



DEPARTMENT OF THE NAVY

CRANE DIVISION
NAVAL SURFACE WARFARE CENTER
300 HIGHWAY 361
CRANE INDIANA 47522-5001

IN REPLY REFER TO:

J&A Number: 12-044
Code: CXMQ
P.R. Number: N00164-12-R-GP50

**JUSTIFICATION AND APPROVAL
FOR USE OF OTHER THAN FULL AND OPEN COMPETITION**

JUSTIFICATION

1. Contracting Activity

Naval Surface Warfare Center, Crane Division, Code CXMQ.

2. Description of the Action Being Approved

Award of an Indefinite-Delivery, Indefinite-Quantity (IDIQ), Firm-Fixed Price contract on a sole source basis for the procurement of Standard Electronic Module Type E (SEM-E) Global Positioning System (GPS) Receivers and Versa Module Eurocard (VME) Circuit Boards to Trimble Military and Advanced Systems, 945 Stewart Drive, Suite 100, Sunnyvale, CA 94085.

3. Description of Supplies/Services

Strategic Systems Programs (SSP) and Program Executive Office, Integrated Warfare Systems (PEO IWS6) require global positioning system (GPS) receivers and VME circuit boards that meet or exceed specified minimum requirements as outlined in the following documents:

Document	Date	Title
OD66129 Rev. -	27 FEB 2009	Performance Specification for [REDACTED] GPS Receiver Card
OD66157 Rev A	27 AUG 2008	Subsystem Specification for the [REDACTED] Navigation Subsystem
OD66196 Rev A	27 May 2009	Subsystem Segment Specification for the [REDACTED] Navigation Subsystem
OD66206 Rev -	29 JUN 2010	Hardware Requirements Specification for the [REDACTED] Console

The GPS receivers are intended to be utilized as spares for units installed on [REDACTED] during the [REDACTED] upgrade. The VME Circuit Boards are intended to be utilized as system upgrade units and spares for installation on [REDACTED] and [REDACTED]. The specific Trimble equipment covered under this J&A is listed in the table below:

Contract Line Item Number	Part Number	Nomenclature	Min/Max Quantities	Estimated Min/Max Dollars
0001	42124-10-U50A	Force524D Standard Electronic Module Type E (SEM-E) GPS Receiver	0-170	Min \$ [REDACTED] Max \$ [REDACTED]
0002	80040-14-U50A	Versa Module Eurocard (VME) Circuit Board (includes Force524D GPS receiver)	27-220	Min \$ [REDACTED] Max \$ [REDACTED]

This procurement will be funded with Other Procurement, Navy (OPN) appropriations. Exact amounts of funding will be dependent upon mission requirements and programmatic decisions. An estimate of the proposed contract utilization is listed in the following table based on maximum quantities of each CLIN:

	FY 12	FY 13	FY 14	FY 15	FY 16	Totals
OPN	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

The Government’s minimum needs have been verified by the certifying technical and requirements personnel.

4. Statutory Authority Permitting Other Than Full and Open Competition

10 U.S.C 2304(c)(1), as implemented by FAR 6.302-1 only one responsible source.

5. Rationale Justifying Use of Cited Statutory Authority

Federal Acquisition Regulation (FAR) 6.302-1(a)(ii) states that supplies may be deemed to be available only from the original source in the case of a follow-on contract for the continued development or production of highly specialized equipment, including major components thereof, when it is likely that award to any other source would result in-

- (a) Substantial duplication of cost to the Government that is not expected to be recovered through competition, and
- (b) Unacceptable delays in fulfilling the agency’s requirements.

GPS receiver evaluation for the SSP community was performed by a Navy GPS focus team that included NSWC Crane, SP24, [REDACTED] Applied Research Labs, and [REDACTED] beginning in FY08. A very limited number of manufacturers exist that have received authorization from the Air Force GPS Directorate to produce GPS receivers for military applications. Military GPS receivers contain an internal [REDACTED] device that enables the receiver access to the [REDACTED] signal. The [REDACTED] is reserved for military and other authorized users. Among the GPS receiver manufacturers that have this authorization, only two produce a [REDACTED] capable receiver in the SEM-E form factor that is required in maritime applications. Through four years of testing

and evaluation, the GPS focus team concluded Trimble was the only GPS receiver manufacturer to meet the requirements of the SP24 [REDACTED] program. In addition to testing units manufactured by Trimble, the focus team also tested units from [REDACTED], but only Trimble met all technical requirements.

