Control Number: TAC-17-44829

JUSTIFICATIONFOR AN EXCEPTION TO FAIR OPPORTUNITY

1. Contracting Activity: Department of Veterans Affairs (VA)
Office of Acquisition Operations
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724

2. Description of Action: The proposed action is for a firm-fixed-priced delivery order under the National Aeronautics and Space Administration (NASA) Solutions for Enterprise-Wide Procurement (SEWP) V Governmentwide Acquisition Contract (GWAC) for Cisco Unified Computing System (USC) servers, licenses, and switches, and NetApp Disk Array Enclosures (DAE) equipment, licenses, and associated support services.

3. Description of the Supplies or Services: VA and the Office of Information and Technology (OI&T), Information Technology (IT) Operations and Services (ITOPS), have a requirement to expand the storage and compute capacity of the currently fielded FlexPod® Converged Virtualization Infrastructures (CVI) and its Tapeless Backup Encryption (TBE) platform with brand name NetApp DAE equipment (quantity of 14), Cisco UCS servers (quantity of 20), 632 Cisco modules, 44 Cisco switches, Cisco LAN Enterprise licenses, NetApp ONTAP Data Management software, and NetApp Common Internet File System (CIFS) licenses. The FlexPod® is a Cisco proprietary integrated virtualization, computing, and storage solution composed of NetApp and Cisco proprietary products, with brand name or equal cabling and accelerator hardware. Specifically, this effort will expand the storage and compute capacity of existing FlexPod® CVI throughout Regions 1 through 6, thereby allowing Research systems across 234 Field Operations-managed facilities to store their data information in redundant High Available (HA) systems capable of fault tolerance that are compliant with contingency planning regulations. The FlexPod® platform is configured and certified using the Cisco Validated Design methodology, and the components are designed to seamlessly integrate with one another and the existing infrastructure. A Cisco Validated Design methodology is a Cisco approved process for combining servers, storage resources, and the network fabric, providing the foundation for systems designed based on common use cases or current engineering system priorities.

This procurement allows VA to expand existing systems to virtualize storage and compute space required for use by existing and future applications in direct support of Research Systems reports, analytics, and studies, which directly supports Patient Care, in order to be compliant with National Institute of Standards (NIST) 800-53 Contingency Planning and Media Protection requirements. The 2015 Office of Inspector General, Federal Information Security Modernization Act (FISMA) noted recommendations for "OI&T to develop and implement a process for ensuring the encryption of backup medium prior to transferring the data offsite for storage". OI&T formed working teams to conduct numerous interviews, in-depth analysis, and other research with each Research facility to identify storage needs. After data was assessed, the recommendation on April 25, 2017 was to move forward with a converged virtualization infrastructure.

The period of performance includes delivery to conclude within 90 days after award and installation to conclude within four months after delivery. In order to ensure that the Cisco USC servers remain operational, the Cisco UCS servers come with a 12-month warranty, after which the warranty support will be covered under the national Smartnet contract. The NetApp Premium Enterprise hardware and software maintenance support shall include remote assistance, patches, bug fixes, and minor and major software upgrades. NetApp warranty support services (which includes installation) shall co-term with existing ESL warranty support services: Existing Tier I warranty expires October 31 2019, and the existing Tier II warranty support services expire January 31, 2022. The total estimated value is [redacted]

4. Statutory Authority: The statutory authority permitting an exception to fair opportunity is Section 41 U.S.C. 4106(c)(2) as implemented by the Federal Acquisition Regulation (FAR) Subpart 16.505(b)(2)(i)(B), entitled "Only one awardee is capable of providing the supplies or services required at the level of quality required because the supplies or services ordered are unique or highly specialized".

5. Rationale Supporting Use of Authority Cited Above: Based on market research, as described in paragraph 8 of this justification, the program and technical points of contact determined that limited competition is available for this procurement.
As the below analysis will show, any other CVI consisting of different brands will not be able to communicate with the existing FlexPod® CVI infrastructure currently in place throughout the 234 facilities consisting of Cisco UCS servers; NetApp data storage systems; disk shelves; storage arrays; and interconnection hardware, software and firmware,

a. Rationale for expansion of storage and compute capacity of the existing FlexPod® CVIs at 234 facilities:

The FlexPod® environment was created with Cisco and NetApp hardware and software products for a complete solution, and require the same OEM hardware to operate at maximum capacity when expanding the storage and compute capacity.

