



DEPARTMENT OF THE NAVY
NAVSUP FLEET LOGISTICS CENTER SAN DIEGO
REGIONAL CONTRACTS OFFICE
3985 CUMMINGS ROAD
SAN DIEGO CA 92136-4000

IN REPLY REFER TO

4200
Ser 200/003
June 28, 2013

**JUSTIFICATION AND APPROVAL
TO PROCURE USING OTHER THAN FULL AND OPEN COMPETITION**

Upon the basis of the following justification I, as Competition Advocate, hereby approve use of other than Full and Open Competition for the proposed contractual action pursuant to the authority of 10 USC 2304(c)(1), only one responsible source and no other supplier or servicing activity will satisfy agency requirements, as implemented by FAR 6.302-1.

1. Contracting Activity.

Requiring Activity: Fleet Readiness Center South West (FRCSW), San Diego, CA.

Contracting Activity: NAVSUP Fleet Logistics Center (FLCSD), San Diego, CA.

Contracting Activity POC: Jorge Cubas, 619-556-5378

2. Description of the Action Being Approved.

This justification seeks approval for a sole source procurement of an upgrade to the existing DIT-MCO Model 2650 Automated Wiring Analyzer (AWA), interconnecting cables, and four (4 ea) custom mobile test stands for the Fleet Readiness Center Southwest (FRCSW) by other than full and open competition from DIT-MCO International. The procurement of this supply is a onetime acquisition. The delivery date is 360 days from date of award. The estimated amount of the award is \$1,850,000.00. The upgraded AWA will be utilized to test all existing E-2C Aircraft Configurations as well as the new E-2D Aircraft. FRCSW has been identified as the Depot Site of Repair (DSOR) for the E-2D platform. FRCSW will utilize FY13 Capital Investment Program (CIP) funding (Other Procurement, Navy – OPN).

3. Description of Supplies/Services

The upgraded AWA will have the following standard operating capabilities; continuity and resistance measurement, Insulation and Isolation measurements, DC HIPOT, capacitance and DC and AC voltage measurements. All the capabilities of this AWA will be standard on all 31,500 points of switching.

The upgraded AWA will include the following components and functions:

- 31,500 Switching Points: A Switching point is a modular testing unit that can be distributed around the Unit Under Test (UUT) without the need of long adapter cables and can reconfigure systems. These modules can be placed anywhere on the plane; cockpit, wings, etc. The 31,500 switching points will be contained in twenty-one (21) 1500 point modules each with ten DL-156R interface connectors. The 21 switching modules will be distributed among four mobile carts; each cart will be designed with dimensions and measurements tailored to the E2C aircraft. Each mobile cart will have ergonomic interface panels that optimize space while reducing adapter cable lengths.
- 4 Latching Matrix Modules: In addition to the switching, there will be four (4) 200 point Latching Matrix Modules for applying programmable power to components for relay activation and actuator extension/retraction.
- 1553 Data Pod function: This function will be capable of testing Mux systems functionally and will be compatible with existing legacy DIT-MCO proprietary software which is the

software used in the analyzers at FRCSW. A Mux system is a multiplexer used to increase the amount of data that can be sent over a network within a certain amount of time.

- Random Hook-up function: This function will reduce adapters' hook-up times since this will allow the positioning of adapters in any fashion. Also a complete set of adapter cables will be supplied containing an encoded chip identifying its nomenclature, eliminating the need to re-host test programs as a safety precaution.

The upgraded AWA system will operate all legacy test programs (60) previously written for use on current analyzers which utilize DIT-MCO proprietary software without the need for modification (100% software ported). This also applies to all existing developed test programs (30) currently used for supporting E2C AWA Foreign Military Sales Countries.

4. Statutory Authority Permitting Other Than Full and Open Competition

The statute authority permitting other than full and open competition is 10 U. S.C. 2304(c)(1), "Only one responsible source and no other supplies or service will satisfy agency requirements", as implemented by part 6.302-1 of the Federal Acquisition Regulation.

5. Rational Justifying Use of Cited Statutory Authority.

Current Automated Wiring Analyzers (AWA) at FRCSW uses DIT-MCO proprietary software. The required upgraded AWA will maintain commonality and compatibility with existing AWAs. Due to the proprietary rights and exclusive software design by DIT-MCO, other AWA manufacturers would have to develop software patches and additional hardware to be able to be compatible with existing FRCSW AWAs in order to communicate with the aircraft software. Also, when the E-2C/D aircraft OEM provides software updates, these updates are provided in the TA2 format which is proprietary to DIT-MCO. Developing software patches and hardware to be compatible with existing software and equipment would create an additional expense for our domestic and foreign military sales.

Furthermore, FRCSW has developed customized applications and utilities that were designed around the unique hardware architecture and software of the DIT-MCO analyzer. These customized tools will not be compatible with other manufacturer's products which would create substantial duplication of costs on the project to redevelop the capabilities and accommodate a new manufacturer's hardware. It was also determined by FRCSW that converting all the existing test program files to another System with different software would cost an additional \$500,000.00 (Government estimate) for initial procurement; software, tool reconfiguration expenses as well as additional ongoing, reoccurring software upgrade expenses.

