



**NOTICE INVITING TENDER FOR
TRUNKY BASIS**

**PROCUREMENT OF A SERVER WITH GPU AND ADDITIONAL
ACCESSORIES**

Ref: ITI/2026-27/Def/Mktg/SGPU

ITI LIMITED

**(A Govt. of India Enterprise)
Defence-Marketing
ITI Limited, First Floor, Core 6,
Scope Complex, Lodi Road, New Delhi-110003
website: <https://www.ityltd.in/>
Email: skumar_bcdel@ityltd.co.in
CIN No: L32202KA1950GOI000640**

1. Introduction.

ITI Limited, a Public Sector Undertaking under the Department of Telecommunications, Ministry of Communications, is a leading Telecom equipment manufacturer and solution provider in India. The major customers are BSNL, BBNL, MTNL, Defense, Paramilitary forces, Railways, Banks, Central & State Govt. departments, Institutions and research organizations like ISRO.

ITI Limited has been undertaking various projects in all fields of telecommunications and information technology and also continuously deploying new technologies in the field of Telecom, ICT, Networking, e-Governance etc. ITI has diversified its operation and has been executing projects in the field of Smart Infrastructure (Smart Cities, Safe Cities, Smart Energy Meters, Smart Classrooms, Smart Poles etc), Bharatnet etc. ITI has been executing projects in latest technologies like GPON, OLT, ONT, OFC, HDPE etc.

ITI Limited would like to address the tender on turnkey basis for selection of backend partner for procurement of for procurement of a Procurement of a Server with GPU and additional accessories for Indian Navy. In this connection ITI Limited, invites sealed tender from eligible bidders for addressing the above tender opportunity and implementing the project as per their scope of work finalized with ITI.

2. Important Dates.

Date of tender Upload	17-09-2026
Due Date for tender Submission	25-09-2026 up to 03:00 PM
Estimated Cost (Approx.)	Rs.29,76,55,000/-
Technical Specification	As per mentioned in GeM Bid- GEM/2026/B/7990572 Dated: 08-09-2026
Pre Empanelment Queries/Pre Bid meeting	NO
ITI Contact Person	Mr.Sandeep Kumar, DGM-Projects Ph.:011-24368533,24360555 Email:-skumar_bcdel@itilttd.co.in https://www.itilttd.in Helpdesk: Mr.Faiz Ahmad Khan, AM-Projects e-mail: faizahmad_nsu@itilttd.co.in
Tender Fee	Rs. 5,000/-+ Rs. 900/- = Rs. 5,900/-(Non-Refundable)
Earnest Money Deposit (EMD)	Rs.5953100/-
PBG/Security Deposit/e-PBG	5%
Duration of e-PBG required (Months)	30
All other additional terms and Condition	As mentioned in Bid document.
The Bank Details of ITI Limited for NEFT/RTGS/Net Banking :	The Bank Details of ITI Limited for NEFT/RTGS/Net Banking is as below: Online RTGS/ NEFT

	Bank: State Bank Of India, Industrial Finance Branch, Residency Road, Bangalore-560025 MICR: 560002059 IFSC: SBIN0009077 A/C No.: 10637729843 EMD may also accepted in the form of BG
Mode of submission	Thru ITI e-tender portal https://itilimited.ewizard.in/ .

3. Tender Scope of work & Technical compliance:-

As per Tender Reference/Bid Number: GEM/2026/B/7990572 Dated: 08-09-2026 ITI inviting TENDER/BID for selection of backend partner for Procurement of a Server with GPU and additional accessories for Indian Navy. The scope of this project as mentioned in Appendix-B. All the technical specification must compliance as per customer bid.

4. Instruction to Bidders

The bidders are required to submit soft copies of their bid electronically on the e-Wizard Portal using valid Digital Signature Certificates. Below mentioned instructions are meant to guide the bidders for registration on the e-Wizard Portal, prepare their bids in accordance with the requirements and submit their bids online on the e-Wizard Portal. For more information, bidders may visit the Portal (<https://itilimited.ewizard.in/>).

a. REGISTRATION PROCESS ON ONLINE PORTAL:

Bidders to enroll on the e-Procurement module of the portal <https://itilimited.ewizard.in/> by clicking on the link "Bidder Enrolment".

- The bidders to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. This would be used for any communication from the e-Wizard Portal.
- Bidders to register upon enrolment, with their valid Digital Signature Certificate (Class III Certificates with signing and Encryption key) issued by any Certifying Authority recognized by CCA India with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- Bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC / e-Token.
- After registration send mail to Helpdesk: helpdeskeuniwizarde@gmail.com for Account activation.
- As per portal norms Registration Fee will be applicable.

b. TENDER DOCUMENTS SEARCH:

- Various built-in options are available in the e-Wizard Portal like Department name, Tender category, estimated value, Date, other keywords, etc. to search for a tender published on the Online Portal.
- Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'Interested tenders' folder.
- The bidder should make a note of the unique Tender No assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

5. BID PREPARATION:

- a) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- b) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
- c) Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that needs to be submitted. Any deviations from these may lead to rejection of the bid.
- d) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/XLSX/PNG, etc. formats.

5(i)	Eligibility Criteria of Applicants	
	a	<u>Company Profile:</u> The Bidder shall be a Company incorporated /registered in India under Companies Act 1956/2013/ proprietorship/ partnership firm/ Limited Liability Partnership (LLP) and should be in operations continuously for at least 5 years as on the last date of submission of bid. 1) In case the bidder has executed any work/project with/for ITI in the last 5years, it is essential that a satisfactory certificate signed by at least DGM level/or above officer from ITI to be submitted for such project. 2) In case CMC followed by project execution, the CMC charges quoted by bidder are optional and ITI reserves the right to either award CMC to the bidder or float a separate tender at the end of project completion which will be abide by bidder. 3) Any financial liability (like contract processing fee, Agreement Stamp fee, Portal fee, BG making fee etc.) on ITI for this project will be borne by Bidder.
	b	a) Minimum average Turnover during each of the last three financial years (2022-23, 2023-24 and 2024-25), should be at least 360 Lakh (s) b) Net Worth of the bidding entity during each of the last three financial years (2022-23, 2023-24 and 2024-25) should be in positive. c) The Bidder shall submit copy of Audited statements/CA certificate for last three years should be submitted along with technical proposal.
	c	Procurement of a Server with GPU and additional accessories for Indian Navy. For more details refer to scope of work as per GeM BID Documents.
	d	The bidder should not have been blacklisted or debarred by any Pvt Ltd/State / Central Government or their agencies or Public Sector Undertakings (PSUs) as on bid submission date for corrupt, fraudulent or any other unethical business practices or for any other reason. Undertaking as per the format attached in Annexure-I duly signed by authorized signatory of bidder.
	e	All the applicable annexures and documents is as per customer BID.
	f	The supply item/OEM must be as per manufacturer certifications mentioned in BID. The technical specification of all the supplied items/equipments as per the Operational characteristics and features as mentioned in bid Appendix-B. All the above sites/solution & technical specifications must be complied with the original GeM Tender.
	g	Undertaking for willingness to work with ITI as per customer tender etc. terms and conditions.
	h	EMD (Back to Back Basis): The bidder seeking EMD exemption, must submit the valid supporting document for the relevant

