



DEPARTMENT OF THE NAVY
NAVAL UNDERSEA WARFARE CENTER DIVISION
610 DOWELL STREET
KEYPORT, WASHINGTON 98345-7610

J&A Number: 11/040

Code: 19

P.R. Number: Various

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

JUSTIFICATION

1. Contracting Activity

The Naval Sea Systems (NAVSEA) Command, Naval Undersea Warfare Center (NUWC) Division Keyport Acquisition Division Code 18.

2. Description of the Action Being Approved

Award of a firm fixed price contract without providing for competition in order to procure Hewlett Packard products. While the equipment is sole source for Hewlett Packard (HP) products, there are multiple dealers that sell and support the required items. Authority to act under this Justification and Authorization (J&A) expires 30 September 2011. The total estimated dollar value of this procurement is \$190,000. Sole source for this procurement is for HP servers, storage components, and database clustering operating software. The items required in support of this project need to integrate and be compatible with existing HP hardware to extend data services to a secure room in Building 1074, at NUWC Keyport, allowing failover (definition: automatic switching to a redundant or standby server, system, or network upon the failure or abnormal termination of the currently-active server, system, or network) of critical data and disaster recovery capabilities. Customary practice is to have failover servers at different locations than primary servers to reduce impact due to problems at any given location. NUWC Keyport has expended approximately \$1M in these technologies to move towards a common IT platform. NUWC Keyport technicians have developed refined skill sets through training services and implementation activities on all of the above required components.

3. Description of Supplies/Services

Items to be procured for this project can be broken into 3 major areas:

1) Blade Servers -- Items included: rack, enclosures, blades, interconnect modules, power supplies, cooling, support, maintenance, and management system.

a. Estimated Cost - \$62,000

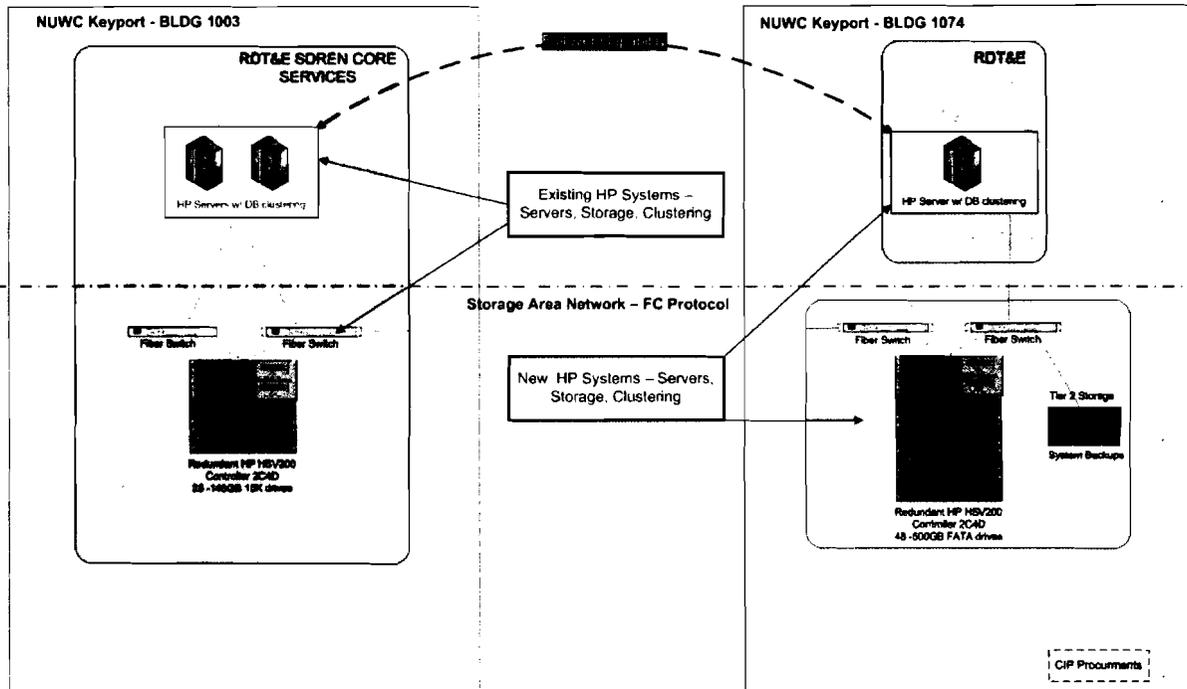
2) Storage -- Items included: storage controllers, storage server, Host Bus Adapters (HBA), Fiber optic cables, drive enclosures, hard drives, Small Form Pluggable (SFP) transceivers, support and maintenance, and fiber switches. These need to plug into the blade server. Thus storage devices are completely contingent on which blade server the government purchases.

