

ODISHA SPACE APPLICATIONS CENTRE
Plot No.45/48(P), Jayadev Vihar, Bhubaneswar-751 023

Short Tender Notice No. 18/2017

Sealed tenders are invited from established and accredited Original Equipment Manufacturer (OEM)/authorized dealers for supply, installation and commissioning of 8 blade servers with enclosure of holding 12 blade capacity on buyback mode of 5 Tower servers to Odisha Space Applications Centre, Bhubaneswar. For details please visit Website <http://www.odisha.gov.in> and ORSAC website: <http://www.orsac.gov.in> or in the above office for the tender papers.

Date of Issue of Tender Paper	:	22.11.2017
Pre- bid conference	:	30.11.2017 at 3.30 P.M in the conference Hall of ORSAC
Last date of issue of Tender Paper	:	14.12.2017 till 2.00 P.M.
Last date of submission of Tender	:	15.12.2017 by 01.00P.M.
Opening of tender	:	15.12.207 at 03.30 P.M.

ORSAC reserves the right to accept/reject/modify & cancel the full tender or part thereof at any time without assigning any reason thereof.

CHIEF EXECUTIVE

ODISHA SPACE APPLICATIONS CENTRE
Dept. Of Science & Technology, Govt. of Odisha
Plot No.45/48(P), Jayadev Vihar, Near Gopabandhu Academy of Administration
Unit-16, Bhubaneswar-751 023

SHORT TENDER NOTICE No. 18/2017

Sealed tenders are invited from established and accredited Original Equipment Manufacturers (OEM)/authorized dealers having annual turnover of more than Rupees 50 lakhs lakhs for supply, installation & commissioning of the under mentioned items of the following specifications and quantities i.e. 8 Blade Servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers at Odisha Space Applications Centre, Bhubaneswar.

Sl. No	Item Description#	Unit	Quantity	Cost of tender paper	EMD
A	8 blade servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers*	No.	1	Rs.5,000.00	Rs.2,50,000.00

* Detail specification at Annexure-I

1) Non-transferable tender documents will be available from Odisha Space Applications Centre (ORSAC), Bhubaneswar on payment Rs.5,000.00 for Sl.No.1 above in shape of Demand Draft drawn in favour of Odisha Space Applications Centre. The tender document can be down loaded from the ORSAC **website: <http://www.orsac.gov.in>** and Govt. of Odisha web site <http://www.odisha.gov.in>. The downloaded bid document can also be used provided it is accompanied with a crossed Demand Draft as mentioned above towards cost of the tender document payable at Bhubaneswar drawn in favour of Odisha Space Applications Centre. Tenderers interested to receive tender documents by Registered Post should pay additional amount of Rs.200/- (Rupees Two hundred) only. However, ORSAC will not be responsible for postal delays in delivery of the documents.

2) The company must be a registered company preferably ISO certified. Company having service centre facility at Bhubaneswar shall be preferred.

3) The Tenderers are required to furnish attested copies of GST registration certificate issued by the competent authority of the State of Odisha / other states as applicable along with the tender.

4) The Tenderers are required to deposit Rs.2,50,000.00 (Rupees Two lakhs fifty thousand) only for Sl.No.1 above as Earnest Money Deposit (**EMD**) in shape of Bank Draft payable at Bhubaneswar drawn in favour of Odisha Space Applications Centre, Bhubaneswar.

5) Performance security shall be deducted from Bills as per guidelines given in the tender documents.

6) The items conforming to required specifications are to be delivered to the consignee (ORSAC) at Bhubaneswar in Odisha and the tenderer has to quote the rates giving details of taxes, levies charges, premium etc. separately as stated in the tender document.

7) The tenders should be submitted after due compliance with guidelines given in the tender documents under Schedule (A) Conditions of Contract, Schedule (B)- Technical specifications, Schedule(C)- Delivery Destination, Schedule (D)- Bid Form & Schedule (E)- Price Schedule Tenders submitted in incomplete form shall be rejected outright.