		category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. EMD & Performance security should be in favour of Beneficiary, wherever it is applicable. EMD of unsuccessful bidders should be returned back once the contract is finalized. The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.
	i	Undertaking expressing willingness to sign agreement with ITI.
	j	Bidder shall provide valid OEM Authorization Certificate for all the products quoted as well as certify that the proposed product is not declared end of sale. OEM documents and all applicable annexures/appendix shall be provided as per required by customer RFP
	k	Consortium is not allowed. Bid splitting not applied. No part bidding allowed.
	l	ITI reserve the right to reject /cancel the bid at any time without assigning any reason.
	m	The agency should have successfully completed similar works(definition of similar Work should be clearly defined) during the last five Years ending last day of the month Previous to the one in Which bids are received as indicated below: i. Three similar completed works each costing not less than 20% Of the estimated cost of work. OR ii. Two similar completed works each costing not less than 25% of the estimated cost of work OR iii. One similar completed work costing not less than 40% of the estimated cost of work. Similar Work:-The bidder/OEM must have the experience in the same field as mention in work scope and technical specification.
	n	Our company reserves the right that if any product, service or equipment is being manufactured in ITI limited, its supply and service must be provided to us by the vendor.
	o	If the bidder is a Micro or Small Enterprise as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Experience Criteria" as defined above subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation
	p	If the bidder is a Micro or Small Enterprise (MSE) as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Bidder Turnover" as defined above subject to meeting of quality and technical specifications. If the bidder itself is MSE OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover, shall upload the supporting documents to prove his eligibility for Relaxation.
	q	The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
	r	Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offered in the bid {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest

		value should meet this criterion. The Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for 3 years before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the primary product having highest value should meet this criterion.	
5(ii)		General : Provide Compliance for the following	YES/NO
	a	All activities like Proof of concept on “No Cost No Commitment” (NCNC) basis wherever applicable will be the responsibility of bidders	
	b	Bidder should be willing to impart required training during undertaking services & execution of project (if applicable)	
	c	Bidder should be willing to sign an exclusive agreement with ITI for smooth execution of the project and all commercial terms will be as per the customer Tender/PO on back-to-back basis.	
	d	PBG will be taken from back-end partner, once ITI will be declared L1. Performance Bank Guarantee (PBG) required for the bid will be borne by the selected bidder.	
	e	LD Clause: LD shall be as per ITI Clauses (@ 0.5% of order value per week or part thereof subject to a maximum of 10% of the undelivered portion/ the order value (if the item(s) cannot be used unless full supply is made) or to cancel the order and purchase the materials from alternative source at the risk and cost of the supplier) OR as per the customer PO/tender clause whichever is higher.	
	f	Payment Terms: a) Payment terms will be as per back to back basis. b) Payment to the vendor shall be done after deduction of all i. LD/recoveries imposed by customer (if any) ii. ITI's margin	
	g	The bidder shall give an undertaking for the following: a. To extend end to end support of partnership b. To support ITI and bid in this tender with ITI as lead bidder c. To support ITI for preparation of the tender, post bid clarifications, technical presentations and any other requirements as per tender.	
	h	Delivery Schedule: Delivery Schedule as per the customer Bid/Tender/ PO on back-to-back basis.(if applicable)	
	i	Consignee Details: As per bid and if any changes will be provided after the award of the work	
	j	Bidder will be responsible for any shortcoming in the BOM and the same should be rectified free of cost	
	k	Bidder should not be insolvent (Self Declaration).	
	l	ITI reserve the right to reject or cancel the bid at any time without assigning any reason.	
5(iii)		Checklist of documents/information to be submitted: (These documents shall be used for evaluating technical parameters for bidder qualification.)	

	a	Company Profile
	b	Certificate of Incorporation a per clause 5(i)(a)
	c	Memorandum & Articles of Association
	d	Audited financial statements for the last 3 years (FY 2022-23, 2023-24 & 2024-25).
	e	GST Registration Certificate
	f	Copy of PAN Card
	g	CIN (Corporate Identity Number), if applicable
	h	Any other relevant registration documents on registration with other appropriate authorities (ESI, EPFO, etc.)
	i	Authorization letter in the company letterhead authorizing the person signing the bid for this tender and Power of Attorney (POA).
	j	Undertaking in letter head to indemnify ITI from any claims / penalties / statutory charges, liquidated damages, with legal expenses etc.
	k	Undertakings in Company letter head as per Annexure I.
	l	Bidders Details as per Annexure II.
	m	Clause by clause compliance of tender terms with references to supporting documents as per Annexure III.
	n	Pre-Contract Integrity Pact as per Annexure-V a) "Bidders participating in the tender have to agree to sign Integrity Pact on placement of order / contract" b) "Those bidders who are not willing to sign Integrity Pact will not be considered for bid opening"
	o	The bidder should give an undertaking on the company's letterhead that all the documents/certificates/information submitted by them against this tender are genuine.
	p	Bidder shall submit technical data sheet by highlighting each complied specification. Wherever technical specifications and operational/functional requirements not mentioned in datasheet, OEM compliance shall be submitted.
	q	Work order / Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order; and Completion / Commission Certificate issued & signed by the competent authority of the client entity on the entity's Letterhead.
	r	Complete tender and customer tender document duly signed and stamped on each page by the bidder be uploaded.
	s	Conditional bids will not be entertained and summarily rejected. Only online bids on https://itilimited.euniwizarde.in portal will be accepted and no physical bids will be accepted.
	t	Mandatory submission of Manufacturing Authorisation Certificate from OEM.
	u	Certificate of Malicious Code Free Design. Products supplied not to be Made in China.

5(iv)	Financial Bid:
	L1 Evaluation Method: A- Lump sum Quote for supply and service items as per Schedule of Requirements (SoR) and Scope of Work (SoW) in INR (without Taxes) B- Margin to ITI as a percentage of A C - Absolute value of Margin = A*B D- Overall Quoted price=A-C • During evaluation bidders with least "D" will be considered as L1. • The bid having higher value of "B" will be selected in case of tied D. • If the bidder is selected, during the final tender submission, the price to be quoted shall not be more than price "A" and the margin offered to ITI shall not be less than "B" SoR & SoW Was as per Tender document and all clarifications & Amendments/Corrigendum

6. BID SUBMISSION:

- Bidder to log into the site well in advance for bid submission so that he/she uploads the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- The bidder to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- Bidders to note that they should necessarily submit their financial bids in the prescribed format given by department and no other format is acceptable.
- The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, the opening of bids, etc. The bidders should follow this time during bid submission.
- All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- The off-line tender shall not be accepted and no request in this regard will be entertained whatsoever.
- As per portal norms Tender Processing Fee will be applicable.

