

	<b>Electronics Corporation of Tamil Nadu Limited</b>
<b>Rate Contract Tender</b>	<b>Supply, Installation and Commissioning of SAN &amp; NAS Storage Devices</b>
	<b>Tender Ref. ELCOT/Proc/OT/33265/SAN &amp; NAS/RC/2019-20</b>
	<b>Revised Tender Document</b>

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**Acronyms and Definitions**

AMC/CAMC	Annual Maintenance Contract / Comprehensive Annual Maintenance Contract
CST	Central Sales Tax
DSC	Digital Signature Certificate
EMD	Earnest Money Deposit
ERTL	Electronic Regional Test Laboratories
ETDC	Electronics Test & Development Centre
FOR	Free On Road / Rail
HR	Human Resources
HRMS	Human Resources Management System
ICT	Information and Communication Technology
IPR	Intellectual Property Rights
ISO	International Organisation for Standardisation
IT	Information Technology
LD	Liquidated Damage
LOA	Letter of Acceptance
MIS	Management Information System
NABL	National Accreditation Board for Testing and Calibration Laboratories
OEM	Original Equipment Manufacturer
PC-OEM	Personal Computer – Original Equipment Manufacturer
RFP	Request for Proposal
ROHS	Restriction Of Use of Hazardous Substances
SAMEER	Society for Applied Microwave Electronics Engineering & Research.
SD	Security Deposit
SAN	Storage Area Network
NAS	Network Attached Storage
SNR	Site Not Ready
SPOC	Single Point of Contact
SRS	Software Requirements Specification
ST/VAT	Service Tax/ Value Added Tax
GST	Goods and Services Tax

**Know Your Rights**

1. ALL TENDERS WILL BE OPENED ONLY IN THE PRESENCE OF THE BIDDERS.
2. THE BIDDERS HAVE A RIGHT TO INSIST ON PROCESSING OF TECHNICAL BIDS IN THE BIDDERS PRESENCE ONLY.
3. PRICE BID OPENING AND PRICE COMPARISON WILL BE DONE ONLY IN THE PRESENCE OF THE BIDDERS.
4. BIDDERS / BIDDERS ARE ELIGIBLE FOR A BIDDER SIGNED COPY OF THE PRICE BID COMPARISON STATEMENT ON THE SPOT.
5. PLEASE INSIST ON YOUR RIGHTS AND AVAIL THE SAME.

MANAGING DIRECTOR  
ELCOT

**Letter of Undertaking**

To  
The Managing Director  
Electronics Corporation of Tamil Nadu Limited  
692 Anna Salai, Nandanam  
Chennai-600035

Sir,

Sub: Undertaking for participating in ELCOT's Procurement Tender - Reg.  
Ref: **Tender No. ELCOT/Proc/OT/33265/SAN & NAS/RC/2019-20**

I/We ----- have gone through the Terms and Conditions, Scope of Work and Specification and will abide by them as laid down (Tender Documents, Technical bid and Price Bid)

I/We ----- hereby confirm that our Company was not blacklisted by any State Government/ Central Government/ Public Sector Undertakings during the last three years. We also hereby confirm that our EMD/SD was not forfeited by any State Government / Central Government / Public Sector Undertakings during the last three years due to our non-performance, non-compliance with the tender conditions etc.

I/We ----- hereby declare that all the particulars furnished by us in this Tender are true to the best of my/our knowledge and we understand and accept that if at any stage, the information furnished is found to be incorrect or false, we are liable for disqualification from this tender and also are liable for any penal action that may arise due to the above.

I/We ----- certify that no refurbished components are used in the manufacturing and supply of SAN & NAS Storage devices/ tendered items. The licences for the operating systems and other software to be installed under this contract are certified as genuine and valid.

I/We \_\_\_\_\_ certify that we are liable and responsible for any disputes arising out of Intellectual Property Rights.

**In case of violation of any of the conditions above, I/We ..... understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.**

Yours faithfully  
for \_\_\_\_\_  
Name, Signature  
Designation  
Seal

**Note:**

- 1) Declaration in the company's letter head should be submitted as per format given above
- 2) If the bidding firm has been blacklisted by any State Government/ Central Government/ Public Sector Undertakings earlier, then the details should be provided.

**1. Preamble**

Electronics Corporation of Tamil Nadu Limited (ELCOT), a wholly owned Government of Tamil Nadu Undertaking is the Optional Procurement Agency of the Government of Tamil Nadu for procurement of IT related products like Computers, Printers, other peripherals and software as per G.O.Ms.No.58 of Finance (BPE) Department dated 16.2.1999 with latest amendments. ELCOT is procuring various IT related products and services for all the State Government Departments / Boards / Autonomous Bodies, etc. As part of the procurement activities, ELCOT inviting bids under **RATE CONTRACT** for the procurement of **SAN & NAS Storage devices** of various Government Departments/Organisations.

**Short Titles used in the Tender Document:**

- 1) **Bidder:** Bidder means the party who makes a formal offer in pursuance of the tender floated.
- 2) **Successful Bidder:** Successful Bidder means the Bidder who becomes successful through the tender process.
- 3) **Day:** A day means a calendar day.
- 4) **Service Centre:** Service Centre means the centre or place, wherein the Bidder, interalia undertakes and performs the service activities relating to the tendered items indicated in the tender and shall include a Direct service centre or Authorised dealer or Franchisee service centre of the bidder/OEM

5) **Details about the Regions and Districts:**

Region	Districts to be Covered under each Region
North	(Chennai), Kancheepuram, Tiruvallur, Tiruvannamalai, Villupuram & Vellore.
East	Ariyalur, Cuddalore, Thanjavur, (Tiruchirapalli), Thiruvarur, Nagapattinam, Pudukkottai & Perambalur.
South	Ramanathapuram, (Madurai), Theni, Dindigul, Tirunelveli, Virudhunagar, Thoothukudi, Sivagangai & Kanyakumari.
West	Salem, Erode, Karur, (Coimbatore), Tiruppur, Dharmapuri, Namakkal, Krishnagiri & Nilgiris.

- 6) **Life Cycle Cost:** Life Cycle Cost under this tender/contract means the total cost to be incurred by the Purchaser towards the purchase of tendered items and also charges to be incurred by the Purchaser towards maintenance of **SAN & NAS Storage devices** for the whole period including Standard warranty period of 3 years and CAMC period of 2 years or any extended period mutually agreed by the Successful Bidder and the Purchaser.
- 7) **Purchaser:** Purchaser means the end-user for whom the procurement is indented through the tender.



## 2. e-Tender Schedule

## ELECTRONICS CORPORATION OF TAMILNADU LIMITED (ELCOT)

1.	Tender inviting Authority, Designation and Address	The Managing Director ELCOT, II Floor MHU Complex 692 Anna Salai, Nandanam, Chennai-600035. e-mail: <a href="mailto:md@elcot.in">md@elcot.in</a> and <a href="mailto:procurement@elcot.in">procurement@elcot.in</a> URL: <a href="http://www.elcot.in">www.elcot.in</a>
2.	Tender Accepting Authority	The Managing Director, ELCOT, Chennai
3.	A) Name of the Work	Supply, Installation and Commissioning of SAN & NAS Storage devices
	B) Tender reference	<b>ELCOT/Proc/OT/33265/SAN &amp; NAS/RC/ 2019-20</b>
	C) Installation	At the Purchaser premises throughout the State of Tamil Nadu
4.	Tender documents available place	Tender documents can be freely downloaded from <a href="https://tenders.elcot.in">https://tenders.elcot.in</a> , <a href="http://www.elcot.in">www.elcot.in</a> and <a href="http://www.tenders.tn.gov.in">www.tenders.tn.gov.in</a> till closing date and time of the Tender. The tender document fee is waived for downloading the Tender.
5.	e-Tender Portal Charges	For every Tender submitted through e-Tender, a portal charge of <b>Rs.10,000/- (Rupees Ten Thousands only)</b> should be payable by way of Demand Draft only
6.	Earnest Money Deposit (EMD)	<b>Rs. 1,50,000/- (Rupees One Lakh and Fifty Thousand Only)</b> should be paid by way of Demand Draft or Banker's Cheque drawn in favour of Electronics Corporation of Tamil Nadu Limited and payable at Chennai only.
7.	Tender submission	Two Part Tender comprising of Technical Bid and Price Bid should be submitted electronically through e-Tender Portal <a href="https://tenders.elcot.in">https://tenders.elcot.in</a>
8.	Bid signing	Bidders should possess valid Class 2/Class 3 - Signing and Encryption Digital Signature Certificates for signing the Bids
9.	Help manuals for e-Tender	Bidders may download the help documents and user manuals from <a href="https://tenders.elcot.in">https://tenders.elcot.in</a>
10.	Date and Place of e-Portal Training and Pre-Bid Meeting	<b>10/10/2019 @ 11.00 AM</b> at the address mentioned in Column (1) above.
11.	Due Date, Time and Place of submission of Tender	<b>26/11/2019 @ 3.00 PM</b> at the address mentioned in Column (7) above.
12.	Date, Time and Place of opening of the Technical Bids	<b>26/11/2019 @ 3.15 PM</b> at the address mentioned in Column (7) above.
13.	Date, Time and Place of opening of Price Bids	Will be intimated only to the Technically Qualified Bidders.

**3. General Instructions**

**3.1 General**

- a) The Bidders are requested to examine the instructions, terms and conditions and specifications given in the Tender. Failure to furnish all required information in every aspect will be at the Bidder's risk and may result in the rejection of bid.
- b) It will be imperative for each Bidder(s) to familiarise itself with the prevailing legal situations for the execution of contract. ELCOT shall not entertain any request for clarification from the Bidder regarding such legal aspects of submission of the Bids.
- c) It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bids and no claim whatsoever including those of financial adjustments to the contract awarded under this tender will be entertained by ELCOT. Neither any time schedule nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder to appraise themselves.
- d) The Bidder shall be deemed to have satisfied itself fully before Bidding as to the correctness and sufficiency of its Bids for the contract and price quoted in the Bid to cover all obligations under this Tender.
- e) It must be clearly understood that the Terms and Conditions and specifications are intended to be strictly enforced. No escalation of cost in the Tender by the Bidder will be permitted throughout the period of Agreement or throughout the period of completion of contract whichever is later on account of any reasons whatsoever.
- f) The Bidder shall make all arrangements as part of the contract to supply, commission and train the beneficiaries at various locations at their own cost and transport.
- g) The Bidder should be fully and completely responsible to ELCOT and State Government for all the deliveries and deliverables.
- h) Any bidder who is blacklisted in ELCOT will not be eligible to bid for Tenders in ELCOT, as per the conditions of blacklisting.
- i) In case show cause notice has been issued by ELCOT for poor performance, then

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ELCOT reserves the right to disqualify the bid submitted by such Bidder.

**3.2 Clarifications in the Tender**

- a) A prospective Bidder requiring any clarification in the Tender may notify ELCOT by letter or by Fax or by E-mail to [md@elcot.in](mailto:md@elcot.in) with a copy to [procurement@elcot.in](mailto:procurement@elcot.in). We encourage paper free e-mail communication.
- b) The responses to the clarifications will be notified in the websites by means of Corrigendum to the Tender Document. It would be advantageous to commence e-mail contact with [procurement@elcot.in](mailto:procurement@elcot.in) to register your e-mail id.

**3.3 Amendments to the Tender**

- a) Before closing of the Tender, clarifications and amendments if any will be notified in the websites mentioned in the Tender Schedule. The Bidders periodically check for the amendments or corrigendum or information in the websites till the closing date of this Tender. ELCOT will not make any individual communication and will in no way be responsible for any ignorance pleaded by the Bidders.
- b) No clarifications would be offered by ELCOT within 48 hours prior to the due date and time for opening of the Tender.
- c) Before the closing of the Tender, ELCOT may amend the Tender document as per requirements or wherever ELCOT feels that such amendments are absolutely necessary.
- d) Amendments also may be given in response to the queries by the prospective Bidders.
- e) Such amendments will be notified in the websites mentioned in the Tender schedule.
- f) ELCOT at its discretion may or may not extend the due date and time for the submission of bids on account of amendments.
- g) ELCOT is not responsible for any misinterpretation of the provisions of this tender document on account of the Bidders failure to update the Bid documents on changes announced through the website.

### **3.4 Language of the Bid**

The bid prepared by the Bidder as well as all correspondence and documents relating to the bid shall be in English only. The supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation in English duly notarised, in which case, for all purposes of the bid, the translation shall govern. Bids received without such translation copy are liable to be rejected.

### **3.5 Bid Currency**

Price should be quoted in Indian Rupees (INR) only and Payment shall be made in Indian Rupees only.

### **3.6 Contacting Tender Inviting Authority**

- a) Bidders shall not make attempts to establish unsolicited and unauthorised contact with the Tender Accepting Authority, Tender Inviting Authority or Tender Scrutiny Committee after the opening of the Tender and prior to the notification of the Award and any attempt by any Bidder to bring to bear extraneous pressures on the Tender Accepting Authority shall be sufficient reason to disqualify the Bidder.
- b) Notwithstanding anything mentioned above, the Tender Inviting Authority or the Tender Accepting Authority may seek bonafide clarifications from Bidders relating to the tenders submitted by them during the evaluation of tenders.

### **3.7 Force Majeure**

Neither the Purchaser / ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as:

- Natural phenomena including but not limited to earthquakes, floods and epidemics.
- Acts of any Government authority domestic or foreign including but not

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limited to war declared or undeclared, priorities and quarantine restrictions.

- Accidents or disruptions including, but not limited to fire, explosions, breakdown of essential machinery or equipment, power and water shortages.
- In such claim of Force Majeure clause, the bidder should submit the written claim, explaining the cause within 7 days of such occurrence and should be accepted by ELCOT/ Purchaser.

**3.8 Dispute and Jurisdiction**

"Any dispute or difference, whatsoever, arising between the parties to this contract, arising out of or in relation to this contract shall be resolved by the parties through mutual consultation, in good faith and using their best endeavours. To this end, the parties agree to provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate discussions between them / their representatives or officers".

"Except as otherwise provided elsewhere in the Contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof, the parties in the contract shall approach the Courts in Chennai alone which shall have jurisdiction in this matter."

**4. Eligibility Criteria**

The Bidders should have the following Eligibility for participating in the Tender. The Bidders should enclose documentary evidence for fulfilling the Eligibility in the Technical Bid. If a bidder fails to enclose the documentary proof for eligibility, their bid will be summarily rejected.

<b>4.1 Eligibility</b>	
<b>Eligibility Conditions</b>	<b>Documentary Proof to be submitted</b>
1 The Bidder shall be a Company registered in India under the Companies Act 1956 / Partnership Firm / Sole Proprietorship Firm and existing for the past 3 years as on 31.08.2019.	The Bidder shall provide the Certificate of Incorporation for Registered Companies, Partnership Deed for Partnership Firms / GST or Service Tax Registration Certificate for Sole Proprietorship Firms.
2 OEM shall be a Company registered in India under the Companies Act 1956 and existing for the past 3 years as on 31.08.2019.	OEM shall provide the Certificate of Incorporation.
3 SAN & NAS Storage devices - OEMs or their authorized Dealer/Distributor are only eligible to Bid.	a) Copy of Manufacturing License with Manufacturing capacity for SAN & NAS Storage devices shall have to be submitted by the respective OEMs. OR OEM need to submit an Undertaking indicating that the ordered quantity during the contract period can be supported without any issues as they have the required manufacturing capacity. b) Letter of Authorization from the manufacturer of SAN & NAS Storage devices to represent their product for this Tender in the format prescribed by ELCOT shall have to be submitted by the Authorized Dealer / Distributor of the OEMs.
4 Bidder should have 3 years of existence in the supply, installation and commissioning of SAN/NAS Components as on 31.08.2019.	Copy of Purchase Order issued in the name of Bidder dated prior to 31.08.2016 and Copy of Completion / Performance Certificate for the above Purchase Order should be submitted.

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<p>5 Bidder shall have an Average Annual Turnover of Rs.5 (Five) Crores or above in the last three successive Audited Financial Years.</p>	<p>Copies of the Audited Annual Reports containing the Balance sheets / Profit and Loss account for the last 3 Audited Financial years (2016-17, 2017-18 &amp; 2018-19) shall have to be submitted. OR Copies of the Audited Annual Reports containing the Balance sheets / Profit and Loss account for the 3 Audited Financial years 2015-16, 2016-17, 2017-18 along with the unaudited financial statement for the year 2018-19 shall have to be submitted.</p>
<p>6 Bidder shall have executed Single order for supply, installation and commissioning of SAN / NAS Storage devices for a value of at least Rs. 10 Lakhs or above for any Government Departments / Organizations / Public Sector Undertakings in Tamil Nadu in the last 3 years.</p> <p>7 The bidder/OEM of SAN &amp; NAS Storage devices should have atleast one service centre in each region (North, East, South and West as given in the Tender Document).</p>	<p>Relevant copies of Purchase Orders obtained in the name of the bidder and completion/ performance certificate obtained from the Purchasers should be submitted.</p> <p>In case of OEM/ Bidder's Own Service Centre, the copies of the land-line telephone bills (month before the due date)/ valid rental agreement/any legal proof shall be submitted as a proof for availability of the service centres. In case of OEM's /Bidder's Franchisee Service centre, copy of the valid agreement entered between the Franchisee and the OEM / Bidder shall be submitted.</p>
<p>8. SAN &amp; NAS Storage devices Manufacturer should have ISO 9001:2008 or latest certified manufacturing facility and ISO 14001:2008 or latest certified for handling hazardous products.</p>	<p>Should submit copy of VALID ISO 9001:2008 or latest and ISO 14001:2008 or latest Certificates of OEM.</p>
<p>9 The bidder should have office in Chennai.</p>	<p>Copies of the land-line telephone bills for the month before the due date / valid rental agreement/ any valid legal proof should be submitted as a proof for availability of the office in Chennai.</p>
<p>10 The OEM shall have their own Website.</p>	<p>The URL of the Website Name and Copy of Home Page Print out of the OEM shall be submitted.</p>

<b>5. SPECIFICATIONS</b>
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**Important Note: The bidders can offer reputed products of SAN & NAS storage devices. The components should be of latest model/specification/generation and equivalent can be offered without compromising the specification.**

Code	Item Description	Make	Approx Qty
33265-001	Network Attached Storage (NAS) - 4 Bays	Any reputed make	1 No

S.No.	Parameters	Specifications
1	Form Factor	Rack 1U/2U
2	Controller	The proposed NAS array should be configured with minimum single controller/Processor
3	Processor	Intel Xeon E3-1220v5, 3.0 GHZ, 4 Core or better
4	Internal storage capacity	1. Offered NAS controller shall support at-least 4 internal LFF Slots and should be scalable to atleast 48 TB capacity. 2. Offered storage should support at least one additional drive enclosure.
5	Cache /Memory	NAS should be with minimum 8GB DDR4 RAM or higher
6	Front end ports	2 x 1 Gbps Ethernet
7	Storage media	NL SAS 7.2 K RPM - 2 TB, 4 TB, 8 TB, 12 TB
8	RAID	RAID 0,1,5 or higher
9	Protocols support	NFS, CIFS , iSCSI
10	Network Client Type Support	Windows , Linux
11	Operating system	Windows storage server 2012 R2 or higher
12	Mode of operation	Capable to function on HBA or RAID Mode.
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)- 2 Nos
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.

