



INTERNATIONAL  
CENTRE *for*  
THEORETICAL  
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

International Centre for Theoretical Sciences  
(ICTS)

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**TENDER NOTICE No. 15/FEB/2017**

**ADDENDUM NO. 1 to TENDER NOTICE No. 15/FEB/2017 FOR SUPPLY, INSTALLATION OF  
Network Attached Storage (NAS)**

13 March 2017

The following Addendum is issued to our TENDER NOTICE NO. 15/FEB/2017, Ref No. ICTS/TIFR/IT/2016-17/06 for “Tender for Supply & Installation of Network Attached Storage (NAS)” to include the following changes in the Specifications:-

**As in tender:**

**Mandatory Clause:** Hardware and software support for the storage should be directly from the OEM to qualify for this tender

**Read as:**

**Mandatory Clause:** Hardware support and tested operating system (pl. refer point 7, preferred OS) for the storage should be directly from the OEM to qualify for this tender

**As in tender:**

**Mandatory Clause:** The entire solution must be factory integrated, tested, validated and certified. No on-site or local assembling of the system at ICTS site is allowed. Only rack-mounting, OS and application installation is allowed on-site

**Read as:**

**Mandatory Clause:** The storage servers must be factory integrated, tested, validated and certified. No on-site or local assembling of the system at ICTS site is allowed. Only rack-mounting, OS and application installation is allowed on-site

**As in tender:**

**Storage server:** Minimum 256GB (16x16) ECC DDR4-2400Mhz or better RAM in balanced configuration for optimizing the memory bandwidth

**Read as:**

**Storage server:** Minimum 256GB (16x16 or 8x32 or better) ECC DDR4-2400Mhz or better RAM in balanced configuration for optimizing the memory bandwidth. A minimum of 4 empty DIMM slots for future expansion.



**As in tender:**

**Storage Server:** 6 x 10 Gbps Ethernet ports

**Read as:**

**Storage Server:** 6 x 10 Gbps Ethernet ports (SFP+ ports with modules for connecting to switch)

**As in tender:**

**Storage Server:** RAID controller with support for Hardware RAID 0, 1, 10, 5 (should have a built in option to disable the RAID controller to use with OpenZFS)

**Read as:**

**Storage Server:** RAID controller with support for Hardware RAID 0, 1, 10, 5 (should have a built in option to disable the RAID controller to use with OpenZFS). Provide an optional solution with HBA card as well

**As in tender:**

**Archival Storage:** Minimum 128GB (16x8) ECC DDR4-2400Mhz or better RAM in balanced configuration for optimizing the memory bandwidth

**Read as:**

**Archival Storage:** Minimum 128GB (16x8 or 8x16 or better) ECC DDR4-2400Mhz or better RAM in balanced configuration for optimizing the memory bandwidth. A minimum of 4 empty DIMM slots for future expansion.

**As in tender:**

**Archival Storage:** 2 x 10 Gbps Ethernet ports

**Read as:**

**Archival Storage:** 2 x 10 Gbps Ethernet ports (SFP+ ports with modules for connecting to switch)

**As in tender:**

**Archival Storage:** RAID controller with support for Hardware RAID 0, 1, 10, 5 (should have a built in option to disable the RAID controller to use with OpenZFS)



**Read as:**

**Archival Storage:** RAID controller with support for Hardware RAID 0, 1, 10, 5 (should have a built in option to disable the RAID controller to use with OpenZFS). Provide an optional solution with HBA card as well

**As in tender:**

**SPARES TO BE SUPPLIED :**

1. At least three hard disks of each type installed
2. At least two power supply of each type installed
3. At least six memory modules of each type installed
4. At least one processor of the type installed

**Read as:**

**SPARES TO BE SUPPLIED :**

1. At least five hard disks (NL SAS or SATA3) of each type installed
2. At least two power supply of each type installed
3. At least six memory modules of each type installed
4. At least one processor of the type installed

**Additions to Pre-qualification for bidder:**

**II. Pre-qualification for bidder:**

**Point No. 10.** The OEM/Bidder should have valid ISO certification. Please attach a copy of the certificate.

Please enclose the **Addendum No. 1 Dt. 13/03/2017** with your Signature, Date & Stamp along with the **TECHNICAL BID**.

All other terms and conditions of the Tender Enquiry shall remain unaltered.

Thanking you,

Yours faithfully,  
For and on behalf of International Centre for Theoretical Sciences,

Administrative Officer