8) The filled in sealed tenders containing Technical Bid and Price Bid in double cover system as per instruction given in tender documents, shall be submitted in the Office of the ORSAC, Bhubaneswar by Registered Post, Courier service or dropping in the tender box. Tenders received after due date and time shall not be entertained.

9) The tender papers will be available for sale in the office of the ORSAC between 11 AM to 4.30 PM on Odisha govt. official working days till 14.12.2017 by 02. PM The sealed tenders will be received till 01.00 PM of 15.12.2017 in Office of the ORSAC. The technical bids will be opened on 15.12.2017 at 03.30 P.M in presence of the Tenderers or their authorized representatives, if they so desire. The opening of price bids will be announced later on. Price Bids will be opened in respect of only those tenderers who qualify in the technical bid assessment.

10) ORSAC reserves the right to cancel any or all tenders without assigning any reason thereof.

CHIEF EXECUTIVE

Schedule (A) – Conditions of contract for Tender No.18/2017

- 1) The Tender papers include instructions issued in the Tender notice along with the Schedule (A) - Conditions of Contract, Schedule (B) – Technical Specifications, Schedule (C) – Delivery Destination, schedule (D) – Bid Form, Schedule (E) – Price Schedule.
- 2) The Tenderers shall submit the following documents and information with the tender. Lack of complete and adequate information under any of the parameter may render the bid disqualified. The technical document shall be tagged and indexed properly to find out the below documents easily.

a) Technical Documents:

- i) Copy of Tender Notice
- ii) Acceptance of Schedule (A) & Schedule (B)
- iii) Documentary evidence that the tenderer is either Original Equipment Manufacturer (OEM) or authorized dealer of the OEM.
- iv) Attested copies of GST registration certificate from the competent Authority of the State of Odisha/ other state. Tax Clearance Certificate issued by the competent authority up to 31.03.2017.
- v) Technical information of product released by the OEM.
- vi) Documents in support of supplies made during last 2 years to different Govt. and public sector undertaking.
- vii) The firm should submit an undertaking for providing service/maintenance during the warranty period effective from the date of commissioning with terms & conditions as well as for taking Annual maintenance contract (AMC) after the warranty period.
- viii) Bank draft drawn in favour of Odisha Space Applications Centre towards tender paper cost.
- ix) Attested copies of Audited Balance Sheet for last 3 years
- x) Service facility at Bhubaneswar & outside.
- xi) Copy of the ISO certificate.
- xii) Bank draft drawn in favour of Odisha Space Applications Centre towards EMD.
- xiii) The vendor has to furnish certificate that they have not provided such materials to other organizations/client at a price less than the price now quoted in this tender during last 3 years.

b) For Price Bid:

- i) Acceptance of Schedule (C) Delivery destination
 - ii) Filled up Schedule (D) – Bid form
 - iii) Filled up Schedule (E) – Price Schedule
- 3) The quoted rates shall be for destination mentioned in the Schedule (C) Delivery Destination, inclusive of all taxes, duties, levies, charges, transportation cost, transit insurance cost. The item should be shown separately along with the basic rate. Prices written in words shall be accepted in case of any discrepancy. Rates with conditionality or provision of escalation will be rejected.
 - 4) Validity of period of the Tender shall be 60 days from the date of opening of the price bid.

- 5) The items are to be delivered in good condition at ORSAC, Bhubaneswar as mentioned in the Schedule (C) for delivery destination.
- 6) The H/W / S/W should be new and unused. The items shall be of reputed OEM and should also conform to latest models, designs and standards i.e. as per Schedule-B. ORSAC reserves the right to purchase whole or part of the items as required.
- 7) If any item fails to satisfy requirement of standards, the item shall not be accepted and the tenderer at his own cost shall remove it from point of delivery.
- 8) Items are to be delivered within **30** days of issue of purchase order.
- 9) The tenderer shall give a minimum warranty period of 3 years from the date of commissioning of the items at destination and shall submit a declaration from OEM regarding the same.
- 10) The tenderer has to rectify defects in the items supplied within 7 days of issue of intimation during the warranty period, failing which an amount of one percent of performance security will be forfeited per day of delay.
- 11) If the tenderer fails to supply the items within prescribed time period it shall be treated as breach of contract. The EMD may be forfeited and the supply order cancelled for which the tenderer shall remain fully responsible without any liability of ORSAC.