Only brand name NetApp products can meet the Governments interoperability and compatibility requirements. The NetApp products rely on proprietary NetApp microcoding to communicate with each other in order to connect with NetApp products, the interface to which is not public and to which the government has no technical data or right to access or release to a third party, thus preventing any other vendor's hardware from interfacing with NetApp products. For example, other vendor storage controllers and disk shelves are not compatible as each vendor has their own proprietary hardware and software in providing storage, and therefore no other vendor's hardware/software system would be able to exchange data or store data transferred from NetApp hardware even if the hardware were physically connected to already-installed NetApp hardware. Additionally, no other cluster interconnection hardware is interoperable or compatible with the currently fielded NetApp storage systems and NetApp Data ONTAP Operating System feature software product. If VA were to utilize

any other brand name hardware and software, it would not operate in the current infrastructure due to the inability of any other vendor's products from interfacing with the already-installed NetApp products.

Only Cisco products can meet the Governments interoperability and compatibility requirements for expanding the storage of the existing FlexPod® CVIs at 234 facilities.

Within the Cisco Validated Design FlexPod®, the Cisco UCS servers communicate to the NetApp hardware using Cisco Fabric Interconnects (FI). The Cisco FI is a core part of the Cisco UCS, providing uniform access to both networks and storage as an aggregation point. The Cisco LAN Enterprise licenses are the aggregate management of UCS FIs. No other connection methods are supported or can be implemented with full integration for the FlexPod® environment because it is a proprietary Cisco interface protocol that is not public and to which the government has no technical data or right to access or release to a third party vendor.. If VA were to utilize any other brand name hardware and software, it would not operate in the current infrastructure due to the the inability to electronically or physically interface with the Cisco products. Procurement of any other brand of hardware would invalidate the Cisco Validated Design certification for the already-installed system and could potentially cause latency and stability issues when expanding the existing systems.

In regards to the TBE platform, the Cisco switches will be an expansion of the existing set of nexus switches within the platform. Clients participate in Link Aggregation Control Protocol groups that stretch across the stack, and thus the switches must support Virtual Port Channel Configuration (VPC). Cisco VPC is proprietary and is not available on third-party switches. No other switches are supported, or can be implemented with full integration into the TBE platform because it is a proprietary Cisco protocol. If VA were to utilize any other brand of switches could cause latency and stability issues to the existing system.

Because of these proprietary restrictions, the required Cisco UCS servers, NetApp DAE hardware, and NetApp software are the only products which are fully interoperable and compatible with the existing FlexPod® CVI infrastructure currently utilized within the 234 facilities and therefore the only products that can provide for the required expansion of the storage and compute capacity of the existing FlexPod CVI .

b. Rationale for NetApp support services and maintenance:

As previously discussed in section 3 of this Justification, the Cisco USC servers and ancillary hardware warranty support will be covered under the national Smartnet contract. The required technical support services are NetApp Premium Enterprise hardware and software maintenance support, which include the following:

24 x 7 x 365 remote help support
4-hour response time
Installation of minor/major software upgrades
Hardware and software support

Troubleshooting

These support services are required to ensure that the procured servers and DAE storage hardware run efficiently. Failure to acquire the aforementioned support will prevent the VA team from obtaining fixes and patches to identify security vulnerabilities and defect resolutions. Due to the proprietary nature of the hardware and software, only NetApp or its authorized resellers can provide the required support NetApp components within the FlexPod® CVI and TBE environment, and the licenses keys necessary for the products to operate. NetApp or its authorized resellers are the only source available that can provide software updates, troubleshooting, patches, and version releases as well as authorize hardware replacement and remediation services. Other manufacturers do not have the proprietary source code and hardware replacement parts necessary to provide the required maintenance and support. Support services performed by parties not authorized by NetApp invalidate product warranties and remove liability for performance from the manufacturer. VA relies heavily on patient care data research stored within the existing Flexpod® CVI and TBE platforms storage solutions for various Patient Care projects. Procurement of the required maintenance and support will ensure that the storage systems remain operational, with software updates, patches and version releases without interruption to the system.

Additionally, only NetApp can provide the required hardware support as only NetApp has access to the proprietary microcode utilized by NetApp hardware's core software. Access to the microcode is required for updates as well as bug fixes to the NetApp hardware. Updates and patches to the hardware's core software are required to maintain compatibility with other NetApp software. If any other source were to provide hardware maintenance on the NetApp products, they would not be able to access the hardware microcode to provide updates and patches, and as such the NetApp hardware would not remain compatible with the NetApp software.

c. Rationale for using a single delivery order (and single vendor) for the procurement:

VA's requirement is for the expansion of the storage and compute capacity of the FlexPod® CVI infrastructure and its TBE platform. Failure to utilize one source to provide the Cisco and NetApp items and services will result in configuration and installation issues since these efforts must be done at the same time to ensure full interoperability and compatibility of the new items and the currently fielded Cisco and NetApp infrastructure. Failure to install the required Cisco UCS servers and NetApp DAE hardware and software as an integrated update will creates a major impact on the organizations due to critical performance damage from delays, possible nullification of existing warranties and maintenance agreements and likely corruption of data. Utilizing two or more vendors to install and configure 234 facilities will cause tremendous communication issues, potential configuration issues, and an increased implementation schedule and the corresponding financial impact of all aforementioned issues. Therefore, procuring this requirement under one delivery order action for the delivery, deployment, and configuration of the NetApp/Cisco

products, at all facilities, is the only approach to ensure for the successful completion of the existing storage infrastructure .