7. AMENDMENT OF BID DOCUMENT:

At any time prior to the deadline for submission of proposals, the department reserve the right to add/modify/delete any portion of this document by the issuance of a Corrigendum, which would be published on the website and will also be made available to the all the Bidder who has been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

8. ASSISTANCE TO BIDDERS:

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- Any queries relating to the process of online bid submission or queries relating to e- Wizard Portal, in general, may be directed to the 24x7 e-Wizard Helpdesk. The contact number for the helpdesk is 8448288994/86/87/89/88/81/90/92/82 011-49606060, 07903269552, 9355030608, 9055030613, 7903810198, 9355030606, 9315620706, 9355030623, 9355030628, 8800526452, 9205898228, 9122643040, 9355030604, eprochelpdesk.01@gmail.com, eprochelpdesk.44@gmail.com, eprochelpdesk.06@gmail.com.
- The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of the bid(s).
- The bid should be submitted through e-Wizard portal (<https://itilimited.ewizard.in/>) only.

- e) All payments should be done through e-Wizard Payment gateway.

09. Special Conditions of tender:

- a. No advance will be paid to the bidder, even though ITI is eligible to get advance from the customer being a front end bidder.
- b. The selected bidder, who has partnered with ITI for a particular tender/ project shall not partner with any other lead bidder for the same tender/project
- c. If the bidder is selected, during the final tender submission, the margin offered to ITI shall not be less than the quoted price.

10. Special Conditions of TENDER:

- a. No advance will be paid to the bidder, even though ITI is eligible to get advance from the customer being a front end bidder.
- b. The selected bidder, who has partnered with ITI for a particular tender/ project shall not partner with any other lead bidder for the same tender/project
- c. If the bidder is selected, during the final tender submission, the margin offered to ITI shall not be less than the quoted price.
- d. The estimated project amount stated in this document is provisional and subject to revision during the actual bidding process. Consequently, the bidder's quoted amount may also fluctuate (increase or decrease).
- e. The work order for the actual RFP will be awarded based on the ratio of the bidder's quoted amount to the revised estimated project value, as compared to the initial estimated value stated in this document."
- f. The requisite final solution to all the supplied equipments/Services must be end to end support till final solution as per RFP clause.

11. Other Terms and conditions:**Confidentiality**

- a) All documents, drawings, samples, data, associated correspondence or other information furnished by or on behalf of the Procuring Entity to the contractor, in connection with the contract, whether such information has been furnished before, during or following completion or termination of the contract are confidential.
- b) If advised by the Procuring Entity, all copies of such information in original shall be returned on completion of the contractor's performance and obligations under this contract.

12. Transparency

All procuring authorities are responsible and accountable to ensure transparency, fairness, equality, competition and appeal rights. This involves simultaneous, symmetric and unrestricted dissemination of information to all likely bidders, sufficient for them to know and understand the availability of bidding opportunities and actual means, processes and time limits prescribed for completion of registration of bidders, bidding, evaluation, grievance redressal, award and management of contracts.

It implies that such officers must ensure that there is consistency, predictability, clarity, openness, equal opportunities in processes.

13. Fall Clause:

Fall clause is a price safety mechanism in rate contracts. The fall clause provides that if the rate contract holder reduces its price or sells or even offers to sell the rate contracted goods or services following conditions of sale similar to those of the rate contract, at a price lower than the rate contract price, to any person or organization during the currency of the rate contract, the rate contract price will be automatically reduced with effect from that date for all the subsequent supplies under the rate contract and the rate contract amended accordingly.

The provisions of fall clause will however not apply to the following:

- i. Export/Deemed Export by the supplier;
- ii. Sale of goods or services as original equipment prices lower than the price charged for normal replacement;
- iii. Sale of goods such as drugs, which have expiry date;
- iv. Sale of goods or services at lower price on or after the date of completion of sale/placement of order of goods or services by the authority concerned, under the existing or previous Rate Contracts as also under any previous contracts entered into with the Central or State Government Departments including new undertakings (excluding joint sector companies and or private parties) and bodies.

14. Price Variation

A suitable price variation formula should also be provided in the tender documents, to calculate the price variation between the base level and scheduled delivery date.

15. Risk Purchase

If the empanelled partner fails to adhere to the quality norms, delivery schedules and other terms and conditions contained in this Tender after acceptance of purchase order and if no agreement is reached on the revised delivery schedule maximum up to 15 Business Days, then buyer shall have the liberty to procure the material from an alternate source at the Empanelled partner's risk and cost, and the Empanelled partner shall be liable to make good the loss incurred by Buyer in this process.

16. Indemnity:

The empanelled partner to indemnify ITI from any claims / penalties / statutory charges, liquidated damages, with legal expenses etc as charged by the customer. LD/ Penalties incurred on account of delay in supply, product failure during warranty if any and deficiency in Warranty and AMC services attributable to the partner shall be borne by the partner All terms and conditions of the customer tender/PO will be applicable to the empanelled partner on back to back basis without affecting the margin of ITI.

17. Arbitration:

Any dispute arising out of this TENDER shall be settled and resolved by any such Authorized person appointed by Chairman and Managing Director of ITI Limited.

18. Set Off:

Any Sum of money due and payable to the supplier under this contract may be appropriated by the purchaser or any other person contracting through the ITI and set off the same against any claim of the purchaser for payment of a sum of money arising out of this contract or under any other contract made by the supplier with the purchaser.

19. The interested partner may like to discuss the customer tender related information, TENDER Bidding Conditions, Bidding Process and clarifications, if any with the Deputy General Manager-Marketing

20. Intellectual Property Rights:

- i. All deliverable, outputs, plans, drawings, specifications, designs, reports and other documents and software submitted by the contractor under this contract shall become and remain the property of the procuring entity and subject to laws of copyright and must not be shared with third parties or reproduced, whether in whole or part, without: the procuring entity's prior written consent.
- ii. The contractor shall, not later than upon termination or expiration of this contract, deliver all such documents and software to the procuring entity, together with a detailed inventory thereof.
- iii. The contractor may retain a copy of such documents and software but shall not use it for any commercial purpose.

21. Language of offers:

The offers prepared by the Company and all the correspondences and documents relating to the offers exchanged by the companies shall be written in English language.

