NASA's existing TSS software in its evaluation of the IBM-compatible alternative. And, third, it is our understanding, based on the lack of Univac-IBM compatibility, that the Univac alternative--including retention of the existing IBM system for CAD/CAM functions--would not have permitted the close system integration that NASA requires for this computing facility.

In these circumstances, we are not persuaded that it was inappropriate for NASA to limit its consideration of alternative approaches to those considered in the conversion study. Moreover, it is our opinion that the comparative conversion costs reflected in NASA's study are of such magnitude, even if we assume a 100-percent margin of error (and we do not purport to guarantee the study's complete accuracy and validity), that we find no basis here to question the reasonableness of the outcome. In these circumstances, we believe the compatibility limitation was reasonable.

The protest is denied.

Comptroller General