Code	Item Description	Make	Approx Qty
33265-002	Network Attached Storage (NAS) - 12 Bays	Any reputed make	1 No

S.No.	Parameters	Specifications
1	Form Factor	Rack 1U/2U



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2	Controller	The proposed NAS array should be configured with minimum single controller/Processor
3	Processor	Intel Xeon Bronze 3104, 1.7GHZ, 6 Core or better
4	Internal storage capacity	1. Offered NAS controller shall support at-least 12 internal LFF Slots and should be scalable to atleast 144 TB capacity. 2. Offered storage should support at least one additional drive enclosure.
5	Cache /Memory	NAS should be with minimum 16 GB DDR4 RAM or higher
6	Front end ports	4 x 1 Gbps Ethernet
7	Storage media	NL SAS 7.2 K RPM - 2 TB, 4 TB, 8 TB, 12 TB
8	RAID	RAID 0,1,5 or higher
9	Protocols support	NFS, CIFS , iSCSI
10	Network Client Type Support	Windows, Linux
11	Operating system	Windows storage server 2016 or higher
12	Mode of operation	Capable to function on HBA or RAID Mode.
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)- 2 Nos
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.

Code	Item Description	Make	Approx Qty
33265-003	Storage Area Network (SAN) - Scalable upto 48 LFF drives, 8GB cache	Any reputed make	1 No

S.No.	Parameters	Specifications
1	Form Factor	Rack 1U/2U
2	Controller	Dual active-active controllers
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above
4	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 48 Drives
5	Cache /Memory	8 GB across dual controllers or higher
6	Supported front end interface	FC, iSCSI , SAS
7	Front end interface ports	4 ports across dual controllers or higher
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher
9	Management ports	1 Management Ethernet Port

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10	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher
11	Raid	RAID 0,1,5 or higher
12	Network Client Type Support	Windows , Linux
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-004</b>	Storage Area Network (SAN) - Scalable upto 96 SFF drives, 8GB cache	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Form Factor	Rack 1U/2U
2	Controller	Dual active-active controllers
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above
4	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 96 Drives
5	Cache /Memory	8 GB across dual controllers or higher
6	Supported front end interface	FC, iSCSI , SAS
7	Front end interface ports	4 ports across dual controllers or higher
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher
9	Management ports	1 Management Ethernet Port
10	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/960 GB or above
11	Raid	RAID 0,1,5 or higher
12	Network Client Type Support	Windows , Linux
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos

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14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-005</b>	Storage Area Network (SAN) - Scalable upto 96 LFF drives, 16 GB cache	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Form Factor	Rack
2	Controller	Dual active-active controllers
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above
4	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 96 Drives
5	Cache /Memory	16 GB across dual controllers or higher
6	Supported front end interface	FC, iSCSI , SAS
7	Front end interface ports	8 Ports across controller or higher
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher
9	Management ports	1 Management Ethernet Port
10	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or above
11	Raid	RAID 0,1,5,6 or higher
12	Network Client Type Support	Windows , Linux
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)- 2 Nos
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy

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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty</b>
<b>33265-006</b>	Storage Area Network (SAN) - Scalable upto 192 SFF drives, 16 GB cache	<b>Any reputed make</b>	<b>1 No</b>

<b>S.No.</b>	<b>Parameters</b>	<b>Specifications</b>
1	Form Factor	Rack
2	Controller	Dual active-active controllers
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above
4	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 192 Drives
5	Cache /Memory	16 GB across dual controllers or higher
6	Supported front end interface	FC, iSCSI, SAS
7	Front end interface ports	8 Ports across controller or higher
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher
9	Management ports	1 Management Ethernet Port
10	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/960 GB or above
11	Raid	RAID 0,1,5,6 or higher
12	Network Client Type Support	Windows, Linux
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)- 2 Nos
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy

<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty</b>
<b>33265-007</b>	Storage Area Network (Unified) - Scalable upto 36 LFF drives, 32 GB cache	<b>Any reputed make</b>	<b>1 No</b>

<b>S.No.</b>	<b>Parameters</b>	<b>Specifications</b>
1	Type	Unified Storage
2	Form Factor	Rack 2U/3U

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3	Processor	Intel Xeon E5-2600 series, 6-core, 1.6 GHz /Intel Xeon 2x6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better
4	Controller	Dual active-active controllers
5	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 36 Drives
6	Cache /Memory	32 GB across dual controllers or higher
7	Frontend FC ports	4 X 16 Gbps across controller or higher
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher
9	Backend SAS ports	4 X 12 Gbps across controller or higher
10	Management ports	1 Management Ethernet Port
11	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher
12	Raid	RAID 5,6 or equivalent
13	Network Client Type Support	Windows , Linux
14	Hotspare	Required
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans
18	Management software	Required
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-008</b>	Storage Area Network (Unified) - Scalable upto 72 SFF drives, 32 GB cache	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Type	Unified Storage
2	Form Factor	Rack 2U/3U
3	Processor	Intel Xeon E5-2600 series, 6-core, 1.6 GHz /Intel Xeon 2x6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better
4	Controller	Dual active-active controllers

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5	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 72 Drives
6	Cache /Memory	32 GB across dual controllers or higher
7	Frontend FC ports	4 X 16 Gbps across controller or higher
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher
9	Backend SAS ports	4 X 12 Gbps across controller or higher
10	Management ports	1 Management Ethernet Port
11	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/920 GB or above
12	Raid	RAID 5,6 or equivalent
13	Network Client Type Support	Windows , Linux
14	Hotspare	Required
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)- 2 Nos
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans
18	Management software	Required
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
33265-009	Storage Area Network (Unified) - Scalable upto 72 LFF drives, 64 GB cache	Any reputed make	1 No

S.No.	Parameters	Specifications
1	Type	Unified Storage
2	Form Factor	Rack 2U/3U
3	Processor	Intel Xeon E5-2600 series, 8-core, 2.4 GHz/Intel Xeon 2-4 x 6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better
4	Controller	Dual active-active controllers
5	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 72 Drives
6	Cache /Memory	64 GB across dual controllers or higher

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7	Frontend FC ports	4 X 16 Gbps across controller or higher
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher
9	Backend SAS ports	4 X 12 Gbps across controller or higher
10	Management ports	1 Management Ethernet Port
11	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher
12	Raid	RAID 5,6 or equivalent
13	Network Client Type Support	Windows , Linux
14	Hotspare	Required
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans
18	Management software	Required
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-010</b>	Storage Area Network (Unified) - Scalable upto 144 SFF drives, 64 GB cache	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Type	Unified Storage
2	Form Factor	Rack 2U/3U
3	Processor	Intel Xeon E5-2600 series, 8-core, 2.4 GHz/Intel Xeon 2-4 x 6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better
4	Controller	Dual active-active controllers
5	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 144 Drives
6	Cache /Memory	64 GB across dual controllers or higher
7	Frontend FC ports	4 X 16 Gbps across controller or higher
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher
9	Backend SAS ports	4 X 12 Gbps across controller or higher

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10	Management ports	1 Management Ethernet Port
11	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/920 GB or above
12	Raid	RAID 5,6 or equivalent
13	Network Client Type Support	Windows , Linux
14	Hotspare	Required
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans
18	Management software	Required
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-011</b>	Storage Area Network (Unified) - Scalable upto 240 LFF drives, 256 GB cache	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Type	Unified Storage
2	Form Factor	Rack 2U/3U
3	Processor	Intel E5-2600 series, 12-core, 2.5 GHz/Intel Xeon 2-4 x 10-core 2.4 GHz/Intel Xeon Broadwell 16-core or better
4	Controller	Dual active-active controllers
5	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 240 Drives
6	Cache /Memory	256 GB across dual controllers or higher
7	Frontend FC ports	8 X 16 Gbps across controller or higher
8	Frontend iSCSI ports	8 X 10 Gbps across controller or higher
9	Backend SAS ports	4 X 12 Gbps across controller or higher
10	Management ports	1 Management Ethernet Port
11	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher



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12	Raid	RAID 5,6 or equivalent
13	Network Client Type Support	Windows , Linux
14	Hotspare	Required
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans
18	Management software	Vendor shall provide Management software.
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-012</b>	Storage Area Network (Unified) - Scalable upto 480 SFF drives, 256 GB cache	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Type	Unified Storage
2	Form Factor	Rack 2U/3U
3	Processor	Intel E5-2600 series, 12-core, 2.5 GHz/Intel Xeon 2-4 x 10-core 2.4 GHz/Intel Xeon Broadwell 16-core or better
4	Controller	Dual active-active controllers
5	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 480 Drives
6	Cache /Memory	256 GB across dual controllers or higher
7	Frontend FC ports	8 X 16 Gbps across controller or higher
8	Frontend iSCSI ports	8 X 10 Gbps across controller or higher
9	Backend SAS ports	4 X 12 Gbps across controller or higher
10	Management ports	1 Management Ethernet Port
11	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/920 GB or above
12	Raid	RAID 5,6 or equivalent
13	Network Client Type Support	Windows , Linux

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14	Hotspare	Required
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans
18	Management software	Vendor shall provide Management software.
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy

Code	Item Description	Make	Approx Qty
<b>33265-013</b>	Tape Library - 2 Drives	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Host Interface	Offered Tape Library shall provide 8Gbps native FC connectivity to SAN switches.
2	Drive Type and Number of Drives	LTO8 and 2 drives
3	Slots	Should support 24 slots or higher
4	Encryption	Encryption should be supported by offered Tape Library
5	Management	Tape Library shall provide web based remote management.
6	Tape and Cleaning Cartridges	5 X LTO8 media and 1 x Cleaning Cartridge

Code	Item Description	Make	Approx Qty
<b>33265-014</b>	Tape Library - 4 Drives	<b>Any reputed make</b>	<b>1 No</b>

S.No.	Parameters	Specifications
1	Host Interface	Offered Tape Library shall provide 8 Gbps native FC connectivity to SAN switches.
2	Drive Type and Number of Drives	LTO 8 and 4 drives
3	Slots	Should support 48 slots or higher

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4	Encryption	Encryption should be supported by offered Tape Library
5	Management	Tape Library shall provide web based remote management.
6	Tape and Cleaning Cartridges	5 X LTO8 media and 1 x Cleaning Cartridge

Code	Item Description	Make	Approx Qty
33265-015	SAN Switch Model 1 : 12 Ports	Any reputed make	1 No

S. No.	Parameters	Specifications
1	Interface	FC
2	Number of Ports	Min 12 and max 24
3	Connectivity Speed	16 Gb FC
4	Monitoring	Switch shall support POST and online/offline diagnostics, including RAStace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).
5	FC Support	Should protect existing device investments with auto-sensing 4, 8 and 16 Gbit/sec capabilities.
6	Intelligent Networking	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic
		The switch shall be able to support ISL trunk up to 128 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.
		SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.
		It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning
		The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric.
		Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.

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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty</b>
<b>33265-016</b>	SAN Switch Model 2 : 24 Ports	<b>Any reputed make</b>	<b>1 No</b>

<b>S. No.</b>	<b>Parameters</b>	<b>Specifications</b>
1	Interface	FC
2	Number of Ports	Min 24 and max 48
3	Connectivity Speed	16 Gb FC
4	Monitoring	Switch shall support POST and online/offline diagnostics, including RAS trace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).
5	FC Support	Should protect existing device investments with auto-sensing 4, 8 and 16 Gbit/sec capabilities.
6	Intelligent Networking	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic
		The switch shall be able to support ISL trunk up to 128 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.
		SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.
		It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning
		The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric.
		Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.

<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty</b>
<b>33265-017</b>	Backup Device - 15 TB	<b>Any reputed make</b>	<b>1 No</b>

<b>S.No</b>	<b>Specifications</b>
1	Offered Disk to disk Purpose Built backup device shall be space efficient and shall not consume more than 2U of rack space and shall be certified to work with at-least 3 Backup application vendors like HPE, Veritas, Dell-EMC, Veeam,

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	Commvault etc.
2	Offered device shall be offered with Minimum of 15 TB of Usable Capacity and scalable to 30 TB of Usable Capacity within the same Appliance.
3	Offered device must be scalable to atleast 30 TB of Usable Capacity at On-prem (DC Site) and should provide atleast- 90 TB capacity in Cloud like AWS, Azure
4	Vendor shall not use any additional staging device in-between while moving the data from Disk based backup device to public cloud
5	Proposed appliance Must be offered RAID-6 with SATA/NL-SAS disk drives along with hot-spare disks for each disk shelf
6	Proposed appliance Must be offered with protocols like CIFS and NFS. All of the protocols should be available to use concurrently with global in-line variable length data deduplication for data ingested across all of them.
7	Offered device shall have capability to do complete copy of data sets from on premise disk backup storage to Cloud storage instead of data tiering.
8	Offered device shall have capability to deliver selective restore from disk Library itself.
9	Proposed appliance must support industry leading backup software like EMC Networker, Symantec Netbackup, Commvault and Veeam etc.
10	Must support and Integrate with all industry standard Tape Libraries
11	Offered device shall have integrated de-duplication license, low bandwidth replication license so that only unique non duplicated block transfers to remote / DR location.
12	Offered device shall support receiving De-Duplicated data from remote locations or branch office directly from the application servers / Client servers in low bandwidth mode without using any backup or replication based device at remote location / Branch office.
13	4 x 1Gbps NIC, 2 x 10Gbps NIC
14	Offered disk based backup device shall also support encryption functionality.
15	Proposed appliance Must support backup throughput of atleast 6 TB/hr in native mode.
16	Proposed backup software should be available on various OS platforms like Windows, Linux, HP-UX, IBM AIX, Solaris etc. The backup server should be compatible to run on both Windows and Linux OS platforms
17	The solution must support client-direct backup feature for file system, applications and databases to reduce extra hop for backup data at backup/media server to cater stringent backup window.
18	Should integrate with third party VTL
19	Must support source capacity based licensing / Socket based License /Instance based licenses.
20	The proposed backup software should support restore a single VM, single file from a VM, a VMDK

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21	The software must support web based advance search from the backup catalog based on dates, time, full text and patterns etc. and also able to recover the data to original / alternate path from the same search console
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Code	Item Description	Make	Approx Qty
<b>33265-018</b>	Backup Device - 45 TB	<b>Any reputed make</b>	<b>1 No</b>

Sl. No	Tender Specifications
1	Offered Disk to disk Purpose Built backup device shall be space efficient and shall not consume more than 2U of rack space and shall be certified to work with at-least 3 Backup application vendor like HPE, Veritas, Dell-EMC, Veeam, Commvault etc.
2	Offered device shall be offered with Minimum of 45 TB of Usable Capacity and scalable to 210 TB of Usable Capacity within the same Appliance.
3	Offered device must be scalable to atleast 210 TB of Usable Capacity at On-prem (DC Site) and should provide atleast 2X (Approx 420 TB) capacity in Cloud like AWS, Azure
4	Vendor shall not use any additional staging device in-between while moving the data from Disk based backup device to public cloud
5	Proposed appliance Must be offered RAID-6 with SATA/NL-SAS disk drives along with hot-spare disks for each disk shelf
6	Proposed appliance Must be offered with protocols like CIFS and NFS. All of the protocols should be available to use concurrently with global in-line variable length data deduplication for data ingested across all of them.
7	Offered device shall have capability to do complete copy of data sets from on premise disk backup storage to Cloud storage instead of data tiering.
8	Offered device shall have capability to deliver selective restore from disk Library itself.
9	Proposed appliance must support industry leading backup software like EMC Networker, Symantec Netbackup, Commvault and Veeam etc.
10	Must support and Integrate with all industry standard Tape Libraries
11	Offered device shall have integrated de-duplication license, low bandwidth replication license so that only unique non duplicated block transfers to remote / DR location.
12	Offered device shall support receiving De-Duplicated data from remote locations or branch office directly from the application servers / Client servers in low bandwidth mode without using any backup or replication based device at remote location / Branch office.
13	4 x 1Gbps NIC, 2 x 10Gbps NIC
14	Offered Appliance Fiber channel ports shall support connectivity of servers either directly or via SAN switches while supporting the both source and Target based de-duplication.

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15	Offered disk based backup device shall also support encryption functionality.
16	Proposed appliance Must support backup throughput of Atleast 30 TB/hr with target based dedupe while maintaining a single deduplication pool with RAID 6 and min. one hot spare disk as well.
17	Proposed backup software should be available on various OS platforms like Windows, Linux, HP-UX, IBM AIX, Solaris etc. The backup server should be compatible to run on both Windows and Linux OS platforms
18	The solution must support client-direct backup feature for file system, applications and databases to reduce extra hop for backup data at backup/media server to cater stringent backup window.
19	Should integrate with third party VTL
20	Must support source capacity based licensing / Socket based License /Instance based licenses.
21	The proposed backup software should support restore a single VM, single file from a VM, a VMDK
22	The software must support web based advance search from the backup catalog based on dates, time, full text and patterns etc. and also able to recover the data to original / alternate path from the same search console

Code	Item Description	Make	Approx Qty
33265-019	Hyper-Converged Solution	Any reputed make	1 No

S.No.	Parameter	Specifications
<b>Hardware and Performance Requirements</b>		
1	Hyper-Converged Infrastructure	Proposed solution must be based on converged IT infrastructure platform that integrates storage, compute, networking, hypervisor, real-time deduplication, compression, and optimization along with powerful data management, data protection, and disaster recovery capabilities in a standard x86 server building block. The storage solution with the HCI should have in-built software defined storage capability integrated within the Hypervisor kernel itself or should be using virtual storage controller architecture. The bidder must provide extra resources to compensate for the loss of resources. Virtualization software shall provide a virtualization layer that sits directly on the bare metal server hardware with no dependence on a general purpose OS for greater reliability and security
2	Functionality	Proposed hardware must be capable to deduplicate, compress & optimize ALL data inline, in real-time, across all storage tiers.