22. In the event that ITI is required to provide demonstration or working of the product to their buyers, the same shall be arranged by the bidder selected partner/OEM at latter's cost and expenditure.

23. Cost of TENDER:

The bidder shall bear all costs associated with the preparation and submission of his offer against this TENDER, including cost of presentation for the purposes of clarification of the offer, if so desired by ITI. ITI will, in no case be responsible or liable for those costs, regardless of the conduct or outcome of the TENDER process.

24. Purchaser's Right to accept any bid and to reject any or All Bids or to cancel the TENDER:

ITI Limited reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds of purchaser's action.

25. Amendment of TENDER:

At any time prior to the last date for receipt of offers, ITI, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the TENDER document by an amendment. In order to provide prospective bidder reasonable time in which to take the amendment into account in preparing their offers, ITI may, at their discretion, extend the last date for the receipt of offers and/or make other changes in the requirements set out in the Invitation for TENDER.

26. Disclaimer:

ITI and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of ITI and/or any of its officers, employees.

27. Accessibility of TENDER Document:

Complete Tender document with terms and conditions is provided in the following websites

- (i) <http://www.italtd.in>
- (ii) <https://itilimited.euniwizarde.in>
- (iii) <http://eprocure.gov.in>

Annexure-I**Undertakings (To be in Bidder's Letter Head)**

M/sdo here by undertake the following

1. Are not blacklisted by Central Govt./ any State or UP Govt/ PSU/ organized sector in India
2. To work with ITI as per this TENDER and Customer Tender terms and conditions. Also, we agree to implement the project (scope of work as per Tender terms and conditions including investment) covering Warranty& post-warranty services, maintenance etc, in the event of ITI winning the contract on back-to-back basis.
3. To submit Security Deposit of 5% per transaction to customer/ITI (as decided by ITI),
4. that we will be equipped with the required manpower with qualifications, certifications and experience as mentioned in the customer tender.
5. to get required certificate& support (warranty & post-warranty/maintenance) in the name of ITI from the OEM as per customer tender requirement.
6. To obtain relevant statutory licenses for operational activities.
7. to sign MoU/Teaming Agreement, Integrity Pact with ITI for addressing the customer tender as per customer's tender terms and conditions.
8. to indemnify ITI from any claims / penalties/ statutory charges, liquidated damages, with legal expenses etc as charged by the customer.
9. to support the offered equipment for a minimum period of 10 years including warranty and AMC or as per customer tender conditions.
10. To supply equipment/components which conform to the latest year of manufacture.
11. The bidder should give certificate stating that all the hardware/ software supplied under the contract shall not contain any embedded malicious codes that could inhibit the desired functions of the equipment or cause the network to malfunction in any manner.

Annexure-II

Bidders Profile

1.	Name and address of the company			
2.	Contact Details of the Bidder (Contact person name with designation, Telephone Number, FAX, E- mail and Web site)			
3.	Area of the business			
4.	Annual Turnover for financial years (Rs in Cr)	2022-23	2023-24	2024-25
5.	IT Turnover for 3 financial years (Rs in Cr)	2022-23	2023-24	2024-25
6.	Positive Net Worth as on 31.03.2025			
7.	Date of Incorporation,			
8.	GST Registration number			
9.	PAN Number			
10.	CIN Number, if applicable			
11.	Number of manpower in company's rolls			
12.	Work Experience details: Annexure IV			
13.	Certifications details like ISO or any other certification as per requirements of Customer.			

Annexure-III

Compliance Statement

Sl. No.	Clause No.	Clause	Compliance (Complied/Not Complied)	Remarks with Documentary Reference

Annexure- IV

Project Experience

Sl. No.	Name of project	Value	Name of customer	Attached Proof	Documentary

Annexure - V

INTEGRITY PACT

TENDER No.

THIS Integrity Pact is made on.....day of 2025.

BETWEEN:

ITI Limited having its Registered & Corporate Office at ITI Bhavan, Dooravaninagar, Bangalore – 560 016 and established under the Ministry of Communications, Government of India (hereinafter called the Principal), which term shall unless excluded by or is repugnant to the context, be deemed to include its Chairman & Managing Director, Directors, Officers or any of them specified by the Chairman & Managing Director in this behalf and shall also include its successors and assigns) ON THE ONE PART

AND:

..... represented by
Chief Executive Officer (hereinafter called the Contractor(s), which term shall unless excluded by or is repugnant to the context be deemed to include its heirs, representatives, successors and assigns of the contractor ON THE SECOND PART.

Preamble:

WHEREAS the Principal intends to award, under laid down organizational procedures, contract for of ITI Limited. The Principal, values full compliance with all relevant laws of the land, regulations, economic use of resources and of fairness/ transparency in its relations with its Contractor(s).

In order to achieve these goals, the Principal has appointed an Independent External Monitor (IEM), who will **monitor** the tender process and the execution of the contract for compliance with the principles as mentioned herein this agreement.

WHEREAS, to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact the terms and conditions of which shall also be read as integral part and parcel of the Tender Documents and contract between the parties.

NOW THEREFORE, IN CONSIDERATION OF MUTUAL COVENANTS STIPULATED IN THIS PACT THE PARTIES HEREBY AGREE AS FOLLOWS AND THIS PACT WITNESSETH AS UNDER:

SECTION 1 – COMMITMENTS OF THE PRINCIPAL

The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- a. No employee of the Principal, personally or through family members, will in connection with the TENDER for or the execution of the contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The Principal will, during the TENDER process treat all bidder(s) with equity and reason. The Principal will in particular, before and during the TENDER process, provide to all bidder(s) the same information and will not provide to any bidder(s) confidential/ additional information through

which the bidder(s) could obtain an advantage in relation to the TENDER process or the contract execution.

- c. The Principal will exclude from the process all known prejudiced persons. If the principal obtains information on the conduct of any of its employee, which is a criminal offence under IPC/PC Act or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary action as per its internal laid down Rules/Regulations.

SECTION 2 – COMMITMENTS OF THE BIDDER / CONTRACTOR

2.1 The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption.

He commits himself observe the following principles during the participation in the TENDER process and during the execution of the contract.

- a. The bidder(s)/contractor(s) will not, directly or through any other person or firm offer, promise or give to any of the Principal's employees involved in the TENDER process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever (during the TENDER process or during the execution of the contract).
- b. The bidder(s)/contractor(s) will not enter with other bidders/ contractors into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The bidder(s)/contractor(s) will not commit any offence under IPC/PC Act, further the bidder(s)/contractor(s) will not use improperly, for purposes of competition of personal gain, or pass onto others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents /representatives in India, if any. Similarly, the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.
- e. The Bidder(s) f Contractor(s) will, when presenting the bid, disclose any and all payments made, are committed to or intend to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f. The Bidder(s)/Contractor(s) will not bring any outside influence and Govt bodies directly or indirectly on the bidding process in furtherance to his bid.
- g. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

SECTION 3 – DISQUALIFICATION FROM TENDER PROCESS & EXCLUSION FROM FUTURE CONTRACTS

If the Bidder(s)/Contractor(s), during TENDER process or before the award of the contract or during execution has committed a transgression in violation of Section 2, above or in any other form such as to put his reliability or credibility in question the Principal is entitled to disqualify Bidder(s)/Contractor(s) from the TENDER process.