ORSAC may consider receiving the items beyond stipulated date by imposing liquidated damage of 0.50 (zero point five zero) percent of cost per week of delay subject to maximum penalty of 5% of the value of each item inclusive of all taxes, duties, levies and charges. Part of the week shall be reckoned as one week.

- 12) Tenders are to be submitted in a double cover system. The 1st sealed envelope should be marked as Technical Bid and shall contain the Technical Documents and the 2nd sealed envelope shall contain the Price Bid and should be marked as Price Bid. Both the 1st and 2nd sealed envelopes are then to be put inside a 3rd envelope duly marked "**supply and installation and commissioning of 8 blade servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers**". From and to addresses shall be written on each of the envelopes.
- 13) Submission of sealed tenders shall be by Registered Post, courier service or dropping in the tender box. ORSAC shall not be responsible for postal or courier service delays or missing of the documents during transit. Tenders reaching late (as per time mentioned in the Tender Notice) shall not be considered by ORSAC.
- 14) Conditional Tenders may be rejected. Decision of the ORSAC authorities in this regard shall be final.
- 15) **Terms of Payment** : Payment to the successful tenderer shall be made only after items are received in good and serviceable condition as per conditions stipulated in the tender documents along with required documents submitted to ORSAC in support of Bills. 90% of the bill amount will be released after successful commissioning & operational of the system & 10% of the Bill amount will be retained towards "**Performance Security**". This amount can be released on submission of Bank

Guarantee for equal amount issued by any Nationalized Bank at Bhubaneswar, which will remain valid till three month beyond the Guarantee period.

- 16)The tenderer shall not raise any claim in any manner after the Bill amounts are cleared against the purchase order.
- 17) In case of any dispute between the Tenderers and ORSAC regarding interpretation of Tender document conditions, the decision of the Chief Executive, ORSAC shall be final and binding.
- 18)Jurisdiction of Court – Civil Suits, if any, arising out of the contract shall have to be filed at Bhubaneswar under Khurda district. Writ petitions, Civil & Criminal, shall be filed in the High Court of Orissa, Cuttack.
- 19)The EMD amount shall be returned to the successful tenderer after receipt of Performance Security amount.
- 20) If at any point of time it is found that any certificate/ declaration/ documents/ materials submitted by the vendor is found to be false or incorrect, then the EMD and BG will be forfeited and no payment shall be made in respect of the supply of the items.

Accepted the above conditions under schedule (A) of tender.

(Signature of Tenderer)

Name:

Address:

Schedule (B) – Technical Specification for Tender No.18/2017

Supply and installation and commissioning of (a) 8 blade servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers

Annexure -I

Bill of Quantities:

Item	Quantity
Enclosure Solution	01 Set
Blade Servers:	
Type 1	03 Sets
Type 2	01 Set
Type 3	02 Sets
Type 4	01 Set
Type 5	01 Set
Type 6	08 Nos

Blade Enclosure Solution

Item	Description of Requirement	Compliance (Yes/No)	Remarks
Blade Enclosure	Offered solution should support full height and half height blades in the same enclosure. A minimum of 12 half height servers or 6 full height servers should be supported in the offered enclosure		
	Offered enclosure should support a minimum of six interconnect bays to configure 3+3 redundancy		
	Offered enclosure should support latest generation Intel Xeon processors based on 2 CPU and 4 CPU blades as well as storage Blades		
	Offered enclosure should support minimum 160 small form factor drives within enclosure along with a compute module to configure as DAS or software defined storage.		
	Support for integrated management appliance in redundant configuration where management network shall be isolated from production network		
	Should support integrated technology for auto-discovery of resources within the enclosure		
	Offered enclosure should provide display port and USB port to connect Laptop/Monitor locally		
	Should support linking multiple enclosures together to form single management plane to reduce complexity and provide single console of management for connected enclosures		