The use of DIT-MCO software and equipment for this upgrade would keep standardization, structure and stability to the process as well as reduce the financial burden on FRCSW. Lastly, the referenced DIT-MCO proprietary software is also used to support our foreign customers through Foreign Military Sales (FMS) requirements. Utilizing a different software and hardware would create substantial duplication of costs that would not be recovered through competition.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable:

FRCSW has researched other manufacturers known to offer AWA systems including Eclipse International, another leading manufacturer and services provider of wiring analyzers. Based on said research, these manufacturers cannot sufficiently meet the software requirements as described in paragraph 5 above.

7. Determination of Fair and Reasonable Cost:

The Contracting Officer will determine the price to be fair and reasonable through historical cost and price analysis.

8. Description of Market Survey or Reasons Why One was Not Conducted:

A market survey was conducted by FRCSW by performing internet searches, contacting manufacturers and vendors in the industry and reviewing the Electronic Document Access (EDA) contracts database. Through said survey, another AWA manufacturer was identified; Eclipse International. FRCSW awarded a contract to Eclipse for an AWA system in 2012. However, the procured AWA was found not compatible with existing units' software and design; consequently it did not meet compatibility requirements for use.

9. Additional Facts Which Support The Use of Other Than Full and Open Competition:

FRCSW has been identified as the Depot Source of Repair for the E-2D, which is the new generation of the E-2C aircraft. It is imperative for FRCSW to maintain system and software continuity between the E-2C AWA and the E-2D AWA. FRCSW also supports all Foreign Military Sales (FMS) countries such as Egypt, Taiwan and Japan. The upgraded DIT-MCO will ensure FRCSW can maintain continuity and standardization as well as avoid increases in production costs. The following technology information in the AWA is proprietary to DIT-MCO and no other vendor holds rights to this software and hardware:

- **Test Assistance II Software (TA2)**

Utilizing TA2 will standardize aircraft design information exchange between FRCSW engineers and the E2C and E2D OEM (Northrop Grumman Corporation, NGC). The OEM currently uses this software for their test program generation, adapter cable design and management, as well as engineering changes of aircraft of different Mod and Block numbers. By procuring and utilizing this software, FRCSW will be able to use the OEM's existing data and test programs which are generated for TA2 applications. Not having to recreate these files will save the government time and money.

Because of the unique E2D data base, future Test programs and program mods are automatically created without the need of physical aircraft and AWA test system hook ups. By eliminating the need of physical hook ups (interface cables) during the automatic test programs development phase or test program mods, time savings are quite substantial resulting in a decrease in the financial burden, increase on productivity and a leaner process. TestAssistant II is a comprehensive Test Program Set (TPS) development tool that will decrease the time it takes to "push down" engineering changes; the software will automatically output adapter cable design, Test Program Set (TPS) updates and library information all at once.

The AWA upgrade will operate all legacy test programs (60) previously written for FRCSW and an additional 30 test programs for the support of E2C AWA Foreign Military Sales.

- **Random Access Hookup**

E2C/D Aircraft has various access points where AWA connectors hook up to analyze the aircraft system. These aircraft access points are coded in a way that AWA connectors need to match respectively. Random Access Hook-up is a property of DIT-MCO's AWA that allows the analyzer's connectors to hook up to the aircraft's access points without having to match them. In other words, the DIT-MCO connectors are universal. This will reduce the hookup time of adapter cables used to interface the aircraft to the tester. Random Hook-up eliminates potential errors when interfacing the aircraft wiring systems to the tester. Random Hook-up also acts as a product safety feature that keeps unwanted voltages from reaching critical components in the event an operator errors in a predefined hookup process. Random Access Hookup is unique to DIT-MCO.

10. Actions to Remove Barriers to Future Competition:

FRCSW will continue to perform the market research throughout the AWA community for all future FRCSW requirements.

CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS CERTIFICATION

I certify that the facts and representations under my cognizance which are included in this Justification and its supporting acquisition planning documents, except as noted herein are complete and accurate to the best of my knowledge and belief.

TECHNICAL & REQUIREMENTS COGNIZANCE:

Signature  Name (Printed)  Phone No.  Date 

LEGAL SUFFICIENCY REVIEW

I have determined this Justification is legally sufficient.

Signature  Name (Printed)  Phone No.  Date 

CONTRACTING OFFICER CERTIFICATION

I certify that this Justification is accurate and complete to the best of my knowledge and belief. To the extent that the J&A/LSJ value is between \$150K and \$650K, the Contracting Officer's signature below also represents approval of the J&A/LSJ.

Signature  Name (Printed)  Phone No.  Date 

CONTRACTING ACTIVITY COMPETITION ADVOCATE REVIEW

To the extent that the J&A/LSJ value is between \$650K and \$12.5M, the Competition Advocate's signature below also represents approval of the J&A/LSJ.

Signature  Name (Printed)  Phone No.  Date 