Additionally, since the FlexPod® design is a multi-product environment, only a single authorized vendor can install, configure, and verify the additional hardware and software in accordance with the Cisco Validated Design within each location. The configuration must be done by a single vendor to be in compliance with the Cisco Validated Design methodology.

Based on the above, the program and technical points of contact determined that only FlexPod® CVIs consisting of Cisco and NetApp products can meet VA's interoperability and compatibility requirement and that the most efficient manner is by one order to a single vendor.

6. Efforts to Obtain Competition: Market research was conducted, details of which are in the market research section of this justification. This effort did not yield any additional sources that could meet the Government's technical requirements. It has been determined however that limited competition is viable among authorized resellers for the brand name requirements. In accordance with FAR 5.301 and 16.505(b)(2), the resulting contract award will be synopsized at award on the Federal Business Opportunities webpage and this Justification for an Exception to Fair Opportunity will be posted on the NASA SEWP V website with the solicitation.

7. Actions to Increase Competition: The Government will continue to conduct market research to ascertain if there are changes in the market place that would enable future actions to be competed. Specifically, the government will continue to research similar servers, switches, disk arrays, software and maintenance services to determine if new products enter the marketplace that are compatible with the CVI and TBE environments described above.

8. Market Research: VA's technical experts conducted market research in May 2017 to ascertain the ability of any other source other than NetApp and Cisco or the authorized resellers that can provide the aforementioned storage and computing ability and also interface with the existing Cisco/NetApp hardware and software. The market research consisted of web searches of other similar hardware, software, and services from EMC Corporation, Dell, International Business Machines, and Hewlett Packard, as well as conducting telephonic conversations with each potential vendor named above. Each vendor confirmed their hardware cannot interoperate and is not compatible with the existing FlexPod® CVI.

On January 23, 2017, a Request for Information (RFI) was posted on FBO to determine if any vendor(s) could provide the brand name NetApp and Cisco hardware, software licenses, and support services, and if any other product or solution could meet the Government's requirements. The RFI closed on January 30, 2017 and yielded three responses. VA technical experts assessed proposed solutions from Four Points Technology, a Service-Disabled Veteran-Owned Small Business (SDVOSB), MiniBurn (SDVOSB), and RedRiver (Small Business). After an extensive review by VA's

technical experts, the Dell solution offered by both Four Points Technology and MiniBurn was unable to meet the Government's requirements. RedRiver's proposed Cisco and NetApp solution meets the Government's requirements.

Specifically, Four Points Technology and MiniBurn's Dell solutions cannot meet the Government's interoperability and compatibility requirements with the existing NetApp & Cisco infrastructures discussed in section five above. Each vendor has their own proprietary hardware and software in providing storage and therefore would not integrate with the currently fielded Regions 1 through 6 VistA application NetApp hardware and software. Since no other cluster interconnection hardware is interoperable or compatible with the currently fielded Regions 1 through 6 VistA application NetApp storage systems and NetApp Data ONTAP Operating System software, other storage solutions cannot seamlessly integrate into the current NetApp infrastructure, as they are not interoperable or compatible. Also, these two vendors cannot meet VA's maintenance needs due to the existing proprietary NetApp product source codes. Unauthorized software and hardware providers do not have access to the proprietary data, source codes, and protocols of the software in order to provide the required CVI modernization (footprint reduction), as well as maintenance support in order to provide NetApp software maintenance, updates, and virtual technical support services. The Government's technical experts contacted both Four Points Technology and MiniBurn in February 2017 and advised them of the Government's assesment that their solutions could not meet VA's needs. No objections were received.

Additional market research was conducted in August 2017 by utilizing the NASA SEWP V GWAC Provider Lookup tool that identified several prospective contract holders that are authorized resellers of NetApp hardware, software, and maintenance, and Cisco hardware, which meet the requirements of this acquisition. This also includes five SDVOSB who are "authorized resellers" of both Cisco and Netapp products.

9. Other Facts: None.