Interconnect support	Should support FCoE, Ethernet, FC and SAS interconnect fabrics offering Hot Pluggable & Redundancy as a feature		
Converged interconnect	Interconnect should support 20Gbps downlinks to the supported blades in redundancy with built-in support for converged Ethernet		
	Should support either Fiber Channel over Ethernet/CEE or Accelerated iSCSI protocol		
	Should support at least six QSFP+ ports for external uplink with option to choose Ethernet and/or FC uplinks as needed		
	Should support aggregation of multiple enclosures to consolidate data center network connections, reduce hardware and to scale network bandwidth across multiple enclosures. Layer 2 network traffic should be switched within enclosure aggregation (without using top of the rack switch)		
	When multiple enclosures are aggregated, switching latency between enclosures should not exceed 1.0 micro second for Ethernet		
	Should support Multi-module link aggregation (MLAG) for resiliency against interconnect failure		
Ethernet Interconnect	Offered enclosure should support network modules with at least 6 x 40G QSFP+ uplink ports up-linkable to the data center switch. Support for 10G BaseT and 10G base LR/SR should be offered		
Fiber Channel Interconnect	Offered enclosure should support Fiber Channel SAN modules with at least 8 x 16Gb FC uplinks and also at least 16Gb downlinks to all server bays. Switch should support trunk to external SAN switches at 128Gb/s per trunk		
Power Supply	Offered enclosure should be fully populated with power supplies of the highest capacity available with the vendor. Power supplies should support N+N as well as N+1 redundancy configuration. Should support Platinum energy efficiency in the offered power supplies.		
Cooling	Offered enclosure should be fully populated with redundant hot pluggable cooling fans or blowers enabled with technologies for improved power consumption and acoustics		
System Software	Management/controlling software have to be from the OEM.		
Management capabilities	Solution should support redundant physical management appliances within an enclosure or on multiple connected enclosures with failover and high-availability.		
	Should support auto-discovery of Compute, Memory, Storage and Fabrics within an enclosure or on multiple connected enclosures.		
	Should support activity, Health and Power LEDs for immediate status.		
	Should support software-defined intelligence for configuring profiles to provision compute, storage, fabrics and images.		
	Should support Firmware and OS Driver updates for the servers using profile templates to monitor, flag, and remediate.		

	Should offer collaborative user interface which support logical resources to physical resources mapping, Smart Search, Activity Log, HTML5 mobile access, and Customizable Dashboard.		
	Should provide a dedicated 10GbE or higher management network for multi-enclosure communications, separate from data plane.		
	Should support frictionless Firmware and OS Driver updates using profile templates to 'monitor, flag, and remediate		
	Should support reporting capabilities for 1) asset and inventory information for the devices in the enclosures 2) thermal and power information, including real-time actual power usage per server and per enclosure Reports should be exportable to csv or Microsoft Excel format		
Operating System and application image streaming capabilities	Should support redundant physical appliances to stream the Image with OS & application. Appliances should be configured with failover and high-availability		
	Should support provisioning of boot/run storage volumes and deploying OS along with application		
	Should support personalizing OS per deployment plan.		
	Should support stateless operation with IP addresses assigned to bootable images		
	Should provide tools for personalization and customization of images		
	Should support generating iSCSI target for the boot/run volume		
Storage management	Should support Internal and external storage provisioning: Local/zoned direct attached storage (DAS), software-defined storage (SDS) and storage area networks (SAN)		
	Should support pooled storage capacity (at least raw storage capacity of over 600TB per chassis) zoned within an enclosure, or across multiple enclosures using software defined storage		
	Should support Storage virtualization for flexible performance tiering on highly-dense, scalable storage platforms		
	Should support SAN storage management compatibility for switched fabric, direct attached, or vSAN topologies		
	Should support SAN zoning policy customization to control zone-/alias- configuration fit with local data center standards		
	Should support private/shared storage volumes for DAS/SAN attach to server profiles/templates to enable automated and policy-driven volume provisioning		
	Should support Boot-from-SAN for Fibre Channel (FC), Fibre Channel over Ethernet (FCoE), and iSCSI storage		
Integration with virtualization and open source software	Should support integration with popular virtualization offerings VMware vCenter and Microsoft system center		
	Should support integration with open source automation and DevOps tools		