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3	Hardware Support	Solution must be based on x86 infrastructure.
4	Hardware Specifications	<p>Proposed hardware must come with the following specifications:</p> <p>Should have minimum 2 Intel skylake Processors with 10 core minimum, 2.2 Ghz or higher</p> <p>Should have Enterprise class SSD should be used for all purpose.</p> <p>Should have DDR4 RAM at 2600 Mhz or above. Minimum 128 GB of RAM in a node.</p> <p>Should have minimum 4 ports each of 10G SFP+ either all on-board OR should have 2 cards having dual ports.</p> <p>Should have dedicated management port.</p> <p>Node should have separate HDD/SSD for OS (Esxi) installation &amp; SSDs for usable capacity.</p> <p>All node should have same number of cores &amp; memory.</p>
5	NRSC requirement	<ul style="list-style-type: none"> <li>- Minimum 3 nodes</li> <li>- Minimum 60 physical cores</li> <li>- Minimum 384 GB of memory</li> <li>- 20 TB of usable space without considering any data reduction features like deduplication &amp; compression. Should use less than 2 TB of Enterprise SSD drives for all purpose. Capacity should be sized using considering FTT=1, Erasure coding</li> <li>-The Hyper-converged appliance should be able to scale on demand to at least 6 times the current deployment in a seamless and non-disruptive manner</li> </ul>
6	ToR Switches & fiber optics	<p>Should provide 2 number of ToR switches with minimum 24 port 10G SFP+ each. ToR switches should have all active ports from day 1.</p> <p>Switch should be of datacenter grade without stacking.</p> <p>Should have minimum 2 uplink fiber port of 40G speed (negotiable with 10G port) to be configured in High Availability (HA). If 40G uplink port cannot negotiate with 10G port, OEM should provide additional hardware, cables &amp; any other component required.</p> <p>Switch should be rack mountable.</p> <p>Switch should have dual power source.</p>
7	Resiliency	Proposed solution must be able to support all hardware multiple points of failure with no loss of function or data.
		During a single component failure (of any type) production services should not affected / degraded in anyway.
		Each node should have dedicated non-shared dual-PSU's and should be able to sustain single power supply failure.



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		Solution should not utilize micro-server architecture with shared PSU's and other components.
		Must be able to sustain minimum of simultaneous 2-HDDs failures across cluster without data loss. Also node should not go down.
		Must be able to sustain single node failure in the cluster without affecting performance of cluster. Additional compute & storage resources should be provided to maintain performance.
		Must be able to sustain 2 NIC port failure per node.
8	Future upgrade	The solution shall provide scale-out (by adding nodes) architecture with no disruption to the workloads already running on the platform. Intermixing of hardware configuration should be supported in cluster. Intermixing of hardware includes different CPU type, Different NIC card / port count per node, Different no of CPU / core per node, HDD count different per node.
<b>SOFTWARE AND FUNCTIONALITY REQUIREMENTS</b>		
9	Licenses	All necessary licenses should be included in BOM. License should be of enterprise class & for 100% capacity. Future Scale-up should not require any additional licenses.
		Component Wise pricing should include all the enterprise class licenses mentioned in RFP for running hyper converge and its features if required by the component.
10	VMware support	The proposed HCI solution should have tight and seamless integration with VMware vSphere.
11	Common Features Included	Dedupe, compression and optimization and guaranteed CPU and RAM available to user applications. Any overhead should be sized over and above NRSC requirement.
		The solution should provide network traffic management controls to allow flexible partitioning of physical NIC bandwidth different network types and allow user defined network resource pools.
		The solution should provide explanations, recommended solutions to performance, capacity & configuration problems. It should also associate workflows with alerts to automatically initiate corrective measures at critical thresholds.
		The solution should provide prebuilt & customizable operations dashboards & reports to provide real time insight into infrastructure behaviour, upcoming problems & opportunities for efficiency improvements.

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		<p>The solution should provide a log analytical tool which will collect data from various data center components and show all the logs available in one single management window to make troubleshooting easier.</p> <p>The solution should monitor traffic flo &amp; audit trails should be able to generate access information with all source information.</p> <p>The solution should provide a tool based physical to virtual conversion to migrate existing physical workload with minimal disruption.</p>
12	Global Unified Management	<p>Single window to manage entire HCI solution deployed on all sites.</p> <p>The solution support performance policies like IOPS, Availability, cache reservation at individual VM level WITHOUT need of restarting VM.</p> <p>Programmatic interface to enable automated tasks like failover / failback.</p> <p>The ability for a single administrator to manage all aspects of the Hyper-convergence from within the Virtualization Manager for all sites.</p>
13	VM-Centricity and Mobility	<p>Ability to move specific VMs between datacenters &amp; clusters.</p> <p>Cloning and snapshot of VMs. Cloning &amp; snap should be a feature of HCI solution. Solution should support 1024 snaps of single VM at a time.</p> <p>Overhead related to clone &amp; snap should be considered over &amp; above SBI Life requirement.</p>
14	Data Protection	<p>Replication across separate datacenter as a feature instead of a separate server / software license.</p> <p>Solution should support sync &amp; async replication.</p> <p>Replication across separate datacenters should be optimized with minimum additional overheads. Any overheads should be sized over and above NRSC requirement.</p> <p>The ability to carry simultaneous out bi-directional replication between two data centers.</p> <p>The solution should support policy &amp; group based replication upto VM &amp; datastore level granularity. If license separately, OEM needs to provide unlimited license as SBI Life reserves right to deploy more VDI, RDSH &amp; VMs which needs to be replicated to other sites.</p> <p>The ability to replicate bi-directional data center deployment of more than 2 DC's</p>
15	Disaster Recovery	<p>Proposed solution must able to achieve &lt;= 15 mins RPO &amp; RTO.</p>

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		<p>HCI solution should use VM and datastore based replication to asynchronously replicate VMs or datastores across hyper converged systems in different sites based on configurable schedules of up to 5-15 minutes RPO.</p> <p>The solution must provide a simple failover operation.</p> <p>The solution must allow creation of a Runbook to automate recovery of Virtual Servers.</p> <p>The solution must allow changing of IP address of recovered Virtual Servers to match target datacenter.</p> <p>The solution should allow changing Virtual Server settings (example vCPU, vRAM, VMSwitch) if required.</p> <p>The solution must allow the option to test DR failover to separate network with no impact to production workloads.</p> <p>The solution should have feature to assist in failback process to Primary datacenter.</p>
16	Support	<p>Single OEM should provide support for complete solution which includes hardware &amp; software components of solution.</p> <p>On-Site support Services to be provided by OEM only for entire HCI solution.</p> <p>Support should be provided 3 years post end of life &amp; support of the product.</p> <p>All-Inclusive software licensing for the proposed features as per RFP. All type of licenses should be UNLIMITED.</p> <p>All kind of upgrades and feature additions &amp; it should be done by OEM.</p> <p>Single button non-disruptive rolling upgrades of Hyper converged system software and hardware firmware from the same management GUI console.</p>

## 6. Bid Preparation and Submission

### 6.1 Tender Procedure

- a) ELCOT facilitated e-Tender portal <https://tenders.elcot.in>. The prospective Bidders should register themselves in the e-Tender Portal and submit the Bids electronically through the e-Tender portal. The paper based physical Tender submission is not permitted.
- b) The e-Tender training session will be held on the date and time as mentioned in the Tender Schedule. The Bidders are requested to download the e-Tender help manual and user manuals from the Portal for reference.
- c) It is mandatory for the Bidders to possess a valid **Class-2/Class -3 Signing and Encryption Digital Signature Certificate** in the name of the tender submitting authority to complete the e-Tender Bid process as per the provisions of Government of India IT Act 2000 with latest amendments.
- d) The Technical Bid form and Price Bid form will be available in spreadsheet format for downloading. The registered Bidders can log into the e-Tender system and download the Bid Forms.
- e) The Bid forms should be filled and submitted using the Digital Signature Certificates. The supporting documents should be scanned and uploaded in the e-Tender system.

### 6.2 Cost of Bidding

The Bidders should bear all costs associated with the preparation and submission of Bids. ELCOT will in no way be responsible or liable for these charges/costs incurred regardless of the conduct or outcome of the bidding process.

### 6.3 Tender Document Fee

- a) The Tender Documents may be directly purchased from ELCOT on payment of fees as mentioned in the Tender schedule. The Tender document cost may be paid by way of Demand Draft / Banker's Cheque in favour of Electronics Corporation of Tamil Nadu Limited, payable at Chennai (not applicable for this tender).
- b) The Tender Documents can be downloaded free of cost from the websites

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mentioned in the Tender Schedule. The Tender document fee is waived for such downloaded documents.

**6.4 Earnest Money Deposit (EMD)**

- a) An EMD amount as specified in the Tender Schedule should be paid by way of Demand Draft or Banker's Cheque drawn in favour of “Electronics Corporation of Tamil Nadu Limited” payable at Chennai. The Demand Draft or Banker's Cheque should be deposited physically at ELCOT before the date and time of opening of the Tender. The EMD in the form of Bank Guarantee is not acceptable.
- b) The EMD of the unsuccessful Bidders will be returned at the expense of the Bidders within a reasonable time consistent with the rules and regulations in this regard. The EMD amount held by ELCOT till it is refunded to the unsuccessful Bidders will not earn any interest thereof.
- c) The EMD amount of the Successful Bidder can be converted as part of the Security Deposit (SD) for successful execution of the work and will be returned only after the successful fulfilment of the Contract.
- d) The EMD amount will be forfeited by ELCOT, if the Bidder withdraws the bid during the period of its validity specified in the tender or if the Successful Bidder fails to sign the contract or the Successful in bidder fails to remit Security Deposit within the respective due dates.

**6.5 Portal Charges**

- a) For each and every Bid submitted, a non-refundable Portal charge as mentioned in the Tender Schedule should be paid by way of Demand Draft or Banker's Cheque drawn in favour of “Electronics Corporation of Tamil Nadu Limited” payable at Chennai. The payment by way of Demand Draft or Banker's Cheque should be deposited physically at ELCOT before the date and time of opening of the Tender.
- b) The payment particulars should be entered in the e-Tender Portal. At the time of the Technical Bid opening, the payment committed in the Bid should be factual and should match with the physically submitted payments.

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- c) Even though the payment particulars are entered in the e-Tender portal, if the Bidder fails to submit the physical instrument, their bid is liable for rejection. If any of the information committed in the e-Tender Bid does not match with physically submitted payment, ELCOT reserves the right to reject the bid summarily

**6.6 Letter of Authorisation**

A letter of Authorisation from the Board of Directors / appropriate authority authorising the Tender submitting authority or a Power of Attorney should be submitted in the Technical bid, otherwise the Bids will be summarily rejected.

**6.7 Two Part Bidding**

Bidders should examine all Instructions, Terms and Conditions and Technical specifications given in the Tender document. Failure to furnish information required by the Bid or submission of a Bid not substantially responsive in every aspect will be at the Bidders risk and may result in rejection of Bids. Bidders should strictly submit the Bid as specified in the Tender, failing which the bids will be considered as non-responsive and will be rejected.

**6.7.1 Technical Bid Form**

- a) The Technical Bid Form will be in specific format which should be filled and signed using the Digital Signature Certificate (DSC) as guided by the e tender portal.
- b) The Technical Bid Form should not be changed or altered or tampered otherwise the bids are liable for rejection.
- c) The Technical Bid Form should not contain any Price indications strictly, otherwise the Bids will be summarily rejected.
- d) The bidders should submit the details of make and model of the items offered against the tender requirement. The compliance sheet is given in the Annexure -1 (A 1.6)

**6.7.2 Price Bid Form**

- a) The Price Bid Form will be in specific format which should be filled and signed using the Digital Signature Certificate (DSC) as guided by the e tender portal.
- b) The Price Bid Form should not be changed or altered or tampered otherwise the

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bids are liable for rejection.

- c) The Price Bid Form should not contain any conditional offers or variation clauses, otherwise the Bids will be summarily rejected.
- d) The Prices quoted shall be in INDIAN RUPEES (INR) only. The tender is liable for rejection if Price Bid contains conditional offers.
- e) The cost quoted by the Bidder shall include cost and expenses on all counts viz., cost of equipment, materials, tools, techniques, methodologies, manpower, supervision, administration, overheads, travel, lodging, boarding, in-station & outstation expenses, etc., and any other cost involved in the supply.
- f) The cost quoted by the Bidder shall be kept firm for a period specified in the Tender from the date of opening of the tender. The Bidder should keep the Price firm during the period of Contract including during the period of extension of time if any. Escalation of cost will not be permitted during the said periods or during any period while providing services whether extended or not for reasons other than increase of duties / taxes payable to the Governments in India within the stipulated delivery period. The Bidders should particularly take note of this factor before submitting the Bids.
- g) The Prices finalised after negotiations should be kept valid during the Rate Contract period and no escalation in the final price will be entertained including reasons due to Foreign Exchange fluctuations.
- h) Exchange Rate fluctuations (Foreign Currency Rate Exchange) cannot be cited as reason for delay or dishonour of Purchase Order.

**6.8 Bid closing date and time**

The Bids should be submitted not later than the date and time specified in the Tender Schedule or Corrigendum if published. The e-Tender portal will automatically lock the date and time exactly on the date and time. Even if the Bid submission is in half way through during the closing date and time, submission would not be possible. Hence the Bidders should be cautious to submit the Bids well in advance to avoid disappointments.

## **7. Tender opening and Evaluation**

### **7.1 Technical Bid Opening**

The Technical Bid will be opened on the date and time as specified in the Tender schedule in the presence of those Bidders, who choose to be present against production of an authorisation letter from the Bidding authority. A maximum of two representatives for each Bidder would be allowed to attend the Tender opening.

### **7.2 Tender Validity**

The offer submitted by the Bidders should be valid for a minimum period of 180 days from the date of opening of the Tender. The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the first Purchase order, whichever is later. However ELCOT reserves the right to extend or short close the Tender validity period if situation warrants to benefit the Government.

### **7.3 Initial Scrutiny**

Initial Bid scrutiny will be conducted and incomplete details as given below will be treated as non-responsive.

If Tenders are;

- not submitted in two parts as specified in the Tender
- received without the Letter of Authorisation
- received without EMD amount and e-Portal charges.
- found with suppression of information or incomplete information
- furnished with subjective and conditional offers.
- submitted without supporting documents in compliance to the Eligibility Criteria and Evaluation Criteria
- non-compliance of any of the clauses stipulated in the Tender
- lesser validity period

All responsive Bids will be considered for further evaluation.

The decision of ELCOT will be final in this regard.



**7.4 Clarifications by ELCOT**

When deemed necessary, ELCOT may seek bonafide clarifications on any aspect from the Bidder. However, that would not entitle the Bidder to change or cause any change in the substance of the Bid or price quoted. During the course of Technical Bid evaluation, ELCOT may seek additional information or historical documents for verification to facilitate decision making. In case the Bidder failed to comply with the requirements of ELCOT as stated above, such Bids may at the discretion of ELCOT, shall be rejected as technically non-responsive.

**7.5 Tender Evaluation**

**7.5.1 Suppression of facts and misleading information**

- a. During the Bid evaluation, if any suppression or misrepresentation or any of its kind, is brought to the notice of ELCOT, then ELCOT shall have the right to reject the Bid and if after selection, ELCOT would terminate the contract, as the case may be, will be without any compensation to the Bidder and the EMD / SD, as the case may be, shall be forfeited.
  - b. Bidders should note that any figures in the proof documents submitted by the Bidders for proving their eligibility is found suppressed or erased, ELCOT shall have the right to seek the correct facts and figures or reject such Bids.
  - c. It is up to the Bidders to submit the full copies of the proof documents to meet out the criteria. Otherwise, ELCOT at its discretion may or may not consider such documents.
  - d. The Tender calls for full copies of documents to prove the Bidder's experience and capacity to undertake the project.
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**7.5.2 Technical Bid Evaluation**

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- a) A Technical Committee will examine the Technical Bids against the Eligibility Criteria and Evaluation Criteria given in the Tender document. The evaluation will be conducted based on the support documents submitted by the Bidders. The documents which did not meet the eligibility criteria will be rejected and further evaluation will not be carried out for such bidders. The eligible Bidders alone will be considered for further evaluation.
- b) The sample submitted will be evaluated for the tendered specification as given in the Scope of work to select the technically qualified bidder.
- c) The bidders have to submit their samples as per the terms specified in “9.1 Sample Submission Clause”. Bids without submission of samples are liable to be rejected.
- d) For those Bidders who have already worked or working with ELCOT, their previous performance in ELCOT would be the mandatory criteria for selection. If any unsatisfactory performances of those Bidders are found, their Bids will be straight away rejected.

The Unsatisfactory performance is defined as

- 1.Non responsiveness after getting the LOA or Purchase order
- 2.Delay in supply, installation of the ordered items etc.
- 3.Lack of communication about the delay in deliveries, Installation etc.
- 4.Poor warranty and CAMC period support.
- 5.Delay in providing services citing reasons of OEM’s support issues.

**7.5.3 Price Bid Evaluation**

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- a) The Price Bids of the Technically Qualified Bidders alone will be opened and evaluated. The Price Bid should include all expenses towards this Tender. The Price Bids will be opened in the presence of the Bidders at ELCOT. The Bidders or their authorised representatives will be allowed to take part in the Price Bid Opening.
- b) Price Bid evaluation will be done as per the Tamil Nadu Transparency in Tender Rules 2000 with latest amendments.

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c) As this is a Rate Contract, the following method of price evaluation will be adopted.