If the Bidder(s)/Contractor(s), has committed a transgression through a violation of Section 2 of the above, such as to put his reliability or credibility into question, the Principal shall be entitled exclude including blacklisting for future TENDER/contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case, particularly taking into account the number of transgression, the position of the transgressor within the company hierarchy of the Bidder(s)/Contractor(s) and the amount of the damage. The exclusion will be imposed for a period of minimum one year.

The Bidder(s)/Contractor(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack if any hearing before the decision to resort to such exclusion is taken. The undertaking is given freely and after obtaining independent legal advice.

A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that based on facts available there are no material doubts.

The decision of the Principal to the effect that breach of the provisions of this Integrity Pact has been committed by the Bidder(s)/ Contractor(s) shall be final and binding on the Bidder(s)/ Contractor(s), however the Bidder(s)/Contractor(s) can approach IEM(s) appointed for the purpose of this Pact.

On occurrence of any sanctions/ disqualifications etc arising out from violation of integrity pact Bidder(s)/ Contractor(s) shall not entitled for any compensation on this account.

Subject to full satisfaction of the Principal, the exclusion of the Bidder(s)/Contractor(s) could be revoked by the Principal if the Bidder(s)/ Contractor(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption preventative system in his organization.

SECTION 4 – PREVIOUS TRANSGRESSION

- 4.1 The Bidder(s)/ Contractor(s) declares that no previous transgression occurred in the last 3 years immediately before signing of this Integrity Pact with any other company in any country conforming to the anti-corruption/ transparency International (TI) approach or with any other Public Sector Enterprises/ Undertaking in India of any Government Department in India that could justify his exclusion from the TENDER process.
- 4.2 If the Bidder(s)/ Contractor(s) makes incorrect statement on this subject, he can be disqualified from the TENDER process or action for his exclusion can be taken as mentioned under Section-3 of the above for transgressions of Section-2 of the above and shall be liable for compensation for damages as per Section- 5 of this Pact.

SECTION 5 – COMPENSATION FOR DAMAGE

- 5.1 If the Principal has disqualified the Bidder(s)/Contractor(s) from the TENDER process prior to the award according to Section 3 the Principal is entitled to forfeit the Earnest Money Deposit/Bid Security/ or demand and recover the damages equitant to Earnest Money Deposit/Bid Security apart from any other legal that may have accrued to the Principal.
- 5.2 In addition to 5.1 above the Principal shall be entitled to take recourse to the relevant provision of the contract related to termination of Contract due to Contractor default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Contractor or demand and recover liquidate and all damages as per the provisions of the contract agreement against termination.

SECTION 6 – EQUAL TREATMENT OF ALL BIDDERS/CONTRACTORS

- 6.1 The Principal will enter into Integrity Pact on all identical terms with all bidders and contractors for identical cases.
- 6.2 The Bidder(s)/Contractor(s) undertakes to get this Pact signed by its subcontractor(s)/sub-empanelled partner(s)/ associate(s), if any, and to submit the same to the Principal along with the TENDER document/contract before signing the contract. The Bidder(s)/Contractor(s) shall be responsible for any violation(s) of the provisions laid down in the Integrity Pact Agreement by any of its subcontractors/ sub-empanelled partners / associates.
- 6.3 The Principal will disqualify from the TENDER process all bidders who do not sign this Integrity Pact or violate its provisions.

SECTION 7 – CRIMINAL CHARGES AGAINST VIOLATING BIDDER(S)/CONTRACTORS

- 7.1 If the Principal receives any information of conduct of a Bidder(s)/Contractor(s) or subcontractor/ sub-empanelled partner/associates of the Bidder(s)/Contractor(s) which constitutes corruption or if the principal has substantive suspicion in this regard, the principal will inform the same to the Chief Vigilance Officer of the Principal for appropriate action.

SECTION 8 – INDEPENDENT EXTERNAL MONITOR(S)

- 8.1 The Principal appoints competent and credible Independent External Monitor(s) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.

Details of IEM appointed by ITI are as under:s

Name:ShriAtul Jindal IFS (Retd.),
Independent External Monitor (IEM)
Address- 3/10 VisheshKhand Opp. Little Friend School Gomti Nagar,
Lucknow-226010(UP)
E-mail: atulindia1947@gmail.com

IEM – II

Shri Benny John, IRS (Retd.),
Villa No. 36, Kent Plam Villas,
Fort Valley Township, Athani,
Kakkanad, Ernakulam,
Kerala – 682 030

- 8.2 The Monitor is not subject to any instructions by the representatives of the parties and performs his functions neutrally and independently. He will report to the Chairman and Managing Director of the Principal.
- 8.3 The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all product documentation of the Principal including that provided by the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The Monitor is under contractual obligation to treat the information and documents Bidder(s)/Contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meeting could have an impact on the contractual relations between the Principal and the Bidder(s)/Contractor(s). As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in specific manner, refrain from action or tolerate action.
- 8.5 The Monitor will submit a written report to the Chairman & Managing Director of the Principal within toWeeks from the date of reference or intimation to him by the principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.6 If the Monitor has reported to the Chairman & Managing Director of the Principal a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman & Managing Director of the principal has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 8.7 The word 'Monitor' would include both singular and plural.

SECTION 9 - FACILITATION OF INVESTIGATION

- 9.1 In case of any allegation of violation of any provisions of this Pact or payment of commission, the

Principal or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) shall provide necessary information and documents in English and shall extend all help to the Principal for the purpose of verification of the documents.

SECTION 10 - LAW AND JURISDICTION

- 1.1 The Pact is subject to the Law as applicable in Indian Territory. The place of performance and jurisdiction shall be the seat of the Principal.
- 1.2 The actions stipulated in this Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

SECTION 11 – PACT DURATION

This Pact begins when both the parties have legally signed it. It expires after 1 year on completion of the warranty/ guarantee period of the project /work awarded, to the fullest satisfaction of the Principal.

If the Bidder(s)/Contractor(s) is unsuccessful, the Pact will automatically become invalid after three months on evidence of failure on the part of the Bidder(s)/Contractor(s).

