

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)
PURSUANT TO TITLE 10 U.S.C. 2304(c)(1)

1. This document is a Justification for the Other Than Full and Open Competition (JOFOC) prepared by the NASA Marshall Space Flight Center (MSFC) in accordance with Federal Acquisition Regulation (FAR) Part 6.3, Other Than Full and Open Competition, and NASA FAR Supplement (NFS) Part 1806.3, Other Than Full and Open Competition.
2. Description of the action being approved: This procurement is for the MIL-STD-1553 PCI Express I/O boards, BU-67106K400R-JL0 in support of the avionics system testing and development within the Integrated Avionics Test Facilities (IATF) which includes the System Integration Labs (SIL), the Software Development Facilities (SDF), and the System Integration Test Facilities (SITF). These labs perform the integration and testing of the avionics systems and flight software for the new launch vehicles.
3. Description of the supplies or services required to meet the agency's need, including estimated value: MIL-STD-1553 PCI Express I/O boards used in the Integrated Avionics Test Facilities (IATF) under the Vehicle Integration project within the Space Launch Systems (SLS) program will be procured from Data Device Corporation (DDC). The total estimated cost of this effort is \$164,694.00 and the estimated period of performance or lead-time for delivery is 90 – 120 days.
4. Statutory authority permitting other than full and open competition: This recommendation is made pursuant to FAR 6.302-1, which implements the authority for 10 U.S.C. 2304(c)(1) for acquisition of supplies or services from only one source and no other supplies or services will satisfy agency requirements, full and open competition need not be provided for.
5. A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires the authority cited: Data Device Corporation (DDC) designs, manufactures and sells direct the MIL-STD-1553 PCI Express I/O board, BU-67106K400R-JL0 with their proprietary embedded AceXtreme ®. These boards will be used to build new emulators and to continue development and testing within the IATF labs. The BU-67107K400R-JL0 boards provide multiple Remote Terminals (RTs) per channel; proper operation of interrupts in the RedHawk Linux real-time operating system; and the ability to support multiple boards per real-time system. DDC's boards are already deployed throughout the IATF labs with an established compatibility with the proprietary real-time operating system of the Concurrent computers and the other hardware used in the IATF labs. Not purchasing these boards would require extensive re-writing of the existing code used throughout the IATF labs.
6. Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable: Pursuant to NFS 1804.570, this proposed contract action will be published on the NASA Acquisition Internet Service (NAIS) and pursuant to FAR 5.201; this proposed contract action will be synopsisized in the Federal Business Opportunities. The results received in writing will be added to this document by addendum.
7. A determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable: Based upon established catalog price list.

8. Description of the market survey conducted, and the results, or a statement of the reasons a market survey was not conducted: Market research and product evaluations were conducted by the simulation development engineers of ES53. Candidate products were obtained and tested for evaluation. ES53 also relied on the expertise of military and aerospace contractors at other government agencies. The evaluation resulted in Data Device Corporation (DDC) being identified as the vendor whose product can meet the requirements needed in the LATF's real-time simulation environment for the development and test of the avionics systems.
9. Other facts supporting the use of other than full and open competition, such as technical data packages, specifications, engineering descriptions, statements of work, or purchase descriptions suitable for full and open competition are not viable due to the fact that Data Device Corporation (DDC) is the designer and manufacturer of the BU-67106K400R-JL0 boards with the proprietary AceXtreme ® and does not sell to resellers, distributors, or exports.
10. Sources, if any, that expressed an interest in writing in the acquisition: See addendum
11. The actions, if any, the Agency may take to remove or overcome barriers to competition before any subsequent acquisition for the supplies or services required: There are no known actions which the agency may take to remove or overcome barriers to competition before any subsequent acquisition for the systems required.

For the above reasons, full and open competition is not feasible. Therefore, purchase of the supplies or services from DDC is the only practical approach.

I hereby certify the facts in this justification and any supporting data used for this justification are accurate and complete to the best of my knowledge.

Linda Brewster

Linda Brewster
Avionics & Software Ground Systems Test
Branch
ES53

7-28-14

Date

I hereby certify that the above justification is complete and accurate to the best of my knowledge and belief. In addition, I hereby determine that the anticipated cost to the Government will be fair and reasonable.

James W. Bailey

James W. Bailey
Contracting Officer
Office Chief, Engineering Lab Support Office

7-28-2014

Date

Approved:

rem
Roxanne C. Melton

Roxanne C. Melton
Contracting Officer
Office Manager, Engineering Lab Support Office

8-12-14

Date