- The Price Bid Evaluation shall include State Goods and Services Tax, Central Goods and Services Tax, Integrated Goods and Services Tax, and all central duties such as Customs Duty as part of the price. The GST rates quoted should comply with the statutory guidelines and will be paid as applicable at the time of billing.
- In evaluation of the price of an imported item, the price shall be determined inclusive of the Customs duty.
- **Partial bid is allowed. Bidder shall quote for relevant items.**
- The prices will be evaluated as follows and the decision of ELCOT will be the final.

The total cost including applicable GST and including all other duties and charges (Such as Excise Duty, Customs Duty, Installation Charges etc., as per the guidelines stated above) of individual line items, add on items will be taken for the price bid evaluation. The bidder who quotes lowest cost/rate for any item will be called as L1 bidder for that item. **Though the 4<sup>th</sup> and 5<sup>th</sup> year comprehensive annual maintenance charges (CAMC) are not included in the price bid evaluation, CAMC charges should not exceed 10% of the item's basic rate (exclusive of taxes) and should be quoted without fail.**

d) The Technically Qualified Bidders will be negotiated to match individual L1 Price and the lowest CAMC Charges offered in the tender. If more than one Bidder matches the L1 Price, then order will be placed more than one Bidder, who matches the L1 Price. However, preference will be given to the L1 Bidder. The L1 Bidder will be given an order value more than the other Bidders, who match the L1 Price. The L1 will be given not less than 60% subject to or restricted to their capacity (manufacturing or trading). The decision of ELCOT will be the final

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- e) **It is purely ELCOT's discretion to ask the willingness of L2, L3 etc to match the L1 price and they cannot claim as their right.** The decision of ELCOT will be the final.
- f) All the Bidders, who are selected after the Price Bid evaluation will be called as Successful Bidders.
- g) ELCOT reserves the right to cancel the tender and retender to invite the competitive offers / quotes after a thorough analysis of the tender specification terms and conditions.
- h) The Successful Bidder should not sell the Tendered items to any other Purchaser at price which is lower than the final negotiated price offered to ELCOT. If it is found that it has been sold at lower rate, then that lower price will be fixed by ELCOT for that item in future and also for the already supplied quantities under this tender.
- i) The successful bidder should supply, install and maintain the ordered items only as per the approved specification and as per the OEM's MAF conditions, until otherwise approved by ELCOT for change (improvement) in specification. If found otherwise or violating condition, then the tender / contract is liable for cancellation and penal action will be initiated against the erring bidder / bidder or OEM including blacklisting of them

## **7.6 Negotiations**

Negotiations will be conducted with all the Successful Bidders for improvement in the Scope of Work, Specification, further reduction in price and advancement of delivery schedule.

## **7.7 Award of Contract**

- a) Total quantity will be apportioned among the L1 Bidder and other Bidders who have agreed to match L1 rate, as per the provisions of Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000 and Terms and Conditions of the Tender. In general minimum 60% of the tender/ contract value will be awarded to the L1 bidder and the balance will be shared to any other bidders who are matching the L1 rates/rate of the L1 bidder.

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- b) No dispute can be raised by any Bidder whose Bid has been rejected and no claims will be entertained or paid on this account.

**7.8 ELCOT reserves the right to:**

- 7.8.1 Negotiate with the Bidder whose offer is the lowest evaluated price for further reduction of prices.
- 7.8.2 Insist on quality / specification of materials to be supplied.
- 7.8.3 Modify, reduce or increase the quantity requirements to an extent of the tendered quantity as per the provisions of Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tenders Rules, 2000.
- 7.8.4 Change the list of areas of supply locations from time to time based upon the requirement of the purchase.
- 7.8.5 Ask other qualified Bidders to match the L1 price as this is a rate contract tender.
- 7.8.6 If delivery performance of the Bidder is not as per the Schedule or not as per the tender terms and conditions, then ELCOT reserves the right to reallocate the quantity to other Bidder(s).
- 7.8.7 ELCOT reserves its right to inspect the bidder's factory before or after placement of Orders and based on the inspection, ELCOT reserves its right to modify the quantity ordered.
- 7.8.8 ELCOT reserves its right to withhold any amount for the deficiency in the service aspect of the ordered items supplied to the Purchasers anytime during the contract period.

## **8. Execution of Work**

### **8.1 Acceptance of Tender and Withdrawals**

The final acceptance of the tender is entirely vested with ELCOT who reserves the right to accept or reject, any or all of the tenders in full or in parts without assigning any reason whatsoever. The Tender Accepting Authority may also reject all the tenders for reasons such as change in Scope, Specification, lack of anticipated financial resources, court orders, calamities or any other unforeseen circumstances. After acceptance of the Tender by ELCOT, the Successful Bidder shall have no right to withdraw their tender or claim higher price.

### **8.2 Letter of Acceptance (LOA)**

After acceptance of the Tender by ELCOT, a Letter of Acceptance (LOA) will be issued to the Successful Bidder(s) by ELCOT. Under this rate contract, ELCOT has the right to issue LOA to more than one bidder.

### **8.3 Payment of Security Deposit (SD)**

The successful Bidder will be required to remit a Security Deposit (SD) equivalent to five percent of the value of the order, inclusive of EMD by way of Demand Draft payable at Chennai or in the form of unconditional irrevocable Bank Guarantee valid for a period of 15 months from the date of issue of letter of acceptance and confirmation from ELCOT. The SD shall be paid within 10 days from the date of letter of acceptance (LOA) issued by ELCOT. The SD furnished by the Successful Bidder in respect of the tender will be returned to them after successful fulfilment of contract i.e only after successful completion of the Purchase Orders issued under this contract. The Security Deposit held by ELCOT till it is refunded to the Successful Bidder will not earn any interest thereof.

The Security Deposit will be forfeited if the Successful Bidder withdraws the Bid during the period of Bid validity specified in the Tender or if the Bidder fails to sign the contract or the bidder fails to supply/ deliver the items as per purchase / work order within the stipulated delivery / time schedule.

### **8.4 Execution of Contract**

- a) The Successful Bidder should execute a Contract in the INR 100 non-

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judicial Stamp Paper bought in Tamil Nadu only in the name of the Bidder within one week from the date of Letter of Acceptance issued by ELCOT with such changes/modifications as may be indicated by ELCOT at the time of execution on receipt of confirmation from ELCOT.

- b) The Successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate for the execution of the contract or any part thereof without the prior written consent of ELCOT. ELCOT reserves its right to cancel the purchase order either in part or full, if this condition is violated. If the Successful Bidder fails to execute the agreement, the SD of the Successful Bidder will be forfeited and their offer/bid will be held as non-responsive.
- c) The expenses incidental to the execution of the agreement should be borne by the Successful Bidder.
- d) The conditions stipulated in the agreement should be strictly adhered to and violation of any of the conditions will entail termination of the contract without prejudice to the rights of ELCOT and ELCOT also have the right to recover any consequential losses from the Successful Bidder.

**8.5 Release of Purchase Order**

After execution of the Contract and payment of Security Deposit, “Firm Purchase Order” for the supply and commissioning of Tendered items will be issued to the Successful Bidder by ELCOT. The supply and payment will be based on the Purchase Order(s) issued from time to time. However in certain specific cases, the supply of items shall be based on LOA or any specific instructions by letter or email or fax etc. for which regularisation purchase / work order will be issued to regularise the transactions.

**8.6 Refund of EMD**

The EMD amount paid by the Successful Bidder(s) will be adjusted towards Security Deposit payable by them. If the Successful Bidder submits Security Deposit for the stipulated value in full by way of Bank Guarantee, the EMD will be refunded.

**8.7 Release of SD**

The Security Deposit will be refunded to the Successful Bidder on completion of entire supply subject to satisfaction of ELCOT. Such completion would be arrived at when the entire quantity is supplied by the Bidder as per the Contract Agreement and as per the LOA or order including Purchase Order(s) issued by ELCOT from time to time.

**8.8 Forfeiture of EMD and SD**

- a) If the successful Bidder fails to act according to the tender conditions or backs out, after the tender has been accepted, the EMD will be forfeited by ELCOT.
- b) If the Successful Bidder fails to remit the SD, the EMD remitted by them will be forfeited by ELCOT and the tender will be held void. If the successful bidder fails to sign the contract within the stipulated time, then the SD remitted will be forfeited and the tender will be held void.
- c) If the Successful Bidder fails to act up on to the tender conditions or backs out from the contract, the SD mentioned above will also be forfeited by ELCOT.

**8.9 Termination of Contract**

**8.9.1 Termination for default**

- a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of 7 days, sent to the Successful Bidder, terminate the contract in whole or part, (i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT; or (ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or (iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract or (iv) supplies the items inferior to the ordered / accepted specifications ; or (v) not procured and supplied the item from the



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OEM from whom the MAF was obtained and not submitted as per tender conditions unless and otherwise taking written approval from ELCOT for alternate OEM source.

- b) In the event ELCOT terminates the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

**8.9.2 Termination for Insolvency**

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ELCOT may at any time terminate the Contract by giving written notice with a notice period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

**8.9.3 Termination for Convenience**

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ELCOT may by written notice, with a notice period of seven days sent to the Successful Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the successful Bidder is not entitled to any compensation whatsoever.

**8.10 Execution of Work Order**

The Successful Bidder should nominate and intimate ELCOT, an Account Manager for Single Point of Contact (SPOC), who should be responsible for effective delivery of work complying with all the terms and conditions. The Successful Bidder should ensure that the Account Manager fully familiarises with the Tender Conditions, Scope of Work and deliverables.

**8.11 Assigning of Tender whole or in part**

The successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate. The Bidder should not under-let or sublet to any person(s) or body corporate for the execution of the contract or any part thereof without the written consent of ELCOT.

**8.12 Liquidated Damages (LD)**

Liquidated damage will be levied at the rate of 0.5% per week on the un-delivered portion of the material, if the delivery has not been completed in full within the stipulated period. The delivery period will effect from the date of receipt of confirmed purchaser address. If the Successful Bidder fails to supply even after the lapse of one month after the stipulated date of delivery, then the orders/contracts are liable for cancellation and the EMD/ Security Deposit will be forfeited in addition to ELCOT reserving the right to blacklist the successful bidders for a period of three years from participating in ELCOT's tenders. This alone will not relieve the Bidder and the difference in cost of the items purchased through other technically qualified Bidders or any other alternative sources will be recovered from the successful Bidder.

**8.13 Penalty for Non-Fulfilment of Tender**

A Penalty will be levied at 5% of the total value of the Purchase Order, for non-fulfilment or non-observance of any of the conditions stipulated in the Agreement, Terms and Conditions and Work Order / contract.

**8.14 Other Conditions**

- a) The final decision would be based on the technical capacity and pricing of the Bidder. ELCOT does not bind itself in selecting the bidder offering lowest prices.
- b) ELCOT reserves the right not to accept lowest price, to reject any or all the tenders without assigning any reason, to relax or waive any of the conditions stipulated in the terms and conditions of tender as deemed necessary in the best interest of ELCOT for good and sufficient reasons.
- c) ELCOT reserves the right to extend this contract rates, supply and provide

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relevant services under special offer to Students / Government Employees / Government Education Institutions /Trust / Government schemes / Government Departments /PSUs/ units etc. The successful bidder should not raise any dispute related with the supply of the SAN & NAS Storage devices under any of the scheme adopted by ELCOT. Non cooperation by the bidder may lead to termination of the contract and ELCOT reserves the right to Black list the successful bidder for a period of 3 years from participating ELCOT or any other Government Tenders.

**8.15 Dispute and Jurisdiction**

"Any dispute or difference, whatsoever, arising between the parties to this contract, arising out of or in relation to this contract shall be resolved by the parties through mutual consultation, in good faith and using their best endeavours. To this end, the parties agree to provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate discussions between them / their representatives or officers".

"Except as otherwise provided elsewhere in the Contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof, the parties in the contract shall approach the Courts in Chennai alone which shall have jurisdiction in this matter."

**8.16 Other Documents to be submitted:**

1. Copy of ESI Registration or necessary Exemption Letter for ESI Registration should be submitted.
2. Copy of EPF Registration or necessary Exemption Letter for EPF Registration should be submitted.
3. For any manpower services, the bidders should adhere to the contract payment structure provided by ELCOT.
4. For payment claims, the bidder/ successful bidders / contractors / outsourcing

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Agencies should submit proof for payment of cash on hand through Bank credit (ECS details and UTR numbers etc) and other documents for proof of statutory payments such as PF, ESI etc.

## 9. Scope of Work

### 9.1 Scope of work

Scope for the Successful Bidder:-

1. Supply ,install and commissioning of SAN & NAS storage devices/ordered items in time
2. No incompatible shall be supplied.
3. It is the responsibility of the Successful Bidder to provide Warranty and CAMC Services.

### 9.2 Sample Submission

- a) For each item quoted in the Tender, the samples should be submitted indicating the make, model number and brochures / specification of the items for testing by ELCOT as per Appendix-3 (Sample Submission Form) of the Tender

OR

The demonstrations of the tendered items have to be arranged by the bidder for the technical evaluation of the items and for the testing of ELCOT. **Bidder compliances should clearly indicate the features of the quoted item/model against the tendered specification.**

- b) Samples/Demonstration should be delivered/Shown to ELCOT's QA team along with the INTERNAL TEST REPORT carried out by the OEM / Bidder as per this Tender specifications duly certified by the OEM / Bidder's Quality Inspection Officer with signature and designation.
- c) If the samples are not delivered/demonstration shown within the time limit specified in the Tender, it would be treated as non-responsive to the Tender conditions and the Bids is liable for rejection.
- d) Sample evaluation is part of technical bid evaluation.

### **9.3 Special Concession for ELCOT approved products**

- a) If the samples of the tender specification has already been tested and approved by ELCOT in earlier tenders, then the Bidder need not submit those products for sample evaluation. The bidder shall provide the reference of the tender number and test reports.
- b) ELCOT reserves the right to call for samples again if need arises and to call for any other sample of any other item at any point of time.

### **9.4 Compliance with Technical Specification**

All the Bidders should submit the items as asked for testing. The results and compliance statement would be prepared and evaluated. The samples of those Bidders, which do not conform to the technical specifications, the Bids of those Bidders will be rejected. The whole evaluation exercise would be done in the presence of the bidders in a transparent manner.

### **9.5 Evaluation Test Results**

The Evaluation test results will enable ELCOT to derive the following details:

- a) To know whether the bidders propose to offer the configuration as per the Tender specification or not.
- b) To provide decision support for the Technical Committee whether to accept or reject the products.

### **9.6 Analysis of Evaluation Results**

#### **9.6.1 General**

- a) If the equipment supplied for evaluation meets the tender specifications, it would be treated that the equipment had passed the “specifications test”. If the specifications are below the tender specifications, then the equipment would be treated as “failed” in the “specifications test”. The bidders should take utmost care to bring in the samples which should be equal to or better than the specifications given in the tender documents.

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- b) ELCOT reserves the right to reject a sample if it is found that it does not meet the specifications. In such cases the bidder would be treated as “failed” in this test. However, ELCOT reserves its right to offer one last opportunity to the bidder to produce another sample for evaluation, say within a short period of 2-3 days. Such a sample would be evaluated again to find out whether the bidder gets “pass” in this test.
- c) Offering this additional opportunity is solely at the discretion of ELCOT. ELCOT would be pleased to provide such an opportunity ONLY if public interest (healthy competition) demands such a step. In the normal course such an additional opportunity would not be given to the bidders.
- d) The supplied item should be as per the approved specification of the sample submitted and the OEM concerned. Any improved specification of the items should be submitted for evaluation and has to be accepted by ELCOT. If any deviation found during the contract period, the penal action will be initiated including blacklisting of the successful bidder.

**9.6.2. Linux Compatibility for Peripherals**

- a) All the Peripherals would be connected to the running Linux (their own system or any other system arranged by ELCOT) to find out whether they work under Linux environment in an efficient and trouble free manner.
- b) All such operations would be carried out using GUI/X Windows procedures only. If the Peripherals work without any hitches, then it would be treated as “passed” in the Linux compatibility test. Otherwise, it would be treated as “failed”.
- c) The Bidder or OEM shall provide tested results for Suse Linux and Red Hat.

**9.7 Supply & installation**

a) **Delivery Schedule:**

**For Quantity / Locations:-**

1 to 10 Nos. - Within 8 weeks from the date of Purchase Order.

10 to 25 Nos. - Within 10 weeks from the date of Purchase Order.

25 Nos. and above - Within 12 weeks from the date of Purchase Order.

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The Delivery Schedule shall be taken from Location/Quantity whichever is higher.

In general the delivery schedule is taken from the date of purchase order and on specific instructions from ELCOT, the delivery schedule is taken from the date of LOA or any Written instruction through email or Fax etc.

b) Based on any urgent requirement of Government Departments, Delivery Schedule may be reduced by ELCOT after the discussions with the Successful Bidders. In such cases, preference will be given to the bidder(s) / successful bidders who have sufficient stock and meet the delivery schedule of the intending departments, without violation of any rules, acts etc. In such specific cases, if the L1 bidder is not ready to supply the required urgent quantity, then the items will be procured from the other successful bidders, who is ready to supply the items and the decision of ELCOT will be final in this regard.

c) The Successful Bidders after obtaining the Purchaser address shall visit the sites to assess the readiness of the site for installation. A report in this respect shall be submitted to ELCOT within 10 days. ELCOT may advise the Purchaser to prepare the site ready for installation. ELCOT advises the successful bidders not to supply the items for the sites which are not ready and in this connection, the successful bidder on receipt of supply instructions from ELCOT shall get the information on site readiness from the respective purchaser.

d) However the Purchaser is responsible for the site preparation before the scheduled installation dates.

e) The Successful Bidder is responsible for all unpacking, assemblies, wiring, installations, cabling between hardware units and connecting to power supplies. The Successful Bidder will test all hardware operations and accomplish all adjustments necessary for successful and continuous operation of the hardware at all the installation sites.