a. Estimated Cost - \$96,000

3) Database Clustering -- operating software to implement database-clustering services with support and maintenance. This is an extension of current database software and needs to be compatible with both existing hardware and software.

a. Estimated Cost - \$32,000

Figure A Proposed SDREN Infrastructure



As shown in Figure A (above), new HP systems will integrate with existing HP systems at the server and storage level. The new HP blade servers and chassis will integrate to existing systems through interconnects allowing all environments to be managed from a single platform with ACTIVE/PASSIVE failover capability. The requested storage systems will integrate at the controller level and connect via fiber channel to existing arrays.

HP PolyServe is a SQL database clustering application that allows highly available SQL instances across multiple server nodes. PolyServe uses a proprietary file system PSFS (PolyServe File System) in order allow all server nodes within a cluster to see the instance volume. This allows much faster failover of the database as volumes do not have to be deported or imported to a new node and only server services are started and stopped. This

capability is unique to the HP product. Implementation of any other vendors SQL clustering application will negate the existing capabilities provided by PolyServe.

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

Estimated Dollar Value

	FY10	FY11	FY12	FY13	FY14	Totals
SCN						
OPN						
RDT&E						
O&MN		\$190,000				\$190,000
FMS						
Total						\$190,000

4. Statutory Authority Permitting Other Than Full and Open Competition

The statutory 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 Services Will Satisfy Agency Requirements as implemented by FAR 6.302-1.

5. Rationale Justifying Use of Cited Statutory Authority

Pursuant to Federal Acquisition Regulation 6.302-1 full and open competition need not be provided for because an award to any other source would result in substantial duplication of cost to the government that is not expected to be recovered through competition. Additionally, if purchasing non-HP based equipment, compatibility issues would increase the total cost ownership incurred in having two systems. Purchasing HP products and services will allow interface through HP interconnects allowing each environment to be managed from a single platform with ACTIVE/PASSIVE failover (see definition above) capability. Storage systems will integrate at the controller level with existing HP firmware. Below are areas of duplication that would increase government costs if the government were to competitively solicit:

- Existing storage technologies would need to be replaced for controller based replication.
- Extensive retraining of technicians to operate blade infrastructure
- Increase in Operations and Management (O&M) costs (2 sets of hardware to maintain/operate).
- Increase in Ready Service Spares to accommodate various manufacturers
- Increase in training requirements to support other vendors SQL clustering product.

Previous HP server blade and storage technologies acquired include:

PROJECT	COMPONENT	INSTALLED DATE	LOCATION
Hardware:			
FY07 CIP – RDT&E Build out	HP blade chassis, blade servers, HP storage, HP blade PC's	May-07	Keyport, B1003 FLR1
NMCI B3COI Build out	HP blade chassis, blade servers, HP storage	Apr-07	Keyport, B1003 FLR1
WISE Investment	HP blade servers	Oct-07	Keyport, B1003 FLR1
OMIS Investment	HP blade servers	Sep-07	Keyport, B1003 FLR1
SWC FY07 CIP ADPE	HP Storage and replication	Sep-07	Keyport, B1003 FLR1, B12 Computer Room
NMCI Disaster Recovery	HP Servers, storage, clustering	Sep-09	Ford Island, HI
Core SDREN	HP Servers, storage	Sep-10	Keyport, B1003, FLR1
RDT&E Expansion	HP Servers, storage	Mar-11	Keyport, B12 FLR1
Software:			
NMCI B3COI Build out	HP Polyserve	Jul-08	Keyport, B1003 FLR1
NMCI B3COI Build out	HP Polyserve	Dec-08	Keyport, B1003 FLR2
IPADS Expansion	HP Polyserve	Jun-08	Keyport, B12 FLR1
IPADS Expansion	HP Polyserve	Apr-09	Keyport, B12 FLR2
IPADS Expansion	HP Polyserve	Sep-09	Ford Island, HI
Training:			
NMCI B3COI Build out	HP Accelerated SAN Essentials	Jun-08	Cupertino, CA
NMCI B3COI Build out	HP Polyserve	Jul-08	Beaverton, OR
FY07 CIP – RDT&E Build out	HP Rapid Deployment	Jul-07	Chicago, IL
FY07 CIP – RDT&E Build out	HP PC Blade Deployment	Sep-07	Houston, TX

Existing hardware supports critical Keyport business applications including: Research Development Test & Evaluation (RDT&E), Keyportal, Obsolescence Management Information System (OMIS), Workforce Acceptance Worksite (WAW), and Virtual In-Service Engineering (WISE). Keyport is required by the Certification and Accreditation (C&A) process to ensure contingency planning is accounted for in the implementation of these systems. As mentioned, this procurement is establishing a contingency site at an alternate facility located at NUWC Keyport. All requested components have been verified by HP's certified professionals to integrate with the existing equipment in order to meet the project goals and help meet C&A requirements. Any implementation of a non-HP solution for servers, storage, or database clustering would have the following impact:

1. Zero integration with the existing IT platform (infrastructure operating software, replication firmware)
2. Require additional equipment purchases
3. Require new skill sets for technicians
4. Place current applications at risk
5. Negate prior expenditures
6. Failure to meet current project goals

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

Additional market research was conducted to identify if other sources would be compatible. Both IBM and Dell specifically stated not being compatible with other systems.¹

HP products and services are available through a wide variety of resellers. In order to be considered for award, resellers must attain or hold HP certified reseller status. Currently, HP has listed forty-three (43) certified resellers that can offer the required products and multiple offers are expected.

7. Determination of Fair and Reasonable Costs

The Contracting Officer has determined that the anticipated cost to the Government for the supplies/services covered by this J&A will be fair and reasonable due to price competition from resellers. Furthermore, HP has competitive pricing to vendors due to the competitive environment in the blade server and database management market.

8. Actions to Remove Barriers to Competition

As discussed above, there are multiple dealers that can provide this product. This requirement will be posted on the Navy Electronic Commerce Exchange (NECO) and on Federal Business Opportunity (FBO), the government wide point of entry. This will allow interested parties the opportunity to respond to the requirement. NUWC Keyport continues to review other solutions for possible suppliers for acquisition in the future. However, to date, there are no additional known manufacturer's that meet the form, fit, and function compatibility requirements.

¹ <http://www-03.ibm.com/systems/bladecenter/migratetoibm/path.html>
<http://itcomparison.com/Blades/Bladesdellvshp/Bladeshpvsdell.htm>
<http://en.community.dell.com/support-forums/servers/f/956/t/18058933.aspx>

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 Block]

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

REQUIREMENTS COGNIZANCE:

[Redacted Signature Block]

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

LEGAL SUFFICIENCY REVIEW (NMCAG 5206.303(90))

I have determined this justification is legally sufficient.

[Redacted Signature Block]

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 Contracting Officer, the solicitation of the proposed procurement(s) using of other than full and open competition, pursuant to the authority of 10 U.S.C. 2304(c)(1).

(CONTRACTING OFFICER)

[Redacted Signature Block]

Signature Name (Print) Date