If any claim is lodged/made during the validity of the Pact, the same shall be binding and continue to be valid despite the lapse of the Pact unless it is discharged/determined by the Chairman and Managing Director of the Principal.

SECTION 12 - OTHER PROVISIONS

12.1 This pact is subject to Indian Law, place of performance and jurisdiction is the Registered & Corporate office of the Principal at Bengaluru.

12.2 Changes and supplements as well as termination notices need to be made in writing by both the parties. Side agreements have not been made.

12.3 If the Bidder(s)/Contractor(s) or a partnership, the pact must be signed by all consortium members and partners.

12.4 Should one or several provisions of this pact turn out to be invalid, the remainder of this pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions

12.3 Any disputes/ difference arising between the parties with regard to term of this Pact, any action taken by the Principal in accordance with interpretation thereof shall not be subject to any Arbitration.

12.4 The action stipulates in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

In witness whereof the parties have signed and executed this Pact at the place date first done mentioned in the presence of the witnesses:

For PRINCIPAL

For BIDDER(S)/CONTRACTOR(S)

.....

.....

Name Designation

Name Designation

Witness

1.

1.

2.

2.

TAPE LIBRARY		
Ser	Item	Specifications
1	Tape Library Type	Modular 3U Rack-Mount Tape Library System or higher
2	Form Factor	3U Control Module or higher
3	Base Slot Capacity	25 Licensed Tape Slots or higher
4	Expansion Slot License	Additional 25-Slot Capacity License Included or higher
5	Tape Drive Type	LTO-9 Half-Height Tape Drives or higher
6	Drive Interface	8Gbps FC or higher, backward compatible with 32Gbps FC HBA connectivity, with all required FC cables/transceivers/accessories included.
7	Number of Tape Drives	2 or higher
8	Power Supply	Energy-Efficient Redundant Power Supply Unit or higher
9	Interface Cables	7.5m OM3 LC–LC Fibre Channel Cables (2 units) or higher
10	Data Cartridge Labels	LTO-9 Barcode Labels Included or higher
11	Cleaning Cartridge Labels	Universal Cleaning Cartridge Labels Included or higher
12	LTO-9 Data Cartridges	50 cartridges
13	Cleaning Cartridges	5 × LTO Universal Cleaning Cartridges or higher
14	Failover Licensing	Advanced Control Path Failover License Included or higher
15	Capacity Licensing	25-Slot Capacity Upgrade License Included or higher
16	Installation Service	Onsite Installation & Configuration Included
17	Drive Installation	Installation for All Tape Drives Included
18	Support Plan	24×7 Support with Parts Replacement or higher
19	Warranty	2-Year Hardware & Support Warranty
20	Connectivity to Backup Server	All Fibre Channel cables and components included or higher
21	Interconnection Materials	All cables, labels, adapters, components supplied by vendor or higher
22	Demonstration Scope	Vendor must demonstrate tape load/unload, drive selection, media handling, and operational workflows
23	Required Components	All FC cables, power components, cleaning/media sets included or higher
24	Make	HPE, IBM or equivalent
25	Library Form Factor	3U Modular Tape Library or higher
26	Tape Technology	LTO Ultrium 9 or higher
27	Tape Drive Count	2 × LTO-9 FC Drives or higher
28	Drive Interface Speed	8Gbps Fibre Channel or higher
29	Slot Capacity	25 Base Slots / 50 with Expansion License or higher
30	Media Type	LTO-9 Data Cartridges or higher
31	Media Capacity	18 TB native / 45 TB compressed per cartridge or higher
32	Cleaning Media	LTO Ultrium Universal Cleaning Cartridges or higher
33	Barcode Support	Full Barcode Reader + Label Support or higher
34	Power Redundancy	Redundant Hot-Swappable PSU or higher
35	Cooling System	Intelligent Fan Control with Airflow Optimization or higher
36	Fibre Channel Connectivity	OM3 LC–LC Fibre Channel Cables Included or higher
37	Management Interface	Web GUI / Remote Management API or higher
38	Security Features	Role-Based Access Control, Secure Access Controls or higher
39	Drive Features	Hardware Compression, Encryption, Error Recovery or higher
40	Vendor Demonstration	Vendor must show tape loading, unloading, drive utilization, media handling
41	Backup Server Integration	Vendor must connect tape library to backup server using provided FC cables
42	Restore Capability Testing	Vendor must verify tape read operations and accessibility (via backup server)
43	Connectivity Materials	All FC cables, adapters, patch cords included or higher

UPS 20KVA		
Ser	Item	Specifications
1	UPS Type	Online Double-Conversion 20 kVA / 20 kW UPS or higher
2	Form Factor	19" Rackmount or Tower-Based UPS or higher
3	Battery Bank	Included – External Modular Battery Bank or higher
4	Battery Type	VRLA or Lithium-Ion (Vendor Neutral) or higher
5	Battery Backup Requirement	Minimum 8 hours for IT load or higher
6	Battery Voltage	Nominal 240–480 VDC or higher
7	Battery Capacity	Sized to deliver ≥ 8 hours runtime or higher
8	Battery Expandability	Supports additional cabinets or higher
9	Battery Enclosure	External cabinet included or higher
10	Battery Cables	All interconnect cables included or higher
11	Charger Type	High-capacity charger compatible with large banks or higher
12	UPS Redundancy	Dual UPS in N+1 configuration
13	Cooling Capacity	2 × 7 kW cooling units or higher
14	Cooling Technology	Digital Scroll Compressor or higher
15	Cooling Redundancy	N+N or higher
16	Fire Detection	Smoke/heat sensors included or higher
17	Fire Suppression	Novec 1230 automatic suppression system or higher
18	Monitoring System	RDU-A remote monitoring included or higher
19	Temperature Monitoring	Included or higher
20	Humidity Monitoring	Included or higher
21	Water Leak Sensor	Included or higher
22	Alarm Notifications	Email + audible alarms or higher
23	Communication Interfaces	RS485, SNMP, Ethernet or higher
24	PDU Connectivity Cables	UPS-to-dual PDUs cabling included or higher
25	Installation Scope	Full installation, cabling & commissioning by vendor
26	Licenses	All UPS monitoring and software licenses included or higher
27	Warranty	2-Year Comprehensive UPS & Battery Warranty
28	Expandability	Future-ready for additional battery cabinets or higher
29	Make	APC, Vertiv or equivalent
30	UPS Technology	Online Double-Conversion or higher
31	Rated Power	20 kVA / 20 kW or higher
32	Input Voltage	380–415V Three-Phase or higher
33	Output Voltage	230/415 VAC or higher
34	Power Factor	Unity (1.0) or higher
35	Efficiency	≥ 94% or higher
36	Battery Technology	VRLA / Lithium-Ion or higher
37	Battery Runtime	≥ 8 hours runtime provided or higher
38	Battery Monitoring	Intelligent battery management or higher
39	Battery Scalability	Supports expansion cabinets or higher
40	Cooling Requirement	2 × 7 kW cooling modules or higher
41	Alerts	Email, logs, audible alarms or higher
42	Sensors	Temperature, humidity, water leak or higher
43	Fire Safety	Novec 1230 suppression system or higher
44	Communication Ports	RS485, SNMP, Ethernet or higher
45	PDU Compatibility	Dual PDUs supported or higher
46	Cabling Included	UPS-PDU + battery cables included or higher
47	Serviceability	Front-access service; hot-swappable batteries (if Li-ion) or higher
48	Vendor Responsibilities	Install, configure, test & handover