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- f) The Successful Bidder selected for various equipments to be installed at single user premises shall co-ordinate with each other and prepare a list where delivery is planned by all the parties, so that installation and handing over can be carried out to the purchasers suitably / simultaneously by all the parties. The Successful Bidder must send the proposed delivery schedule to each purchaser and to ELCOT well in advance.
- g) The Successful Bidder shall be responsible for commissioning of the items supplied by preparing interfacing / integrating with purchaser's equipment / accessories / software supplied by other bidders.
- h) After successful Installation, commissioning and handing over of the ordered items to the purchasers the Successful Bidder must obtain signed installation certificate / Installation Report (IR) in the Installation Certificate Format prescribed by ELCOT along with Sample test results duly certified by the respective purchaser on the installed items. The IR should carry the full specification and OEM description as per tender / contract / purchase / work order. The system generated report should be submitted duly certified by the purchaser from technical compliance especially in server, Desktop, SAN, NAS etc as applicable.
- i) The Successful Bidder shall send status report in the format prescribed in such intervals as may be required by ELCOT from time to time till the execution of the entire order. Such status report should accompany with each claim for payment.
- j) The Successful Bidder shall undertake to supply spares for the maintenance of the supplied items for period of minimum FIVE years or extended period mutually accepted.
- k) The details of the service centre representatives responsible for attending the installation, warranty services at each purchaser site, name and designation of the contact person and centre in-charge, higher level in-charge who is responsible to oversee the service centres, person to whom complaints can be made in case the service provided by any centre is not satisfactory, phone, fax, mobile numbers & email address must be provided well in advance to each purchaser and to ELCOT. The above shall be complied by the Successful Bidders. Service Centre details shall be made available in the Websites of the OEM / Bidder and ELCOT.
- l) In the rare event of non-acceptance of delivery items by the user, the successful bidder shall immediately report ELCOT for suitable directions.

**9.8 Warranty Clause**

The warranty clause during the Standard warranty period of 3 years and CAMC period of 4<sup>th</sup> and 5<sup>th</sup> year would be applicable as follows.

- a) All the Tendered items should be supplied to the Purchaser site free from breakages, malfunctions, breakdowns or manufacturing defects. If any of the items are found defective due to manufacturing defect or design fault or transit damage occurred at the time of supply or within one month from the date of installation, the items in full should be replaced.
- b) All the materials and components of the Tendered items should be covered with a replacement warranty during the **Standard warranty** from the date of signing of installation report of the ordered items. The successful Bidder shall be liable to make good the loss by replacing the items or other accessories found defective during the warranty period.
- c) The successful Bidder should give an undertaking to maintain the spares of all the hardware items of 2% of the total quantity ordered. Service Level Agreement (SLA) during maintenance support period (warranty or post warranty (CAMC)).
- d) During the warranty and CAMC support period, the complaints received from the Purchasers should be attended as below.
  - 1) If the complaint is received during the forenoon (up to 2 PM), the complaint should be attended on the same day.
  - 2) If the complaint is received during the afternoon (after 2 PM), the complaint should be attended on the next day. If next day is the declared Holiday, the complaint should be attended in the next working day under normal circumstances. In emergency situations or urgent requirement of the Purchaser, the complaint should be attended within 2 hours on the same day.
  - 3) All the complaints should be attended from the nearest service centres.
  - 4) All the complaints should be rectified within 2 working days excluding the date of complaint.
- 5) **Penalty for nonadherence of the above SLA (Service Level Agreement)**

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If the complaints are not rectified within the stipulated period as mentioned in clause 9.8.d.4, an equivalent standby shall be supplied till rectification. A penalty of 0.25% on the value of the item will be charged per day till the equipment is put on working condition, in case the standby item is not supplied. 0.25% per day subject to Maximum of 30 days on value of the ITEM, thereafter ELCOT holds the options for cancellation of the order and re-procures the same from any other bidder at the cost of successful bidder and forfeits the EMD/SD / Performance Security of the bidder.

6) Weekly breakdowns maintenance report shall be sent to ELCOT with details of RECTIFICATION.

7) After expiry of warranty, the purchaser/ELCOT has option to enter into Comprehensive Annual Maintenance Contract (CAMC) with successful bidder/Bidder for Post Warranty Maintenance of the items.

**10. Payment Clause**

10.1 100% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for 40 months during the warranty period. (OR)

95% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications and the balance 5% will be released to the successful bidder after completion of 3 years warranty period.

10.2 1. ELCOT advises the successful bidder to supply the items only if the site is ready. On receipt of the purchaser details, the concerned authority may be contacted for issue of Site Ready Certificate and then arrange for supplies only to the sites, which are ready.

2. However if the site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser

OR

if the site is not ready within 30 days of delivery and the purchaser is not issuing the SNR certificate, on submission of proof of delivery and after checking with purchaser, 75% of total cost will be paid, after receipt of funds from the Purchaser and balance 25% of the total cost will be paid on installation, commissioning and handing over of the systems on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for period of 40 months during the warranty period.

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- 10.3 Bills will be honoured within 30 working days after submission of bills along with all supporting documents in complete shape and accepted by ELCOT. The Successful Bidder should file relevant invoices online using the web based procurement software in operation at ELCOT.
- 10.4 The Successful Bidder hereby agrees to get the refund of incentive, excise duty and proportionate sales tax from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the Excise duty or Sales tax or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act. If any purchaser (Government Department/ Institutions / Unit/ PSU etc) request/claim for exemption from ED or Tax, then the successful bidder before accepting the order should produce the relevant documentation and accordingly the PO / Work order will be issued.
- 10.5 Penalty amount if any, will be adjusted in the payment due to the Successful Bidder.
- 10.6 All taxes and other levies imposed by Governments in India will be paid at actual as applicable.
- 10.7 If any purchaser department have obtained exemption from payment of any duty or taxes or any concessional rate of duty or taxes, then the bidder / successful bidder / contractor should extend the concession to the department / purchaser and bill the purchaser/ purchaser accordingly.

**Appendix-1 Model Form of Contract**

(To be executed on a Rs. 100/- Non-Judicial Stamp Paper bought in Tamil Nadu by the Successful Bidder for the supply and commissioning of SAN & NAS Storage devices)

**(NO FIGURES IN NUMERALS OR WORDS SHALL BE FILLED UP IN THIS SAMPLE FORM AT THE TIME OF SUBMISSION OF TENDER)**

This CONTRACT is entered into at Chennai on the ..... day of ..... (Year) between Electronics Corporation of Tamil Nadu Limited, a wholly owned Government of Tamil Nadu Undertaking, a Company registered under the Companies Act, 1956 and having its Registered office at 692, Anna Salai, Nandanam, Chennai- 600 035 herein after referred to as “ELCOT” (which term shall mean and include its Successors and permitted assigns) on behalf of Purchaser (s) to be communicated by ELCOT from time to time (herein after referred to as “Purchaser (s)”) and ..... a Company registered under the Companies Act, 1956 and having its Registered Office at ..... hereinafter referred to as the “Successful Bidder” (which term shall mean and include its Successors and permitted assigns)

Whereas, ELCOT had floated a Rate Contract Tender vide Tender No. **ELCOT/Proc/OT/33265/SAN & NAS/RC/2019-20** for the supply & installation of SAN & NAS Storage devices and the Successful Bidder has been selected as one of the successful bidders in the Tender as per the following terms and conditions:-

1. This document on having been signed by both the parties shall constitute a binding contract between the parties and shall remain in force for a period of 12 months. But in the event of any breach of agreement at any time on the part of the Successful Bidder, the contract shall be determinable by ELCOT without compensation to the Successful Bidder. The contract may also be put to an end at any time by ELCOT upon giving seven days notice to the Successful Bidder.
2. The Successful Bidder agrees that in the event of failure of 10% or more of the vital components of the equipments occurring during the first three year warranty period, ELCOT would have a right to blacklist them for any

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procurement through ELCOT for a period of three years from that date.

3. The Successful Bidder agrees to supply, install and commission the Bill of Materials detailed in ELCOT Tender **ELCOT/Proc/OT/33265/SAN & NAS/RC/2019-20** after carrying out successfully all tests prescribed by the Purchaser(s) at an unit price plus applicable Taxes as indicated in Annexure to this Contract to the Purchaser(s) before the specified date. The price offered is firm and is not subject to enhancement on any ground.

4. **Delivery Schedule:**

**For Quantity / Locations:-**

1 to 10 Nos. - Within 8 weeks from the date of Purchase Order.

10 to 25 Nos. - Within 10 weeks from the date of Purchase Order.

25 Nos. and above - Within 12 weeks from the date of Purchase Order.

The Delivery Schedule shall be taken from Location/Quantity whichever is higher.

In general the delivery schedule is taken from the date of purchase order and on specific instructions from ELCOT the delivery schedule is taken from the date of LOA or any written instruction through email or Fax etc.

**NOTE:** Based on any urgent requirement of Government Departments, Delivery Schedule may be reduced by ELCOT after the discussions and concurrence from the Successful Bidders.

5. The price of the ordered items as per the Tender includes excise duty, Surcharges, Freight, Octroi, insurance, commissioning, and such other levies that may be applicable. Any concessional tax or Duty claimed by purchaser shall be considered based on documentation.
6. The goods or materials to be supplied under this contract are to be of the quality and of the sort mentioned in the ELCOT Tender document.
7. The goods or materials are to be delivered on F.O.R destination indicated by ELCOT/Purchaser(s) without any extra cost in such quantities or numbers contained in the purchase order to be issued by ELCOT from time to time. Any

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amendments to the orders in terms of quantities or delivery period etc., may be incorporated on a mutually agreed basis. The delivery of goods to the destination is the responsibility of the Successful Bidder only. The goods supplied under the contract shall be covered for comprehensive insurance by the Successful Bidder till delivery and acceptance by the authority concerned.

8. ELCOT is entitled to change the list of purchaser address from time to time based on the requirement of the Purchaser(s). In this situation, the successful bidder shall not claim any additional charges except for any major amount involved which will be resolved mutually.
9. The goods sold under this agreement shall not be taken back. However any replacement necessitated, as part of the warranty commitments shall be carried out by the Successful Bidder and faulty parts/materials that arise out of such replacements shall be taken back by the Successful Bidder within a reasonable time.
10. If the supply, installation and commissioning of the Ordered items are not effected as specified in the purchase order, Purchaser(s) /ELCOT shall have the full authority to cancel the order and to take any such action that will be deemed fit in the circumstances.
11. In case of failure by the Successful Bidder to deliver goods or materials demanded from them, within the period specified for delivery or in case of goods or materials delivered by them, not being of the stipulated quality and specifications or in the case of goods or materials being delivered without a correct invoice in duplicate, ELCOT or anyone duly authorized by ELCOT shall have the power to reject any such goods or materials and to purchase from others instead of any goods or materials so rejected or not delivered. Unless the successful Bidder shall themselves forthwith supply that shall be sufficient and satisfactory any excess of cost so incurred by the Purchaser(s) over the contract price together with all charges and expenses attending the purchase shall be recoverable by ELCOT / Purchaser(s) from the Successful Bidder.



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12. Liquidated damage will be levied at the rate of 0.5% per week on the un-delivered portion of the material, if the delivery has not been completed in full within the stipulated period. The delivery period will effect from the date of receipt of confirmed purchaser address. If the Successful Bidder fails to supply even after the lapse of one month after the stipulated date of delivery, then the orders/contracts are liable for cancellation and the EMD/ Security Deposit will be forfeited in addition to that ELCOT reserving the right to blacklist the successful bidders for a period of three years from participating in ELCOT's tenders. This alone will not relieve the Bidder and the difference in cost of the items purchased through other technically qualified Bidders or any other alternative sources will be recovered from the successful Bidder.
13. The Successful Bidder agrees that in the event of non-fulfillment or non-observance of any of the conditions stipulated in the tender Terms & Conditions and work order, the Successful Bidder shall pay as penalty an amount equivalent to 5% of total value of Contract or an amount equal to the actual loss incurred by the Purchaser(s) whichever is higher subject to the condition that the loss amount would not exceed the value of the goods supplied / to be supplied.
14. Notwithstanding anything contained in the penalty clause, ELCOT reserves the right to blacklist the successful bidder from taking part in any of the procurement operations of ELCOT for a minimum period of three years from the date of blacklisting for failure to carry out supply in time or according to the quality and quantity prescribed or any such similar reasons. This penalty shall be over and above all other penalties.
15. **WARRANTY:-**
  - i) The materials or goods are to be given Standard warranty of 3 years with CAMC period of 2 years, after installation and commissioning against any manufacturing defect and bad workmanship solely by the Successful Bidder irrespective of whether the same have been manufactured by them or not. The warranty period of 3 years will commence from the date of installation and commissioning of the ordered items after carrying out successfully the tests prescribed by Purchaser/(s) and installation in good working condition. A report of

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services attended on monthly basis must be submitted to ELCOT for each order during the warranty period.

ii) The Successful Bidder shall undertake to supply the spares for the Standard warranty and CAMC period of the offered items for the period of five years. If any manufacturing or other technical defects is found within 3 years from the date of installation, commissioning and handing over of the ordered items to Purchaser (s), they will have to be rectified or replaced free of cost by the Successful Bidder in good working condition.

(iii) If the complaints are not rectified within the stipulated period as mentioned in the tender conditions, an equivalent standby shall be supplied till rectification. A penalty of 0.25% on the value of the item will be charged per day till the equipment is put on working condition, in case the standby item is not supplied.

(iv) The Successful Bidder agrees to provide comprehensive maintenance of the ordered items, which shall include preventive maintenance and corrective maintenance at the location specified by the Purchaser(s). The maintenance shall include replacement of all parts. The Ordered items, which are down, shall be restored in good working condition within 48 hours. Otherwise, the Successful Bidder shall be liable for a penalty of 10% per week of breakdown period on the costs of only those machineries, which are non- functional. The Purchaser(s) reserves the right to terminate the maintenance contract in the event of unsatisfactory maintenance and claim damages for non-fulfillment of contract.

**16. PAYMENT TERMS:**

a) 100% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for 40 months during the warranty period. (OR)

b) 95% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after

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testing all the software and fulfilling the technical specifications and the balance 5% will be released to the successful bidder after completion of 3 years warranty period.

c) However if the site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser

OR

if the site is not ready within 30 days of delivery and the purchaser is not issuing the SNR certificate, on submission of proof of delivery and after checking with purchaser, 75% of total cost will be paid, after receipt of funds from the Purchaser and balance 25% of the total cost will be paid on installation, commissioning and handing over of the systems on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for period of 40 months during the warranty period.

d) Bills will be honoured within 30 working days after submission of bills along with all supporting documents in complete shape. The Successful Bidder shall file relevant invoices online using the web based procurement software in operation at ELCOT.

e) The Successful Bidder hereby agrees to get the refund of incentive, excise duty and proportionate sales tax from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the Excise duty or Sales tax or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act.

f) Penalty amount if any, will be adjusted in the payment due to the Successful Bidder.

g) All taxes and other levies imposed by Governments in India will be paid at actual as applicable.

17. The contract or any part share of interest in it is not be transferred or assigned by the Successful Bidder directly or indirectly to any person or persons whomsoever without the prior written consent of the Purchaser(s).

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18. Neither the Purchaser(s)/ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as
- i) Natural phenomena including but not limited to earthquakes, floods and epidemics.
  - ii) Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.
  - iii) Accidents or disruptions including, but not limited to fire, explosions, break down of essential machinery or equipment, power and water shortages.
19. The following documents shall be deemed to form and be read and construed as part of this Contract.
- a) Technical Specifications
  - b) Tender Terms and Conditions
  - c) Amendments issued by ELCOT for the Tender document
  - d) Corrigendum / Clarifications issued by ELCOT for the Tender Document
  - e) Detailed final offer of the Successful Bidder
  - f) Purchase Order(s) issued by ELCOT from time to time
  - g) Correspondence made by ELCOT to the Successful Bidder from time to time during the period of the contract.
  - h) Wherever the offer conditions furnished by the Successful Bidder are at variance with conditions of this contract or conditions stipulated in the purchase order, the latter shall prevail over the offer conditions furnished by the Successful Bidder.
20. (a) Unless otherwise provided in the agreement, any notice, request, consent or other communication given or required to be given hereunder shall be given by mailing the same by registered mail, postage prepaid, return receipt requested in the case of the Successful Bidder to the Purchaser(s) at their respective addresses and set forth above or with other addresses and to the attention of such other person or persons as may hereafter be designated by like notice hereunder and any such notice sent by post shall be deemed to have been served on the date when in

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the ordinary course of post, it would have been delivered at the address to which it was sent.

(b) Any notice to the Successful Bidder shall be deemed to be sufficiently served, if given or left in writing at their usual or last known place of abode or business.

**21. Termination of Contract:**

**21.1 Termination for default:-**

(a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of seven days, sent to the Successful Bidder, terminate the contract in whole or part,

(i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT; or

(ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or

(iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.

(b) In the event of ELCOT terminating the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

**21.2 Termination for Insolvency:-**

ELCOT may at any time terminate the Contract by giving written notice with a notice period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

**21.3 Termination for Convenience:-**

ELCOT may by written notice, with a notice period of seven days sent to the

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Successful Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the successful Bidder is not entitled to any compensation whatsoever.

22. ELCOT reserves the right to cancel the order(s) and to terminate the contract in the event of short performance or non performance of the Successful Bidder.

**23. Dispute and Jurisdiction :**

"Any dispute or difference, whatsoever, arising between the parties to this contract, arising out of or in relation to this contract shall be resolved by the parties through mutual consultation, in good faith and using their best endeavours. To this end, the parties agree to provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate discussions between them / their representatives or officers".

"Except as otherwise provided elsewhere in the Contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof, the parties in the contract shall approach the Courts in Chennai alone which shall have jurisdiction in this matter."

In Witness whereof the parties hereto have signed on the day, month and year above written in the presence of

**For and on behalf of  
Successful Bidder**

**For and on behalf of  
Electronics Corporation of  
Tamil Nadu Limited**

Witnesses:

- 1.
- 2.

Witnesses:

- 1.
- 2.

**Appendix-2 Bank Guarantee Format**

(To be executed in Rs.100/- Stamp Paper)

To  
The Managing Director  
Electronics Corporation of Tamil Nadu Limited  
MHU Complex II Floor  
692 Anna Salai, Nandanam  
Chennai - 600035

Bank Guarantee No:  
Amount of Guarantee:  
Guarantee covers from:  
Last date for lodgement of claim:

This Deed of Guarantee executed by ..... (Banker's Name & Address) having our Head Office at .....(address) (hereinafter referred to as “the Bank”) in favour of The Managing Director, Electronics Corporation of Tamil Nadu Limited, MHU Complex II Floor, 692 Anna Salai, Nandanam, Chennai - 600035 (hereinafter referred to as “the Beneficiary”) for an amount not exceeding Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ Only) as per the request of M/s. \_\_\_\_\_ having its office address at \_\_\_\_\_ (hereinafter referred to as “Successful bidder”) against Letter of Acceptance reference \_\_\_\_\_ dated \_\_\_/\_\_\_/\_\_\_ of M/s. Electronics Corporation of Tamil Nadu Limited. This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ Only) and the guarantee shall remain in full force up to \_\_\_ months from the date of Bank Guarantee and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before \_\_\_ months from the date of Bank Guarantee.