Solution requirement	Offered solution should support provisioning virtual and physical infrastructure from pools of compute, storage and networking resources.		
	Offered solution should have single console for provisioning of compute, storage and server side network configuration with choice of direct attach storage (DAS), iSCSI and FC.		
	Offered solution should support standard API for integration into popular management tools such as Microsoft Systems Center and VMWare vCenter including open source automation and DevOps tools.		
	Offered solution should support software defined templates to quickly make changes to the infrastructure. Template should include server BIOS, firmware, boot order, RAID, storage and network configurations of the infrastructure required		
	Offered solution should support scripting to reassign compute resources to different workloads to effectively utilize the infrastructure		
	OEM of the proposed solution should be listed in Leaders Quadrant of Gartner's latest report for modular servers and integrated systems		
Storage Requirement	Storage solution should be offered with minimum 20TB usable capacity using SAS 1800GB 10K drives scalable up to 300TB complying to above storage management.		
Warranty	3 years comprehensive warranty		

Blade Server Solution

Item	Description of Requirement	Compliance (Yes/No)	Remarks
CPU & Memory	Type 1: Two numbers of latest generation Intel 22 Core 2.1GHz Xeon Gold processor, 256GB RAM		
	Type 2: Two numbers of latest generation Intel 16 Core 2.6GHz Xeon Gold processor, 512GB RAM		
	Type 3: Two numbers of latest generation Intel 22 Core 2.1GHz Xeon Gold processor, 512GB RAM		
	Type 4: Two numbers of latest generation Intel 8 Core 3.2 GHz Xeon Gold processor, 512GB RAM		
	Type 5: Two numbers of latest generation Intel 8 Core 3.2 GHz Xeon Gold processor, 256GB RAM		
Motherboard	Intel® latest chipset compatible to offered processor		
Memory Scalability	Scalable to at least up to 1.5 TB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules.		
Memory Protection	Advanced ECC, Memory mirroring, Memory online spare mode		
HDD	2 * 1800 GB hot plug SAS 10K drives		

Storage Controller	Integrated PCIe 3.0 based 12G SAS Raid Controller with RAID 0, 1 with 1GB of Flash backed write cache onboard.		
Networking features	Dual port 10GbE/higher Converged Network Adaptor		
SAN Connectivity	Should be capable of supporting 16 Gbps Dual port Fiber Channel HBA internal to the Server Blade.		
Bus Slots	Minimum of 3 Nos of x16 PCIe 3.0 based mezzanine slots supporting Converged Ethernet, Ethernet, FC adapters and SAS adaptors		
Graphics	Integrated G200eh video controller		
Industry Standard Compliance	ACPI 2.0, Microsoft® Logo certifications, USB 3.0 Support, IPMI 2.0, Secure Digital 2.0, TPM 1.2 and 2.0 Support, IEEE, AES, 3DES, SNMP, SSL 2.0, DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP), Active Directory v1.0, PCIe 3.0, ASHRAE A3		
Embedded system management	Should support integration with management software to deliver 'composable infrastructure' with a view of resources. This should be flexible and scalable solution providing IT managers with the architecture to implement their software-defined data center (SDDC) -- and to address the changing business needs and the challenges of today's enterprise data centers Should support Gigabit out of band management port to monitor the servers for ongoing management, service alerting and reporting Should support UEFI to configure and boot the servers securely System should support RESTful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with Intelligent Provisioning System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support		
Security	Power-on password Administrator's password Keyboard password (QuickLock) System Management Chipset with: - SSL encryption - Secure Shell version 2 - Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser, CLP and XML scripting interface - AES and RC4 encryption of video External USB port enable/disable Network server mode Serial interface control TPM (Trusted Platform Module) 1.2 or 2.0 option Advanced Encryption Standard (AES) Intel® Advanced Encryption Standard-New Instructions (AES-NI)		
OS Support	Microsoft Windows Server Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware		