APPLICATION LOAD BALANCER		
Ser	Item	Specifications
1	Appliance Type	Web Application Firewall + Application Load Balancer or higher
2	Form Factor	Rackmount or Virtual Appliance (Vendor Neutral) or higher
3	Network Interfaces	Multiple 1/10/25GbE SFP/SFP28 or RJ45 Ports or higher
4	Management Interface	Dedicated Management Port (Web/SSH/API) or higher
5	SSL/TLS Offloading	Hardware-accelerated SSL Decryption/Re-encryption or higher
6	Load Balancing Methods	Round Robin, Least Connections, Weighted, Application-Aware or higher
7	Application Security Engine	Layer-7 WAF with Signature, Anomaly & Behavioral Analysis or higher
8	DDoS Protection	Application Layer DDoS Mitigation or higher
9	Content Routing	URL, Host, Path Based Traffic Steering or higher
10	Reverse Proxy Mode	Full Reverse Proxy with L7 Inspection or higher
11	Certificate Management	Auto Certificate Import, Renewal, Secure Key Storage or higher
12	High Availability	Supports Active-Passive or Active-Active Clustering or higher
13	Logging & Analytics	Real-Time Attack Logs, Traffic Analytics, Syslog Export or higher
14	API Protection	API Gateway, Schema Validation, Rate Limiting or higher
15	Authentication Support	SAML, OAuth2, LDAP, RADIUS or higher
16	Virtual IP Support	Supports L4/L7 VIPs or higher
17	Health Monitoring	HTTP/HTTPS/TCP/Custom Health Probes or higher
18	Included Licenses	All WAF, Bot, LB & Threat Intelligence Licenses Included or higher
19	Onboard Storage	SSD-Based Local Event/Log Storage or higher
20	Redundant Power Supply	Dual Hot-Swappable PSUs or higher
21	Included Components	All SFPs, Fiber/Copper Patch Cables, Power Cords Provided or higher
22	Vendor Network Integration	Vendor must connect WAF/ALB to required network zones
23	Load Balancer Configuration	Vendor must configure LB pools, health monitors & VIPs
24	WAF Configuration	Vendor must configure security profiles, signatures, rules
25	Demonstration Scope	Vendor must demonstrate WAF triggers, load balancing & feature set
26	Firewall Rule Creation	Vendor must implement rules per datacenter requirement
27	Documentation	Vendor must provide full configuration documentation
28	Warranty	2-Year Hardware & Software Support
29	Installation Scope	Vendor must fully install, integrate & validate system
30	Make	F5, Fortinet or equivalent
31	Layer Support	L4 & L7 Load Balancing or higher
32	WAF Modes	Blocking, Alert, Learning, Positive Security Model or higher
33	Supported Protocols	HTTP/S, TCP, UDP or higher
34	SSL Offload Performance	Hardware-Accelerated SSL Throughput or higher

35	WAF Engine	Signature-Based + Behavior-Based Threat Detection or higher
36	OWASP Protection	Comprehensive OWASP Top 10 Coverage or higher
37	API Security	Schema Enforcement, Rate Limiting, JWT/OAuth Support or higher
38	Bot Mitigation	Bot Detection & Blocking or higher
39	Threat Intelligence	Cloud/Local Threat Feeds (Licensed) or higher
40	LB Algorithms	Round Robin, Least Connections, Weighted, Source Hash or higher
41	Session Persistence	Cookie, IP, Session-Based or higher
42	Health Checks	L4/L7 Probes, Custom HTTP/HTTPS or higher
43	HA Support	Supports Active–Passive or Active–Active HA or higher
44	Logging	Attack Logs, Access Logs, Analytics Dashboard or higher
45	Monitoring	SNMP, Syslog, API-Based Telemetry or higher
46	Routing Capabilities	Static Routing & Policy-Based Routing or higher
47	Security Features	IPS/IDS-like Features, Rate-Limiting, Traffic Shaping or higher
48	Management Interfaces	Web GUI, SSH CLI, REST API or higher
49	Automation	Supports Ansible, Terraform, Scripting or higher
50	Redundancy	Dual Hot-Swappable PSUs or higher
51	Cabling	All Fiber & Copper Cables Included or higher
52	Integration Requirement	Fully integrated into inside/outside datacenter network
53	Required Demonstration	WAF triggering, LB distribution, rule behavior

BACKUP SERVER		
Ser	Item	Specifications
1	Server Type	2U Rack-Mount Backup Server or higher
2	Processor	Dual 16-Core x86 Server CPUs or higher
3	Total CPU Cores	32 Cores or higher
4	Memory	128 GB DDR4/DDR5 ECC Registered or higher
5	Boot/OS Drives	2 × 960GB SATA SSD (Read Intensive, 6Gbps) or higher
6	Backup Storage Capacity	Minimum 100 TB usable backup storage after RAID/resiliency overhead; usable capacity shall be calculated without deduplication/compression unless explicitly stated otherwise. Storage subsystem shall tolerate failure of at least two disks without loss of backup data.
7	Storage Type	High-Capacity SATA Disk Array or higher
8	Power Supply	Dual Hot-Plug Redundant PSU (1+1), 1400W Mixed Mode or higher
9	Fibre Channel Connectivity	Dual-Port 32G FC HBA with SFPs Included or higher
10	Network Connectivity	2 × Dual-Port 10/25GbE SFP28 Network Adapters or higher
11	Warranty	2-Year Hardware & Software Support
12	Included Components	All cables, connectors, SFPs, FC cables, power cords included or higher
13	Tape Library Connectivity	Vendor must supply all components/cables for tape library connection or higher
14	Backup Software	Vendor-supplied enterprise backup software for tape restoration or higher
15	Software Features	Supports file, folder, OS, database, incremental & full backups or higher
16	Installation Scope	Vendor must install, configure, validate backup server
17	Tape Backup Demo Scope	Vendor must demonstrate backups to tape: files, folders, OS (Windows & RHEL), DBs (Oracle & PostgreSQL), incremental & full
18	Documentation	Vendor must provide configuration & operational documentation
19	Make	Dell, HPE or equivalent
20	Form Factor	2U Rackmount or higher
21	CPU Architecture	x86-64 Server Grade or higher
22	CPU Count	2 or higher
23	Core Count	32 Total or higher
24	Memory Type	ECC Registered Server Memory or higher
25	Memory Capacity	128 GB or higher
26	Storage Architecture	SATA Disk Array for Backup or higher
27	Backup Storage Usable	100TB or higher
28	SSD Type	Read-Intensive SATA SSD or higher
29	SSD Capacity	960GB × 2 or higher
30	FC Interface Speed	32Gb Fibre Channel or higher
31	Ethernet Speed	10/25GbE Dual-Port or higher
32	Redundancy	1+1 Redundant PSU or higher
33	Availability	Hot-Plug PSUs & Drives or higher
34	Operating Temperature	10°C – 35°C or higher
35	Management	Remote Management Controller (Vendor-Neutral) or higher
36	Security	Secure Boot, Role-Based Access Control or higher
37	Connectivity Accessories	All SFPs, FC cables, network cables included or higher
38	Tape Library Interface	All cables for tape library connectivity included or higher
39	Backup Software Capability	Tape Restore, Incremental, Full, DB & OS backups or higher
40	Supported Backup Types	File, Folder, Oracle DB, PostgreSQL DB, OS image or higher
41	OS Image Support	Windows & RHEL Full OS Backup or higher
42	Backup Methodologies	Full, Differential, Incremental or higher