AND WHEREAS it has been stipulated by you in the said ORDER that the Successful bidder shall furnish you with a Bank Guarantee by a Scheduled/Nationalised Bank for the sum specified therein as security for compliance with the Contractor’s performance obligations for a period in accordance with the contract.

AND WHEREAS we have agreed to give the Successful bidder a Guarantee.

THEREFORE, we (Bankers address)....., hereby affirm that we are Guarantors and responsible to you on behalf of the Successful bidder up to a total of

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Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ Only) and we undertake to pay you, upon your first written demand declaring the Successful bidder to be in default under the contract and without any demur, cavil or argument, any sum or sums within the limit of Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Successful bidder.

This Guarantee is valid until \_\_\_\_\_ months from the date of Bank Guarantee.

Notwithstanding, anything contained herein

Our liability under this guarantee shall not be exceed Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ Only). This bank guarantee shall be valid up to \_\_\_ months from the date of Bank Guarantee and we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before \_\_\_\_\_

In witness whereof the Bank, through its authorised Officer, has set its, hand and stamp on this ..... at \_\_\_\_\_.

Witness:

(Signature)

(Name in Block Letters)



**Appendix-3 Sample Submission Form**

Date of submission: \_\_/\_\_/\_\_

Bidder Name :

Bidder Address :

Tender No. :

Sample Submitted On :

Tender Product Sl No. :

<b>Sl. No.</b>	<b>Item No. in the Tender</b>	<b>Item Description</b>	<b>Make</b>	<b>Model</b>	<b>Sl. No of the Item</b>

**BIDDER**

**ELCOT**

<i>Bidding Company Name:</i>	<i>Name &amp; Designation of the Person Receives the Sample:</i>
<i>Signature of the Representative:</i>	<i>Store I/C Name &amp; Designation:</i>
<i>Name:</i>	<i>Signature:</i>
<i>Designation:</i>	
<i>Contact No.</i>	

**Appendix – 4 Manufacturer's Letter of Guarantee (Manufacturer Authorisation Form)**

To  
The Managing Director,  
Electronics Corporation of Tamil Nadu Ltd.,  
MHU Complex, II Floor,  
692, Anna Salai,  
Nandanam, Chennai – 600 035.

Sir,

We hereby authorise M/s .....to undertake to submit a Bid, and subsequently negotiate and sign the contract with the purchaser against Tender No: ELCOT/Proc/OT/33265/SAN & NAS/RC/2019-20 for the (type the Description of goods) developed by us. We hereby extend our full warranty for the goods offered for supply by the above firm against this tender.

We also undertake to provide timely supplies as per terms of tender and as agreed mutually and also to provide a trouble free and continuous support either directly or through our authorised partners under our supervision during the Warranty and CAMC period and Extended Warranty Period. We will provide the necessary spares support in the event of replacement of any spare parts is necessitated while providing Warranty and CAMC period and Extended Warranty Period and if the spares are not available then we will arrange for complete replacement of the item(s) with an equivalent / higher model.

For this tender we authorise M/s. \_\_\_\_\_ (Complete address and full contact details of the partner) to be our sales and service partner. In the event of discontinuation of supply and service by our partner viz., M/s. \_\_\_\_\_ or any problem arises during provision of supply and services, the entire responsibility to provide trouble free and continuous supply and services to the end user / purchaser rests with us and we undertake to provide supply and services directly or through our alternative sales / service partners.

**In case of violation of any of the conditions above, I/We ..... understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.**

(Signature for and on behalf of Principal)

Signature with date:  
Name of the signatory:  
Designation:

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- Note:** (1) Competent authority of the Manufacturer / Principal should issue the letter of authority.
- (2) If the Bidder submits the Manufacturer's Letter of Guarantee other than the specimen provided above will not be considered as valid and hence will lead to rejection of the Bid itself.

**Appendix-5 Format for Clarifications / Amendments**

**FORMAT FOR  
QUERIES ON TENDER CONDITIONS AND TECHNICAL SPECIFICATIONS**

**FOR COMMERCIAL CONDITIONS:**

<b>Sl. No.</b>	<b>Page No.</b>	<b>Clause No.</b>	<b>Title of the Clause</b>	<b>Description of the Clauses as per Tender Document</b>	<b>Amendment requested</b>	<b>Reasons for requesting the amendment</b>

**FOR TECHNICAL SPECIFICATIONS:**

<b>Sl. No.</b>	<b>Page No.</b>	<b>Product Code</b>	<b>Item Name</b>	<b>Existing Specification as per Tender Document</b>	<b>Technical Parameter as per Tender Document</b>	<b>Amendment requested</b>	<b>Reasons for requesting the amendment</b>

## Annexure-1 Technical Bid

## A1.1 Check-list for Enclosures

Documents to be submitted		Fill (YES or NO)
	Filled Tender Technical Bid Form and Price Bid Form	
	Payment of Portal Charges and EMD amount	
	Two Part Bid submission	
	Letter of Authorisation for signing the Tender document	
Eligibility Criteria		
1.	Manufacturing License and capacity for SAN & NAS Storage Devices should be submitted or Under taking letter should be submitted	
2.	Certificate of Incorporation of bidder	
3.	Certificate of Incorporation of OEM	
4.	Copies of the Audited Balance sheets and (2018-2019 and two preceding financial years) OR Copies of the Audited Balance sheets(2017-2018 and two preceding financial years along with the unaudited financial statement for the year 2018-19)	
5.	Full copies of Work Order or signed Agreement and performance / order completion certificate from the Purchasers for executing single order value.	
6.	Full copies of Work Order or signed Agreement and performance / order completion certificate from the Purchasers for three years existence	
7.	Manufacturer should submit undertaking to do servicing directly or through their authorised service partners under their supervision. (MAF)	
8.	<b>Service Centre Facilities</b> In case of Manufacturer's service centre /franchise service centre, copies of the land-line telephone bills, month before the due date / valid rental agreement /any valid legal proof/Franchise agreement should be submitted as a proof for availability of the service centres	
9.	The bidder should have ISO 9001:2008 or latest/ ISO 14001:2008 or latest certified manufacturing facility and copy of the certificate is submitted	
10.	Power of Attorney for submitting the bid	
11.	Language of the supporting documents only in English	

**A1.2 Profile of the Bidder**

1.	Name of the Company	Principal Bidder
2.	Year of incorporation	
3.	Nature of the Company (Registered Company or Partnership or Proprietary)	
4.	<b>Registered office (In India) or the office covering the Business transaction in India</b>	
	Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	<b>Contact Person</b>	
	Name	
	Personal Telephone Number	
	Email Address	
5.	<b>Local presence at Tamil Nadu</b>	
	Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	<b>Contact Person</b>	
	Name	
	Personal Telephone Number	
	Email Address	
6.	<b>Registration Details</b>	
	Permanent Account Number	
	GST Registration Number	
7.	Banker's Name, Address and Account Number	
8.	ESI Registration No. and ESI Remittance details for last 3 years	
9.	PF Registration No. and PF Remittance details for last 3 years.	

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**A1.3 Details in support of Eligibility Criteria**

Sl.No.	Description	Please give details along with proof
1.	Certificate of Incorporation of Bidder and OEM	
2.	Manufacturing license along with capacity of the OEM or Undertaking letter	
3.	Annual Turn over (INR)	
	2018-19 (audited / unaudited)	
	2017-18	
	2016-17	
	2015-16	
4.	Details of single Purchase order for a value of 10 lakhs for supply of SAN & NAS Storage Devices executed in any Government Departments/ Organizations/ Public Sector Undertakings in Tamil Nadu in the last 3 years.	
5.	Details of the Purchase order executed for supply of SAN & NAS Storage Devices in Government organisations before 31.08.2016, for three years existence	
6..	Details about service centres in Tamil Nadu	
7.	Proof of availability of office in Chennai	
8.	ISO 9001:2008 or latest certified manufacturing facility and ISO 14001:2008 or latest certified for handling hazardous products.	
9.	URL Homepage of OEM	

**A1.4 Details in support of Evaluation Criteria**

**1. List of Service Centres**

S. No	District	Name of the Bidder, who established the centre and address of the centre	Details about the facilities and no. of service persons	Documents attached for supporting the claim

**A1.5 Hardware Compliance**

The Bidders should submit the details of the make and model of each item offered against the tender requirement, failing which their bids will not be considered for further process.

S.No	Item Code	ITEM DESCRIPTION	Item Quoted details along with Make & Model
1	33265-001	Network Attached Storage (NAS) - 4 Bays	
2	33265-002	Network Attached Storage (NAS) - 12 Bays	
3	33265-003	Storage Area Network (SAN) - Scalable upto 48 LFF drives, 8GB cache	
4	33265-004	Storage Area Network (SAN) - Scalable upto 96 SFF drives, 8GB cache	
5	33265-005	Storage Area Network (SAN) - Scalable upto 96 LFF drives, 16 GB cache	
6	33265-006	Storage Area Network (SAN) - Scalable upto 192 SFF drives, 16 GB cache	
7	33265-007	Storage Area Network (Unified) - Scalable upto 36 LFF drives, 32 GB cache	
8	33265-008	Storage Area Network (Unified) - Scalable upto 72 SFF drives, 32 GB cache	
9	33265-009	Storage Area Network (Unified) - Scalable upto 72 LFF drives, 64 GB cache	
10	33265-010	Storage Area Network (Unified) - Scalable upto 144 SFF drives, 64 GB cache	
11	33265-011	Storage Area Network (Unified) - Scalable upto 240 LFF drives, 256 GB cache	
12	33265-012	Storage Area Network (Unified) - Scalable upto 480 SFF drives, 256 GB cache	
13	33265-013	Tape Library - 2 Drives	
14	33265-014	Tape Library - 4 Drives	
15	33265-015	SAN Switch Model 1 : 12 Ports	
16	33265-016	SAN Switch Model 2 : 24 Ports	
17	33265-017	Backup Device - 15 TB	
18	33265-018	Backup Device - 45 TB	



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19	33265-019	Hyper-Converged Solution	
<b>Add on Items</b>			
20	33265-020	Memory for NAS - 8GB DDR4 RAM	
21	33265-021	Memory for NAS - 16GB DDR4 RAM	
22	33265-022	Hard Disk for NAS - 2 TB NLSAS 7.2K RPM LFF	
23	33265-023	Hard Disk for NAS - 4 TB NLSAS 7.2K RPM LFF	
24	33265-024	Hard Disk for NAS - 6 TB NLSAS 7.2K RPM LFF	
25	33265-025	Hard Disk for NAS - 8 TB NLSAS 7.2K RPM LFF	
26	33265-026	Hard Disk for NAS - 10 TB NLSAS 7.2K RPM LFF	
27	33265-027	Hard Disk for NAS - 12 TB NLSAS 7.2K RPM LFF	
28	33265-028	Hard Disk for SAN - 2 TB NLSAS 7.2K RPM LFF	
29	33265-029	Hard Disk for SAN - 4 TB NLSAS 7.2K RPM LFF	
30	33265-030	Hard Disk for SAN - 8 TB NLSAS 7.2K RPM LFF	
31	33265-031	Hard Disk for SAN - 10 TB NLSAS 7.2K RPM LFF	
32	33265-032	Hard Disk for SAN - 12 TB NLSAS 7.2K RPM LFF	
33	33265-033	Hard Disk for SAN - 1.2 TB SAS 10K RPM 12 Gbps SFF	
34	33265-034	Hard Disk for SAN - 1.8 TB SAS 10K RPM 12 Gbps SFF	
35	33265-035	Hard Disk for SAN - 2.4 TB SAS 10K RPM 12 Gbps SFF	
36	33265-036	Hard disk for SAN - SSD - 800 GB SAS SSD	
37	33265-037	Hard disk for SAN - SSD - 960 TB SAS SSD	
38	33265-038	Hard disk for SAN - SSD - 1.6 TB SAS SSD	
39	33265-039	Hard disk for SAN - SSD - 1.92 TB SAS SSD	
40	33265-040	Hard disk for SAN - SSD - 3.2 TB SAS SSD	
41	33265-041	Hard disk for SAN - SSD - 3.84 TB SAS SSD	

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42	33265-042	Hard disk for SAN - SSD - 7.68 TB SAS SSD	
43	33265-043	Hard disk for SAN - SSD - 15.36 TB SAS SSD	
44	33265-044	Hard Disk for Unified - 2 TB NLSAS 7.2K RPM LFF	
45	33265-045	Hard Disk for Unified - 4 TB NLSAS 7.2K RPM LFF	
46	33265-046	Hard Disk for Unified - 8 TB NLSAS 7.2K RPM LFF	
47	33265-047	Hard Disk for Unified - 10 TB NLSAS 7.2K RPM LFF	
48	33265-048	Hard Disk for Unified - 12 TB NLSAS 7.2K RPM LFF	
49	33265-049	Hard disk for Unified - 1.2 TB SAS 10K RPM 12 Gbps SFF	
50	33265-050	Hard disk for Unified - 1.8 TB SAS 10K RPM 12 Gbps SFF	
51	33265-051	Hard Disk for Unified - 2.4 TB SAS 10K RPM 12 Gbps SFF	
52	33265-052	Hard disk for Unified - SSD - 800 GB SAS SSD	
53	33265-053	Hard disk for Unified - SSD - 920 GB SAS SSD	
54	33265-054	Hard disk for Unified - SSD - 1.6 TB SAS SSD	
55	33265-055	Hard disk for Unified - SSD - 1.92 TB SAS SSD	
56	33265-056	Hard disk for Unified - SSD - 3.2 TB SAS SSD	
57	33265-057	Hard disk for Unified - SSD - 3.84 TB SAS SSD	
58	33265-058	Hard disk for Unified - SSD - 7.68 TB SAS SSD	
59	33265-059	Hard disk for Unified - SSD - 15.36 TB SAS SSD	
60	33265-060	Disk Enclosure for NAS - 4 Bays (Part Number to be given)	
61	33265-061	Disk Enclosure for NAS - 12 Bays (Part Number to be given)	
62	33265-062	Disk Enclosure for SAN - 2U 12Bay LFF (Part Number to be given)	
63	33265-063	Disk Enclosure for SAN - 2U 24Bay SFF (Part Number to be given)	
64	33265-064	Disk Enclosure for Unified - 2U 12Bay LFF (Part Number to be given)	
65	33265-065	Disk Enclosure for Unified - 2U 24Bay SFF	

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		(Part Number to be given)	
66	33265-066	Host Connectivity for SAN - 4 Port 16Gbps FC Modules	
67	33265-067	Host Connectivity for SAN - 4 Port 10Gbps iSCSI Modules	
68	33265-068	Host Connectivity for SAN - 4 Port 12Gbps SAS Modules	
69	33265-069	Host Connectivity for SAN - 8 Port 16Gbps FC Modules	
70	33265-070	Host Connectivity for SAN - 8 Port 10Gbps iSCSI Modules	
71	33265-071	Host Connectivity for SAN - 8 Port 12Gbps SAS Modules	
72	33265-072	Host Connectivity for Unified - 8 Port 16Gbps FC Modules	
73	33265-073	Host Connectivity for Unified - 8 Port 10Gbps iSCSI Modules	
74	33265-074	License for SAN Switch - 12 port Upgrade Licence with Transceivers	
75	33265-075	Replication bundle for SAN -Sync	
76	33265-076	Replication bundle for SAN - Async	
77	33265-077	Replication bundle for Unified - Sync	
78	33265-078	Replication bundle for Unified - Async	
79	33265-079	LTO8 Tape Cartridge	
80	33265-080	LTO7 Tape Cartridge	
81	33265-081	Cleaning Cartridge for Tape Library	
82	33265-082	Cleaning Cartridge for Standalone Tape drive	
83	33265-083	LTO 7 - Standalone Tape Drive	
84	33265-084	LTO 8 - Standalone Tape Drive	
85	33265-085	Hyper-Converged Solution - Cost of one node	

**A1.6 BIDDER COMPLIANCES**

**Note: Bidders must specify/mark their offer, as per brochure against each parameter specified for tendered items. The bidder who does not specify their offer as per brochure and their samples as well as their bid will be summarily rejected.**

Code	Item Description	Make	Approx Qty.
33265-001	Network Attached Storage (NAS) - 4 Bays	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Form Factor	Rack 1U/2U			
2	Controller	The proposed NAS array should be configured with minimum single controller/Processor			
3	Processor	Intel Xeon E3-1220v5, 3.0 GHZ, 4 Core or better			
4	Internal storage capacity	1. Offered NAS controller shall support at-least 4 internal LFF Slots and should be scalable to atleast 48 TB capacity. 2. Offered storage should support at least one additional drive enclosure.			
5	Cache /Memory	NAS should be with minimum 8GB DDR4 RAM or higher			
6	Front end ports	2 x 1 Gbps Ethernet			
7	Storage media	NL SAS 7.2 K RPM - 2 TB, 4 TB, 8 TB, 12 TB			
8	RAID	RAID 0,1,5 or higher			
9	Protocols support	NFS, CIFS , iSCSI			
10	Network Client Type Support	Windows , Linux			
11	Operating system	Windows storage server 2012 R2 or higher			

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12	Mode of operation	Capable to function on HBA or RAID Mode.			
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			

Code	Item Description	Make	Approx Qty.
33265-002	Network Attached Storage (NAS) - 12 Bays	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Form Factor	Rack 1U/2U			
2	Controller	The proposed NAS array should be configured with minimum single controller/Processor			
3	Processor	Intel Xeon Bronze 3104, 1.7GHZ, 6 Core or better			
4	Internal storage capacity	1. Offered NAS controller shall support at-least 12 internal LFF Slots and should be scalable to atleast 144 TB capacity. 2. Offered storage should support at least one additional drive enclosure.			
5	Cache /Memory	NAS should be with minimum 16 GB DDR4 RAM or higher			
6	Front end ports	4 x 1 Gbps Ethernet			
7	Storage media	NL SAS 7.2 K RPM - 2 TB, 4 TB, 8 TB, 12 TB			
8	RAID	RAID 0,1,5 or higher			
9	Protocols	NFS, CIFS , iSCSI			