After the decision was made to utilize Trimble receivers, SP24 released a competitive contract for a redesign of the [REDACTED] [REDACTED] subsystem and that contract was awarded to [REDACTED]. Through this contract SSP paid for VME circuit cards designed and built by [REDACTED] that are only compatible with the Trimble Force524D GPS Receiver. These VME circuit cards being produced by [REDACTED] under the SP24 contract and the GPS receivers being procured under CLIN 0001 of the instant procurement will be installed into newly designed equipment consoles in FY [REDACTED] and then installed on [REDACTED] shortly thereafter. No other GPS receivers would be functional in the [REDACTED] System using the hardware and software that has been designed around the capabilities of this GPS receiver.

Based on the GPS receiver evaluation performed by SSP, PEO IWS6 also found that the Trimble GPS receiver was the only receiver that would meet the requirements of the [REDACTED] programs. The Space and Naval Warfare Systems Command Center (SPAWAR) conducted follow-on integration testing on a number of commercial and non-commercial boards for integration into the Enhanced Control Display Unit (ECDU), which included Trimble, the design by [REDACTED] and [REDACTED] VME GPS CCA. The Trimble board was selected based on its level of maturity and its ability to provide the data that most closely matched the current GPS solution in the ECDU. This minimizes the amount of integration work required for the ECDU and the impacts to other shipboard users. Thus, while the SP24's needs discussed above require [REDACTED] VME Circuit Boards with Trimble GPS Receivers, the PEO IWS6 needs require Trimble VME Circuit Boards with Trimble GPS Receivers.

The Government does have performance specifications available to utilize full and open competition (see first column of the first table in Section 3 above). However, if this follow-on procurement action were awarded to any source other than Trimble Military and Advanced Systems it would result in both substantial duplication of cost to the Government that is not expected to be recovered through competition and unacceptable delays in fulfilling the agency's requirements.

CLIN 0001

Under the instant procurement if the Government procures the maximum quantities of CLIN 0001, the estimated cost to the Government is \$ [REDACTED]. To date, this has been a four year effort with some qualification testing of [REDACTED] equipment still not yet complete before the system can be installed. It is estimated that the work completed by the GPS focus team to date is in excess of \$ [REDACTED] for all related hardware, evaluation and testing efforts to ensure that this equipment will meet the specification requirements. For the Government to now utilize a source other than Trimble, a portion of the \$ [REDACTED] in costs incurred would have to be duplicated. This would involve procurement of the alternative unit at an estimated price of \$ [REDACTED] and duplicating

the testing at an estimated cost of \$ [REDACTED]. An additional cost of \$ [REDACTED] would be required to replace current units since all of the GPS receivers and VME boards in the SP24 [REDACTED] program must be fully compatible. The total estimated cost duplication is \$ [REDACTED]. These estimates are based on historical data of costs already incurred on this project. The SSP program office does not have sufficient funds to develop another source at this time.

Based on timeframes experienced thus far on this project, it is anticipated that it would take Government personnel [REDACTED] to accomplish this testing. While the Government's minimum quantity requirement for CLIN 0001 is currently 0, it is anticipated that initial deliveries of [REDACTED] units of CLIN 0001 will be needed by [REDACTED] so that the required number of spares are on hand if needed. Thus, award to a new source would cause unacceptable delays in fulfilling the agency's requirements.

CLIN 0002

Under the instant procurement, if the Government procures the maximum quantities of CLIN 0002, the estimated cost to the Government is \$ [REDACTED]. For the Government to now utilize a source other than Trimble, this would involve procurement of the unit at an estimated price of \$ [REDACTED] and duplicating the testing at an estimated cost of \$ [REDACTED]. This is a total estimated cost duplication of \$ [REDACTED]. These estimates are based on historical data of costs already incurred on this project thus far. The PEO IWS6 program office does not have the necessary funds to develop another source at this time.