Remote Management	System remote management should support browser based Graphical Remote Console along with Virtual Power button, Remote boot using USB / CD/ DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media / image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication.		
	Dedicated remote management port should be provided and it should be able to download the firmware from the website directly or from internal system. Server should support automated firmware update.		
	Server should support agentless management using the out-of-band remote management port. Remote management port should have 4GB NAND flash with 1GB available for user access. NAND flash should be used for keeping system logs and downloading firmware from manufacture's website or internal repository		
	The server should support Active Health System which monitors and records continuously every hardware change, every configuration change, temperature and voltage variations, and alerts changes in the server hardware and system configuration without impacting server performance. This assists in diagnosing problems and delivering rapid resolution when system failures occur.		
	Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be available		
	Should support managing multiple servers as one via Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media Group License Activation		
	Should support remote console sharing up to 6 users simultaneously during pre-OS and OS runtime operation, Console Replay that captures and stores and supports replay of the console video during a server's last major fault or boot sequence, Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console.		
Warranty	3 year 24x7 comprehensive warranty		

Operating System

Type-6	Windows Server 2016 Standard 5-Client Access License as per server core (includes Hyper-V®) down gradable to 2012 R2 (Paper License)		
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SCHEDULE "C" DELIVERY DESTINATIONS

Sl. No	Item	Qty	Unit	Delivery Destination/Consignee
A	Supply and installation and commissioning of (a) 8 blade servers with enclosure of holding 12 blade capacity on buyback mode of 5 Tower servers.	No.	1	ORSAC, Bhubaneswar

Accepted the above-mentioned conditions under schedule C of the tender for our item of supply.

Signature of Tenderer

Name:

Address:

SCHEDULE (D) – Bid Form

To

The Chief Executive
Odisha Space Applications Centre
Bhubaneswar

Sir,

I/ we have gone through the Tender Notice relating to Supply and installation and commissioning of (a) 8 blade servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers at Odisha Space Applications Centre (ORSAC) and the schedule (A), (B), (C), (D) and (E) of Tender document.

A sum of Rs. _____ (Rupees _____) only is hereby tendered in shape of _____ duly pledged as Earnest Money Deposit (EMD). I / we also agree that an amount of ten percent shall be deducted from my bill towards performance security.

I/ We agree the ORSAC shall be at liberty to forfeit the EMD and performance security as per conditions of the contract in case of defaults on my/ our part in fulfilling contractual obligations.

I/We have gone through all terms and conditions stated in the Tender documents and agree to all the terms and conditions.

(Signature of Tenderer)

Date:

Name:

Address:

Schedule (E) – Price Schedule for Supply and installation and commissioning of 8 blade servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers.

Item description (mention as per Tender Notice)	Unit price @	Details of tax components			Buy back price	Total price in Rs. (mention in figures and words)	AMC cost per year after warranty period (Per Year)	Remark
		Taxes* (Mention each tax separately) in Rs.	Other** Charges (mention each separately) in Rs.	Total (3+4)				
1	2	3	4	5	6	7	8	9
Supply and installation and commissioning of (a) 8 blade servers with enclosure of holding 12 blade capacity on buy back mode of 5 Tower servers								

(Signature of Tenderer)

Name:

Address:

@ Please refer to paragraphs-3 of schedule A

* Specify tax components included in unit price

** Mention installation & commissioning charges if any