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	support				
10	Network Client Type Support	Windows, Linux			
11	Operating system	Windows storage server 2016 or higher			
12	Mode of operation	Capable to function on HBA or RAID Mode.			
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)- 2 Nos			
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			

Code	Item Description	Make	Approx Qty.
33265-003	Storage Area Network (SAN) - Scalable upto 48 LFF drives, 8GB cache	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Form Factor	Rack 1U/2U			
2	Controller	Dual active-active controllers			
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above			
4	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 48 Drives			
5	Cache /Memory	8 GB across dual controllers or higher			
6	Supported front end interface	FC, iSCSI , SAS			
7	Front end interface ports	4 ports across dual controllers or higher			

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8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher			
9	Management ports	1 Management Ethernet Port			
10	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher			
11	Raid	RAID 0,1,5 or higher			
12	Network Client Type Support	Windows , Linux			
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy			

Code	Item Description	Make	Approx Qty.
33265-004	Storage Area Network (SAN) - Scalable upto 96 SFF drives, 8GB cache	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Form Factor	Rack 1U/2U			
2	Controller	Dual active-active controllers			

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3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above			
4	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 96 Drives			
5	Cache /Memory	8 GB across dual controllers or higher			
6	Supported front end interface	FC, iSCSI , SAS			
7	Front end interface ports	4 ports across dual controllers or higher			
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher			
9	Management ports	1 Management Ethernet Port			
10	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/960 GB or above			
11	Raid	RAID 0,1,5 or higher			
12	Network Client Type Support	Windows , Linux			
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy			



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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-005	Storage Area Network (SAN) - Scalable upto 96 LFF drives, 16 GB cache	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Parameter</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Form Factor	Rack			
2	Controller	Dual active-active controllers			
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above			
4	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 96 Drives			
5	Cache /Memory	16 GB across dual controllers or higher			
6	Supported front end interface	FC, iSCSI , SAS			
7	Front end interface ports	8 Ports across controller or higher			
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher			
9	Management ports	1 Management Ethernet Port			
10	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or above			
11	Raid	RAID 0,1,5,6 or higher			
12	Network Client Type Support	Windows , Linux			
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
14	Cables, Drivers	All the necessary cables, drivers, connectors and			

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	connectors and accessories	accessories if any should be provided.			
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy			

Code	Item Description	Make	Approx Qty.
33265-006	Storage Area Network (SAN) - Scalable upto 192 SFF drives, 16 GB cache	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Form Factor	Rack			
2	Controller	Dual active-active controllers			
3	Processor	Intel Xeon Broadwell Dual Core processor 2.2 GHZ or above			
4	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 192 Drives			
5	Cache /Memory	16 GB across dual controllers or higher			
6	Supported front end interface	FC, iSCSI, SAS			
7	Front end interface ports	8 Ports across controller or higher			
8	Back end interface ports	2 x 12 Gbps SAS ports across dual controllers or higher			
9	Management ports	1 Management Ethernet Port			
10	Storage media	1. Should support SAS and SSD drives			

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		2. SAS - 1.2 TB or above SSD - 800 GB/960 GB or above			
11	Raid	RAID 0,1,5,6 or higher			
12	Network Client Type Support	Windows , Linux			
13	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
14	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.			
15	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, online firmware upgrade, Performance, Redundancy			

Code	Item Description	Make	Approx Qty.
33265-007	Storage Area Network (Unified) - Scalable upto 36 LFF drives, 32 GB cache	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Type	Unified Storage			
2	Form Factor	Rack 2U/3U			
3	Processor	Intel Xeon E5-2600 series, 6-core, 1.6 GHz /Intel Xeon 2x6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better			
4	Controller	Dual active-active controllers			

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5	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 36 Drives			
6	Cache /Memory	32 GB across dual controllers or higher			
7	Frontend FC ports	4 X 16 Gbps across controller or higher			
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher			
9	Backend SAS ports	4 X 12 Gbps across controller or higher			
10	Management ports	1 Management Ethernet Port			
11	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher			
12	Raid	RAID 5,6 or equivalent			
13	Network Client Type Support	Windows , Linux			
14	Hotspare	Required			
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans			
18	Management software	Required			
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy			

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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-008	Storage Area Network (Unified) - Scalable upto 72 SFF drives, 32 GB cache	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Parameter</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Type	Unified Storage			
2	Form Factor	Rack 2U/3U			
3	Processor	Intel Xeon E5-2600 series, 6-core, 1.6 GHz /Intel Xeon 2x6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better			
4	Controller	Dual active-active controllers			
5	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 72 Drives			
6	Cache /Memory	32 GB across dual controllers or higher			
7	Frontend FC ports	4 X 16 Gbps across controller or higher			
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher			
9	Backend SAS ports	4 X 12 Gbps across controller or higher			
10	Management ports	1 Management Ethernet Port			
11	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/920 GB or above			
12	Raid	RAID 5,6 or equivalent			
13	Network Client Type Support	Windows , Linux			

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14	Hotspare	Required			
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans			
18	Management software	Required			
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy			

<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-009	Storage Area Network (Unified) - Scalable upto 72 LFF drives, 64 GB cache	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Parameter</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Type	Unified Storage			
2	Form Factor	Rack 2U/3U			
3	Processor	Intel Xeon E5-2600 series, 8-core, 2.4 GHz/Intel Xeon 2-4 x 6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better			
4	Controller	Dual active-active controllers			
5	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 72			

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		Drives			
6	Cache /Memory	64 GB across dual controllers or higher			
7	Frontend FC ports	4 X 16 Gbps across controller or higher			
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher			
9	Backend SAS ports	4 X 12 Gbps across controller or higher			
10	Management ports	1 Management Ethernet Port			
11	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher			
12	Raid	RAID 5,6 or equivalent			
13	Network Client Type Support	Windows , Linux			
14	Hotspare	Required			
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans			
18	Management software	Required			
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy			

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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-010	Storage Area Network (Unified) - Scalable upto 144 SFF drives, 64 GB cache	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Parameter</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Type	Unified Storage			
2	Form Factor	Rack 2U/3U			
3	Processor	Intel Xeon E5-2600 series, 8-core, 2.4 GHz/Intel Xeon 2-4 x 6-core 2.2 GHz/Intel Xeon Broadwell 12-core or better			
4	Controller	Dual active-active controllers			
5	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 144 Drives			
6	Cache /Memory	64 GB across dual controllers or higher			
7	Frontend FC ports	4 X 16 Gbps across controller or higher			
8	Frontend iSCSI ports	4 X 10 Gbps across controller or higher			
9	Backend SAS ports	4 X 12 Gbps across controller or higher			
10	Management ports	1 Management Ethernet Port			
11	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/920 GB or above			
12	Raid	RAID 5,6 or equivalent			
13	Network Client Type Support	Windows , Linux			



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14	Hotspare	Required			
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories should be provided.			
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans			
18	Management software	Required			
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy			

<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-011	Storage Area Network (Unified) - Scalable upto 240 LFF drives, 256 GB cache	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Parameter</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Type	Unified Storage			
2	Form Factor	Rack 2U/3U			
3	Processor	Intel E5-2600 series, 12- core, 2.5 GHz/Intel Xeon 2-4 x 10-core 2.4 GHz/Intel Xeon Broadwell 16-core or better			
4	Controller	Dual active-active controllers			
5	Storage Capacity	Minimum 12 Drives of LFF, Scalable upto 240			

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		Drives			
6	Cache /Memory	256 GB across dual controllers or higher			
7	Frontend FC ports	8 X 16 Gbps across controller or higher			
8	Frontend iSCSI ports	8 X 10 Gbps across controller or higher			
9	Backend SAS ports	4 X 12 Gbps across controller or higher			
10	Management ports	1 Management Ethernet Port			
11	Storage media	1. Should support NL-SAS drives 2. NL -SAS - 2 TB or above, upto 6 TB or higher			
12	Raid	RAID 5,6 or equivalent			
13	Network Client Type Support	Windows , Linux			
14	Hotspare	Required			
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.			
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans			
18	Management software	Vendor shall provide Management software.			
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy			

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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-012	Storage Area Network (Unified) - Scalable upto 480 SFF drives, 256 GB cache	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Parameter</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Type	Unified Storage			
2	Form Factor	Rack 2U/3U			
3	Processor	Intel E5-2600 series, 12-core, 2.5 GHz/Intel Xeon 2-4 x 10-core 2.4 GHz/Intel Xeon Broadwell 16-core or better			
4	Controller	Dual active-active controllers			
5	Storage Capacity	Minimum 24 Drives of SFF, Scalable upto 480 Drives			
6	Cache /Memory	256 GB across dual controllers or higher			
7	Frontend FC ports	8 X 16 Gbps across controller or higher			
8	Frontend iSCSI ports	8 X 10 Gbps across controller or higher			
9	Backend SAS ports	4 X 12 Gbps across controller or higher			
10	Management ports	1 Management Ethernet Port			
11	Storage media	1. Should support SAS and SSD drives 2. SAS - 1.2 TB or above SSD - 800 GB/920 GB or above			
12	Raid	RAID 5,6 or equivalent			
13	Network Client Type Support	Windows , Linux			

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14	Hotspare	Required			
15	Power supply	Redundant Power supply Hot pluggable (230 VAC)– 2 Nos			
16	Cables, Drivers connectors and accessories	All the necessary cables, drivers, connectors and accessories if any should be provided.			
17	Redundancy	The system should have redundancy at Controller, Power Supply and Fans			
18	Management software	Vendor shall provide Management software.			
19	Software features	Thin Provisioning, Snapshots / Clone Software, Automated data movement across HDD tiers, Hot Spares, online firmware upgrade, Performance, Redundancy			

Code	Item Description	Make	Approx Qty.
33265-013	Tape Library - 2 Drives	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Host Interface	Offered Tape Library shall provide 8Gbps native FC connectivity to SAN switches.			
2	Drive Type and Number of Drives	LTO8 and 2 drives			
3	Slots	Should support 24 slots or higher			
4	Encryption	Encryption should be supported by offered Tape Library			
5	Management	Tape Library shall provide web based			

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		remote management.			
6	Tape and Cleaning Cartridges	5 X LTO8 media and 1 x Cleaning Cartridge			

Code	Item Description	Make	Approx Qty.
33265-014	Tape Library - 4 Drives	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Host Interface	Offered Tape Library shall provide 8 Gbps native FC connectivity to SAN switches.			
2	Drive Type and Number of Drives	LTO 8 and 4 drives			
3	Slots	Should support 48 slots or higher			
4	Encryption	Encryption should be supported by offered Tape Library			
5	Management	Tape Library shall provide web based remote management.			
6	Tape and Cleaning Cartridges	5 X LTO8 media and 1 x Cleaning Cartridge			

Code	Item Description	Make	Approx Qty.
33265-015	SAN Switch Model 1 : 12 Ports	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Interface	FC			
2	Number of Ports	Min 12 and max 24			

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3	Connectivity Speed	16 Gb FC			
4	Monitoring	Switch shall support POST and online/offline diagnostics, including RAstrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).			
5	FC Support	Should protect existing device investments with auto-sensing 4, 8 and 16 Gbit/sec capabilities.			
6	Intelligent Networking	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic			
		The switch shall be able to support ISL trunk up to 128 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.			
		SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.			
		It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning			
		The Switch should be configured with the Zoning and shall support ISL Trunking features when			

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		cascading more than 2 numbers of SAN switches into a single fabric.			
		Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.			

Code	Item Description	Make	Approx Qty.
33265-016	SAN Switch Model 2 : 24 Ports	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
1	Interface	FC			
2	Number of Ports	Min 24 and max 48			
3	Connectivity Speed	16 Gb FC			
4	Monitoring	Switch shall support POST and online/offline diagnostics, including RAS trace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).			
5	FC Support	Should protect existing device investments with auto-sensing 4, 8 and 16 Gbit/sec capabilities.			
6	Intelligent Networking	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be			

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	possible to define high, medium and low priority QOS zones to expedite high-priority traffic			
	The switch shall be able to support ISL trunk up to 128 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.			
	SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.			
	It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning			
	The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric.			
	Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.			

<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-017	Backup Device - 15 TB	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Offered Disk to disk Purpose Built backup device shall be space efficient and shall not consume more than 2U of rack			



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	space and shall be certified to work with at-least 3 Backup application vendors like HPE, Veritas, Dell-EMC, Veeam, Commvault etc.			
2	Offered device shall be offered with Minimum of 15 TB of Usable Capacity and scalable to 30 TB of Usable Capacity within the same Appliance.			
3	Offered device must be scalable to atleast 30 TB of Usable Capacity at On-prem (DC Site) and should provide atleast 90 TB capacity in Cloud like AWS, Azure			
4	Vendor shall not use any additional staging device in-between while moving the data from Disk based backup device to public cloud			
5	Proposed appliance Must be offered RAID-6 with SATA/NL-SAS disk drives along with hot-spare disks for each disk shelf			
6	Proposed appliance Must be offered with protocols like CIFS and NFS. All of the protocols should be available to use concurrently with global in-line variable length data deduplication for data ingested across all of them.			
7	Offered device shall have capability to do complete copy of data sets from on premise disk backup storage to Cloud storage instead of data tiering.			
8	Offered device shall have capability to deliver selective restore from disk Library itself.			
9	Proposed appliance must support industry leading backup software like EMC Networker, Symantec Netbackup, Commvault and Veeam etc.			
10	Must support and Integrate with all industry standard Tape Libraries			
11	Offered device shall have integrated de-duplication license, low bandwidth replication license so that only unique non duplicated block transfers to remote / DR location.			
12	Offered device shall support receiving			

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	De-Duplicated data from remote locations or branch office directly from the application servers / Client servers in low bandwidth mode without using any backup or replication based device at remote location / Branch office.			
13	4 x 1Gbps NIC, 2 x 10Gbps NIC			
14	Offered disk based backup device shall also support encryption functionality.			
15	Proposed appliance Must support backup throughput of Atleast 6 TB/hr in nativemode.			
16	Proposed backup software should be available on various OS platforms like Windows, Linux, HP-UX, IBM AIX, Solaris etc. The backup server should be compatible to run on both Windows and Linux OS platforms			
17	The solution must support client-direct backup feature for file system, applications and databases to reduce extra hop for backup data at backup/media server to cater stringent backup window.			
18	Should integrate with third party VTL			
19	Must support source capacity based licensing / Socket based License /Instance based licenses.			
20	The proposed backup software should support restore a single VM, single file from a VM, a VMDK			
21	The software must support web based advance search from the backup catalog based on dates, time, full text and patterns etc. and also able to recover the data to original / alternate path from the same search console			

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<b>Code</b>	<b>Item Description</b>	<b>Make</b>	<b>Approx Qty.</b>
33265-018	Backup Device - 45 TB	Any Reputed make	1 No.

<b>Sl. No</b>	<b>Tender Specifications</b>	<b>As per brochure</b>	<b>Bidder's offer</b>	<b>Bidder's compliance (Yes/No)</b>
1	Offered Disk to disk Purpose Built backup device shall be space efficient and shall not consume more than 2U of rack space and shall be certified to work with at-least 3 Backup application vendor like HPE, Veritas, Dell-EMC, Veeam, Commvault etc.			
2	Offered device shall be offered with Minimum of 45 TB of Usable Capacity and scalable to 210 TB of Usable Capacity within the same Appliance.			
3	Offered device must be scalable to atleast 210 TB of Usable Capacity at On-prem (DC Site) and should provide atleast 2X (Approx 420 TB) capacity in Cloud like AWS, Azure			
4	Vendor shall not use any additional staging device in-between while moving the data from Disk based backup device to public cloud			
5	Proposed appliance Must be offered RAID-6 with SATA/NL-SAS disk drives along with hot-spare disks for each disk shelf			
6	Proposed appliance Must be offered with protocols like CIFS and NFS. All of the protocols should be available to use concurrently with global in-line variable length data deduplication for data ingested across all of them.			
7	Offered device shall have capability to do complete copy of data sets from on premise disk backup storage to Cloud storage instead of data tiering.			

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8	Offered device shall have capability to deliver selective restore from disk Library itself.			
9	Proposed appliance must support industry leading backup software like EMC Networker, Symantec Netbackup, Commvault and Veeam etc.			
10	Must support and Integrate with all industry standard Tape Libraries			
11	Offered device shall have integrated de-duplication license, low bandwidth replication license so that only unique non duplicated block transfers to remote / DR location.			
12	Offered device shall support receiving De-Duplicated data from remote locations or branch office directly from the application servers / Client servers in low bandwidth mode without using any backup or replication based device at remote location / Branch office.			
13	4 x 1Gbps NIC, 2 x 10Gbps NIC			
14	Offered Appliance Fiber channel ports shall support connectivity of servers either directly or via SAN switches while supporting the both source and Target based de-duplication.			
15	Offered disk based backup device shall also support encryption functionality.			
16	Proposed appliance Must support backup throughput of Atleast 30 TB/hr with target based dedupe while maintaining a single deduplication pool with RAID 6 and min. one hot spare disk as well.			
17	Proposed backup software should be available on various OS platforms like Windows, Linux, HP-UX, IBM AIX, Solaris etc. The backup server should be compatible to run on both Windows and Linux OS platforms			
18	The solution must support client-direct backup feature for file system, applications and databases to reduce extra hop for backup data at backup/media server to cater stringent backup window.			

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19	Should integrate with third party VTL			
20	Must support source capacity based licensing / Socket based License /Instance based licenses.			
21	The proposed backup software should support restore a single VM, single file from a VM, a VMDK			
22	The software must support web based advance search from the backup catalog based on dates, time, full text and patterns etc. and also able to recover the data to original / alternate path from the same search console			

Code	Item Description	Make	Approx Qty.
33265-019	Hyper-Converged Solution	Any Reputed make	1 No.