Based on timeframes experienced thus far on this project, it is expected that the activities discussed immediately above would require [REDACTED]. The supply of the existing GPS VME Receiver Cards (GVRC) has been [REDACTED] to a [REDACTED]. Currently there are no GVRCs in supply and any delay in the receipt of these GPS receivers and VME boards or implementation of this change will impact [REDACTED] ability to get underway. The Government's minimum quantity requirement for CLIN 0002 of [REDACTED] units needed as system upgrade units are needed by [REDACTED]. Thus, award to a new source would cause unacceptable delays in fulfilling the agency's requirements. Not having the upgrade units would cause a failure in installation plans for [REDACTED] and [REDACTED] and potentially cause some [REDACTED] to go without GPS capability due to inadequate availability of spare equipment for the currently installed GPS system. The GPS is vital to the verification of the primary navigation system to insure the proper location and to insure [REDACTED] remain on course. A lack of GPS would result in the Government putting the Navy fleet at risk and delaying necessary missions.

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

A synopsis was issued on 02 April 2012 as required by FAR 5.202, via posting on the Federal Business Opportunities website (www.fbo.gov). Two inquiries were received. The first was from [REDACTED]. [REDACTED] is proposing the same VME circuit board that has been fully evaluated and was found to be inadequate by NSWC Crane technical personnel in 2010. Notification and an explanation that their product did not meet the Government's needs was sent via e-mail on 16 May 2012. [REDACTED] responded that evening and stated that they were not aware of the problems or exact requirements during the 2010 test; they also stated that their product has evolved since then

and are confident that they can meet the Government's requirements. [REDACTED] responded a second time requesting to be considered for award. The Navy responded on 30 May 2012 to [REDACTED] stating that specific part numbers were being purchased from an approved source and that future procurements were not anticipated; the response was approved by the office of counsel prior to being sent. To date no response has been received from [REDACTED]. A second inquiry was from [REDACTED] via phone on 7 May 2012. On 16 May 2012 [REDACTED] was informed that the Government is planning to order specific part numbers. They responded that they were unable to meet requirements.

Market research was conducted by SSP, SPAWAR, and RTA (requiring technical activity) to locate GPS and VME circuit board equipment with the required capabilities. The RTA's market research efforts included attending several conferences, Google searches, and searches of Central Contractor Registration, Thomas Register, and Small Business Administration websites. Products manufactured by Trimble, [REDACTED], and [REDACTED] were evaluated and tested to determine capabilities. In the opinion of the RTA, only the Trimble equipment was found to meet the required capabilities and specific form requirements to integrate into the [REDACTED] System.

7. Determination of Fair and Reasonable Costs

The Contracting Officer has determined the anticipated cost to the Government of the supplies covered by this J&A will be fair and reasonable based on historical price analysis and catalog pricing data for same products.

8. Actions to Remove Barriers to Competition

The current requirement is not anticipated to continue beyond the five-year ordering period of this contract action. The maximum order quantities identified in Section 3 are sufficient to meet the needs of SSP and PEO IWS6 for the lifetime of the systems that are currently being installed.

CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS CERTIFICATION (FAR 6.303-2(b))

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

TECHNICAL COGNIZANCE:

[Redacted Signature] [Redacted Name and Title] [Redacted Phone No.] [Redacted Date]
Signature Name (Print) and Title (Code) Phone No. Date

REQUIREMENTS COGNIZANCE:

[Redacted Signature] [Redacted Name and Title] [Redacted Phone No.] [Redacted Date]
Signature Name (Print) and Title (Code) Phone No. Date

LEGAL SUFFICIENCY REVIEW (NMCARS 5206.303-90)

I have determined this justification is legally sufficient.

[Redacted Signature] [Redacted Name and Title] [Redacted Phone No.] [Redacted Date]
Signature Name (Print) and Title (Code) Phone No. Date

CONTRACTING OFFICER CERTIFICATION (FAR 6.303-2(a)(12))

I certify that this justification is accurate and complete to the best of my knowledge and belief.

[Redacted Signature] [Redacted Name and Title] [Redacted Phone No.] [Redacted Date]
Signature Name (Print) and Title (Code) Phone No. Date

APPROVAL BLOCK (FAR 6.304 for Approving Official)

Upon the basis of the above justification, I hereby approve, as Competition Advocate for the Procuring Activity the solicitation of the proposed procurement described herein using other than full and open competition, pursuant to the authority of 10 U.S.C. 2304(c)(1).

COMPETITION ADVOCATE FOR THE PROCURING ACTIVITY

[Redacted Signature] [Redacted Name and Title] [Redacted Date]
Signature Name (Print) Date