Sl. No	Parameter	Tender Specifications	As per brochure	Bidder's offer	Bidder's compliance (Yes/No)
<b>Hardware and Performance Requirements</b>					
1	Hyper-Converged Infrastructure	Proposed solution must be based on converged IT infrastructure platform that integrates storage, compute, networking, hypervisor, real-time deduplication, compression, and optimization along with powerful data management, data protection, and disaster recovery capabilities in a standard x86 server building block. The storage solution with the HCI should have in-built software defined storage capability integrated within the Hypervisor kernel itself or			

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		should be using virtual storage controller architecture. The bidder must provide extra resources to compensate for the loss of resources. Virtualization software shall provide a virtualization layer that sits directly on the bare metal server hardware with no dependence on a general purpose OS for greater reliability and security			
2	Functionality	Proposed hardware must be capable to deduplicate, compress & optimize ALL data inline, in real-time, across all storage tiers.			
3	Hardware Support	Solution must be based on x86 infrastructure.			
4	Hardware Specifications	Proposed hardware must come with the following specifications: Should have minimum 2 Intel skylake Processors with 10 core minimum, 2.2 Ghz or higher Should have Enterprise class SSD should be used for all purpose. Should have DDR4 RAM at 2600 Mhz or above. Minimum 128 GB of RAM in a node. Should have minimum 4 ports each of 10G SFP+ either all on-board OR should have 2 cards having dual ports. Should have dedicated management port. Node should have separate HDD/SSD for OS (Esxi) installation & SSDs for			

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		usable capacity. All node should have same number of cores & memory.			
5	NRSC requirement	<ul style="list-style-type: none"> <li>- Minimum 3 nodes</li> <li>- Minimum 60 physical cores</li> <li>- Minimum 384 GB of memory</li> <li>- 20 TB of usable space without considering any data reduction features like deduplication &amp; compression. Should use less than 2 TB of Enterprise SSD drives for all purpose. Capacity should be sized using considering FTT=1, Erasure coding</li> <li>-The Hyper-converged appliance should be able to scale on demand to at least 6 times the current deployment in a seamless and non-disruptive manner</li> </ul>			
6	ToR Switches & fiber optics	Should provide 2 number of ToR switches with minimum 24 port 10G SFP+ each. ToR switches should have all active ports from day 1. Switch should be of datacenter grade without			

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		<p>stacking. Should have minimum 2 uplink fiber port of 40G speed (negotiable with 10G port) to be configured in High Availability (HA). If 40G uplink port cannot negotiate with 10G port, OEM should provide additional hardware, cables &amp; any other component required.</p> <p>Switch should be rack mountable.</p> <p>Switch should have dual power source.</p>			
7	Resiliency	Proposed solution must be able to support all hardware multiple points of failure with no loss of function or data.			
		During a single component failure (of any type) production services should not be affected / degraded in anyway.			
		Each node should have dedicated non-shared dual-PSU's and should be able to sustain single power supply failure. Solution should not utilize micro-server architecture with shared PSU's and other components.			
		Must be able to sustain minimum of simultaneous 2-HDDs failures across cluster without data loss. Also node should not go down.			
		Must be able to sustain single node failure in the cluster without affecting performance of cluster.			



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		Additional compute & storage resources should be provided to maintain performance.			
		Must be able to sustain 2 NIC port failure per node.			
8	Future upgrade	The solution shall provide scale-out (by adding nodes) architecture with no disruption to the workloads already running on the platform. Intermixing of hardware configuration should be supported in cluster. Intermixing of hardware includes different CPU type, Different NIC card / port count per node, Different no of CPU / core per node, HDD count different per node.			
<b>SOFTWARE AND FUNCTIONALITY REQUIREMENTS</b>					
9	Licenses	All necessary licenses should be included in BOM. License should be of enterprise class & for 100% capacity. Future Scale-up should not require any additional licenses.			
		Component Wise pricing should include all the enterprise class licenses mentioned in RFP for running hyper converge and its features if required by the component.			
10	VMware support	The proposed HCI solution should have tight and seamless integration with VMware vSphere.			
11	Common Features Included	Dedupe, compression and optimization and guaranteed CPU and RAM			

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	available to user applications. Any overhead should be sized over and above NRSC requirement.			
	The solution should provide network traffic management controls to allow flexible partitioning of physical NIC bandwidth different network types and allow user defined network resource pools.			
	The solution should provide explanations, recommended solutions to performance, capacity & configuration problems. It should also associate workflows with alerts to automatically initiate corrective measures at critical thresholds.			
	The solution should provide prebuilt & customizable operations dashboards & reports to provide real time insight into infrastructure behaviour, upcoming problems & opportunities for efficiency improvements.			
	The solution should provide a log analytical tool which will collect data from various data center components and show all the logs available in one single management window to make troubleshooting easier.			
	The solution should monitor traffic flo & audit trails should be able to generate access			

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		information with all source information.			
		The solution should provide a tool based physical to virtual conversion to migrate existing physical workload with minimal disruption.			
12	Global Unified Management	Single window to manage entire HCI solution deployed on all sites.			
		The solution support performance policies like IOPS , Availability , cache reservation at individual VM level WITHOUT need of restarting VM.			
		Programmatic interface to enable automated tasks like failover / failback.			
		The ability for a single administrator to manage all aspects of the Hyper-convergence from within the Virtualization Manager for all sites.			
13	VM-Centricity and Mobility	Ability to move specific VMs between datacenters & clusters.			
		Cloning and snapshot of VMs. Cloning & snap should be a feature of HCI solution. Solution should support 1024 snaps of single VM at a time.			
		Overhead related to clone & snap should be considered over & above SBI Life requirement.			
14	Data Protection	Replication across separate datacenter as a feature instead of a separate server / software license.			
		Solution should support sync & async replication.			

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		Replication across separate datacenters should be optimized with minimum additional overheads. Any overheads should be sized over and above NRSC requirement.			
		The ability to carry simultaneous out bi-directional replication between two data centers.			
		The solution should support policy & group based replication upto VM & datastore level granularity. If license separately, OEM needs to provide unlimited license as SBI Life reserves right to deploy more VDI, RDSH & VMs which needs to be replicated to other sites.			
		The ability to replicate bi-directional data center deployment of more than 2 DC's			
15	Disaster Recovery	Proposed solution must able to achieve <= 15 mins RPO & RTO.			
		HCI solution should use VM and datastore based replication to asynchronously replicate VMs or datastores across hyper converged systems in different sites based on configurable schedules of up to 5-15 minutes RPO.			
		The solution must provide a simple failover operation.			
		The solution must allow creation of a Runbook to automate recovery of Virtual Servers.			

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		The solution must allow changing of IP address of recovered Virtual Servers to match target datacenter.			
		The solution should allow changing Virtual Server settings (example vCPU, vRAM, VMSwitch) if required.			
		The solution must allow the option to test DR failover to separate network with no impact to production workloads.			
		The solution should have feature to assist in failback process to Primary datacenter.			
16	Support	Single OEM should provide support for complete solution which includes hardware & software components of solution.			
		On-Site support Services to be provided by OEM only for entire HCI solution.			
		Support should be provided 3 years post end of life & support of the product.			
		All-Inclusive software licensing for the proposed features as per RFP. All type of licenses should be UNLIMITED.			
		All kind of upgrades and feature additions & it should be done by OEM.			
		Single button non-disruptive rolling upgrades of Hyper converged system software and hardware firmware from the same management GUI console.			

**A 1.7 Declaration**

I/We agree that the offer shall remain open for acceptance for a minimum period as stipulated in the Tender from the date of opening of the tender and thereafter until it is withdrawn by us by notice in writing duly addressed to the authority of opening the tender and sent by registered post with acknowledgement due or otherwise delivered at the office of the authority. The EMD amount shall not bear any interest and shall be liable to be forfeited to ELCOT should I/We fail to abide by the stipulations to keep the offer open for a period mentioned above or fail to sign and complete the contract document as required by ELCOT and furnish the Security Deposit as specified in the terms and conditions of the contract. The EMD amount may be adjusted towards SD or refunded to me/us unless the same or any part thereof has been forfeited as aforesaid.

I/We agree to adhere with the schedule of implementation and deliver the items as specified in the tender.

I/We declare that the Price bid has been submitted without any conditions and strictly as per the Terms and Conditions of the tender document and I/We am/are aware that the Price bid is liable to be rejected if it contains any other conditions.

I/We declare that the information furnished in the tender is true to the best of my/our knowledge. If any false/fictitious information is found I/We agree to the rejection of the bids and consequence action.

**Annexure-2 - PRICE BID – SAN & NAS Storage devices with 3 years Warranty**

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S.N	Product Code	Description	Initial Approx. Qty & the future on RC (in Nos.)	Unit Price inclusive of Excise Duty, Packing & Forwarding, Insurance, Installation etc. (Rs.)	GST in (%) for Col no.5	GST Value for Col No.5 in Rs.	Total Unit Price with GST (Rs.) (5 + 7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33265-001	Network Attached Storage (NAS) - 4 Bays	1 No.				
2	33265-002	Network Attached Storage (NAS) - 12 Bays	1 No.				
3	33265-003	Storage Area Network (SAN) - Scalable upto 48 LFF drives, 8GB cache	1 No.				
4	33265-004	Storage Area Network (SAN) - Scalable upto 96 SFF drives, 8GB cache	1 No.				
5	33265-005	Storage Area Network (SAN) - Scalable upto 96 LFF drives, 16 GB cache	1 No.				
6	33265-006	Storage Area Network (SAN) - Scalable upto 192 SFF drives, 16 GB cache	1 No.				

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7	33265-007	Storage Area Network (Unified) - Scalable upto 36 LFF drives, 32 GB cache	1 No.				
8	33265-008	Storage Area Network (Unified) - Scalable upto 72 SFF drives, 32 GB cache	1 No.				
9	33265-009	Storage Area Network (Unified) - Scalable upto 72 LFF drives, 64 GB cache	1 No.				
10	33265-010	Storage Area Network (Unified) - Scalable upto 144 SFF drives, 64 GB cache	1 No.				
11	33265-011	Storage Area Network (Unified) - Scalable upto 240 LFF drives, 256 GB cache	1 No.				
12	33265-012	Storage Area Network (Unified) - Scalable upto 480 SFF drives, 256 GB cache	1 No.				
13	33265-013	Tape Library - 2 Drives	1 No.				
14	33265-014	Tape Library - 4 Drives	1 No.				
15	33265-015	SAN Switch Model 1 : 12 Ports	1 No.				
16	33265-016	SAN Switch Model 2 : 24 Ports	1 No.				
17	33265-017	Backup Device - 15 TB	1 No.				



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18	33265-018	Backup Device - 45 TB	1 No.				
19	33265-019	Hyper-Converged Solution	1 No.				
	<b>Add on items</b>						
20	33265-020	Memory for NAS - 8GB DDR4 RAM	1 No.				
21	33265-021	Memory for NAS - 16GB DDR4 RAM	1 No.				
22	33265-022	Hard Disk for NAS - 2 TB NLSAS 7.2K RPM LFF	1 No.				
23	33265-023	Hard Disk for NAS - 4 TB NLSAS 7.2K RPM LFF	1 No.				
24	33265-024	Hard Disk for NAS - 6 TB NLSAS 7.2K RPM LFF	1 No.				
25	33265-025	Hard Disk for NAS - 8 TB NLSAS 7.2K RPM LFF	1 No.				
26	33265-026	Hard Disk for NAS - 10 TB NLSAS 7.2K RPM LFF	1 No.				
27	33265-027	Hard Disk for NAS - 12 TB NLSAS 7.2K RPM LFF	1 No.				
28	33265-028	Hard Disk for SAN - 2 TB NLSAS 7.2K RPM LFF	1 No.				
29	33265-029	Hard Disk for SAN - 4 TB NLSAS 7.2K RPM LFF	1 No.				

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30	33265-030	Hard Disk for SAN - 8 TB NLSAS 7.2K RPM LFF	1 No.				
31	33265-031	Hard Disk for SAN - 10 TB NLSAS 7.2K RPM LFF	1 No.				
32	33265-032	Hard Disk for SAN - 12 TB NLSAS 7.2K RPM LFF	1 No.				
33	33265-033	Hard Disk for SAN - 1.2 TB SAS 10K RPM 12 Gbps SFF	1 No.				
34	33265-034	Hard Disk for SAN - 1.8 TB SAS 10K RPM 12 Gbps SFF	1 No.				
35	33265-035	Hard Disk for SAN - 2.4 TB SAS 10K RPM 12 Gbps SFF	1 No.				
36	33265-036	Hard disk for SAN - SSD - 800 GB SAS SSD	1 No.				
37	33265-037	Hard disk for SAN - SSD - 960 TB SAS SSD	1 No.				
38	33265-038	Hard disk for SAN - SSD - 1.6 TB SAS SSD	1 No.				
39	33265-039	Hard disk for SAN - SSD - 1.92 TB SAS SSD	1 No.				
40	33265-040	Hard disk for SAN - SSD - 3.2 TB SAS SSD	1 No.				

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41	33265-041	Hard disk for SAN - SSD - 3.84 TB SAS SSD	1 No.				
42	33265-042	Hard disk for SAN - SSD - 7.68 TB SAS SSD	1 No.				
43	33265-043	Hard disk for SAN - SSD - 15.36 TB SAS SSD	1 No.				
44	33265-044	Hard Disk for Unified - 2 TB NLSAS 7.2K RPM LFF	1 No.				
45	33265-045	Hard Disk for Unified - 4 TB NLSAS 7.2K RPM LFF	1 No.				
46	33265-046	Hard Disk for Unified - 8 TB NLSAS 7.2K RPM LFF	1 No.				
47	33265-047	Hard Disk for Unified - 10 TB NLSAS 7.2K RPM LFF	1 No.				
48	33265-048	Hard Disk for Unified - 12 TB NLSAS 7.2K RPM LFF	1 No.				
49	33265-049	Hard disk for Unified - 1.2 TB SAS 10K RPM 12 Gbps SFF	1 No.				
50	33265-050	Hard disk for Unified - 1.8 TB SAS 10K RPM 12 Gbps SFF	1 No.				

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51	33265-051	Hard Disk for Unified - 2.4 TB SAS 10K RPM 12 Gbps SFF	1 No.				
52	33265-052	Hard disk for Unified - SSD - 800 GB SAS SSD	1 No.				
53	33265-053	Hard disk for Unified - SSD - 920 GB SAS SSD	1 No.				
54	33265-054	Hard disk for Unified - SSD - 1.6 TB SAS SSD	1 No.				
55	33265-055	Hard disk for Unified - SSD - 1.92 TB SAS SSD	1 No.				
56	33265-056	Hard disk for Unified - SSD - 3.2 TB SAS SSD	1 No.				
57	33265-057	Hard disk for Unified - SSD - 3.84 TB SAS SSD	1 No.				
58	33265-058	Hard disk for Unified - SSD - 7.68 TB SAS SSD	1 No.				
59	33265-059	Hard disk for Unified - SSD - 15.36 TB SAS SSD	1 No.				
60	33265-060	Disk Enclosure for NAS - 4 Bays (Part Number to be given)	1 No.				

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61	33265-061	Disk Enclosure for NAS - 12 Bays (Part Number to be given)	1 No.				
62	33265-062	Disk Enclosure for SAN - 2U 12Bay LFF (Part Number to be given)	1 No.				
63	33265-063	Disk Enclosure for SAN - 2U 24Bay SFF (Part Number to be given)	1 No.				
64	33265-064	Disk Enclosure for Unified - 2U 12Bay LFF (Part Number to be given)	1 No.				
65	33265-065	Disk Enclosure for Unified - 2U 24Bay SFF (Part Number to be given)	1 No.				
66	33265-066	Host Connectivity for SAN - 4 Port 16Gbps FC Modules	1 No.				
67	33265-067	Host Connectivity for SAN - 4 Port 10Gbps iSCSI Modules	1 No.				
68	33265-068	Host Connectivity for SAN - 4 Port 12Gbps SAS Modules	1 No.				
69	33265-069	Host Connectivity for SAN - 8 Port 16Gbps FC Modules	1 No.				
70	33265-070	Host Connectivity for SAN - 8 Port 10Gbps iSCSI Modules	1 No.				
71	33265-071	Host Connectivity for SAN - 8 Port	1 No.				

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		12Gbps SAS Modules					
72	33265-072	Host Connectivity for Unified - 8 Port 16Gbps FC Modules	1 No.				
73	33265-073	Host Connectivity for Unified - 8 Port 10Gbps iSCSI Modules	1 No.				
74	33265-074	License for SAN Switch - 12 port Upgrade Licence with Transceivers	1 No.				
75	33265-075	Replication bundle for SAN -Sync	1 No.				
76	33265-076	Replication bundle for SAN - Async	1 No.				
77	33265-077	Replication bundle for Unified - Sync	1 No.				
78	33265-078	Replication bundle for Unified - Async	1 No.				
79	33265-079	LTO8 Tape Cartridge	1 No.				
80	33265-080	LTO7 Tape Cartridge	1 No.				
81	33265-081	Cleaning Cartridge for Tape Library	1 No.				
82	33265-082	Cleaning Cartridge for Standalone Tape drive	1 No.				
83	33265-083	LTO 7 - Standalone Tape Drive	1 No.				

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84	33265-084	LTO 8 - Standalone Tape Drive	1 No.				
85	33265-085	Hyper-Converged Solution - Cost of one node	1 No.				

**Note:**

- 1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders shall quote for relevant items from the above list. Partial quote is allowed.**
- 2) **Warranty: Three Years**
- 3) **Rate Contract: 1 year from the date of issue of 1<sup>st</sup> Purchase Order or from the date of signing the Agreement with ELCOT, Whichever is later.**

**Annexure – 3- Comprehensive CAMC (or Extended Warranty) Cost for 4<sup>th</sup> & 5<sup>th</sup> year after the successful completion of 3 years Warranty**

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S.No	Year	CAMC in % ( for all quoted products)	GST in %
(1)	(2)	(3)	(4)
1	4 <sup>th</sup> year		
2	5 <sup>th</sup> Year		

**Note:**

- a) Comprehensive CAMC for 4<sup>th</sup> & 5<sup>th</sup> years should be quoted without fail, failing which the Price Bid shall not be considered for further process. Comprehensive CAMC cost means cost toward all the spares, service charge and all taxes, excluding consumable cost if any and the bidders should explicitly list out the consumable items.
- b) CAMC percentage quoted should be less than 10%.