43	Vendor Responsibilities	Install software, configure jobs, demo backups
44	Backup Software Edition	Enterprise Plus Edition or higher
45	Instant Recovery	Instant recovery for virtual and physical machines or higher
46	Cloud Restore	Seamless restoration to public/private cloud environments or higher
47	Extended Retention Policies	Configurable long-term retention policies or higher
48	Agentless Backup	Agentless backup for supported virtual environments or higher
49	Centralized Management	Centralized management with high availability and scalability or higher
50	Data Security	Encryption at rest/in transit with role-based access control or higher
51	Compliance Framework	Compliance with common industry standards (ISO/PCI/GDPR class) or higher
52	Machine Learning Protection	ML-based anomaly and ransomware detection or higher
53	VM Licensing	50 VM License or higher
54	Instance to Workload Ratio	1:1 for VM, physical server, or cloud instance or higher
55	Backup Software Edition	Enterprise Plus Edition or higher
56	Instant Recovery	Instant recovery for virtual and physical machines or higher
57	Cloud Restore	Seamless restoration to public/private cloud environments or higher
58	Extended Retention Policies	Configurable long-term retention policies or higher
59	Agentless Backup	Agentless backup for supported virtual environments or higher
60	Centralized Management	Centralized management with high availability and scalability or higher
61	Data Security	Encryption at rest/in transit with role-based access control or higher
62	Compliance Framework	Compliance with common industry standards (ISO/PCI/GDPR class) or higher
63	Machine Learning Protection	ML-based anomaly and ransomware detection or higher
64	VM Licensing	50 VM License or higher
65	Instance to Workload Ratio	1:1 for VM, physical server, or cloud instance or higher

CORE SWITCH		
Ser	Item	Specifications
1	Switch Type	High-Performance Datacenter Core Switch or higher
2	Form Factor	1U Rack-Mountable or higher
3	Airflow Direction	Front-to-Rear Cooling or higher
4	Power Supply	Dual Hot-Swappable AC Power Supplies or higher
5	25GbE Ports	Minimum 28 × 10/25GbE SFP28 ports, supporting 10GbE and 25GbE operation.
6	100GbE Ports	Minimum 4 × QSFP28 ports, supporting 100GbE operation.
7	Routing License	Full Routing License (≥256K Routes, EVPN, VXLAN) or higher
8	Support Subscription	Software & Hardware Replacement Service - Same Day/NBD or higher
9	Interconnection Components	All SFP/SFP28/QSFP28 transceivers, DACs, AOCs, and patch cords required for full interconnection must be supplied by vendor or higher
10	Optical Transceivers	24 × 10/25GBASE-SR Optical Modules (included) or higher
11	Transceiver Reach	Up to 70–100m at 25Gb / 300–400m at 10Gb (OM3/OM4) or higher
12	25GbE AOC Cables	25 × 25GbE Active Optical Cables (30m) or higher
13	100GbE DAC Cables	3 × 100GbE QSFP DAC Cables (5m) or higher
14	Patch Cables – Fiber	All necessary OM3/OM4 fiber patch cords included or higher
15	Patch Cables – Copper	All necessary Cat6A/Cat7 copper patch cords included, as required or higher
16	Uplink Cabling	All uplink cables from core switch to aggregation/distribution included or higher
17	Server Interconnect Cables	All cables required for server uplinks (25GbE) included or higher
18	Storage Interconnect Cables	All cables for storage access networks included or higher
19	Firewall Interconnect Cables	All required cables for firewall integration included or higher
20	Management Interfaces	Console Port + Dedicated Out-of-Band Ethernet Port or higher
21	Operating System	Datacenter-Optimized Network Switching OS or higher
22	Layer-2 Features	VLAN, STP/MSTP, LACP, IGMP Snooping, LLDP or higher
23	Layer-3 Features	OSPF, BGP, IS-IS, VRRP, Static Routing or higher
24	Overlay Support	EVPN-VXLAN Fabric Capable or higher
25	Automation Support	NETCONF, REST API, Ansible, CLI or higher
26	Telemetry	Real-Time Streaming Telemetry Ready or higher
27	High Availability	Multi-Chassis LAG, Redundant Fans & PSUs or higher
28	Security Features	ACLs, Port Security, RADIUS/TACACS+, Secure Boot or higher
29	License Activation Scope	Vendor must install and activate all licenses
30	Network Setup Scope	Vendor must configure routing, switching, uplinks, & DC integration
31	Datacenter Integration	Vendor must integrate switch with servers, storage, & firewalls
32	Warranty	2-Year Hardware & Software Support
33	Documentation & Handover	Vendor must provide full configuration documentation
34	Throughput	Line-Rate Switching on All Ports or higher
35	Packet Buffer	Datacenter-Class Dynamic Packet Buffering or higher
36	Routing Table Size	≥256K Entries or higher
37	MAC Table Size	≥128K MAC Addresses or higher
38	Latency	Low-Latency Cut-Through Forwarding or higher
39	Power Redundancy	Dual Hot-Swappable PSU (N+1) or higher
40	Cooling	Front-to-Rear Airflow with Redundant Fans or higher
41	Operating Temperature	0°C to 40°C
42	Humidity Range	5%–90% Non-Condensing
43	Management Capability	CLI, SSH, Web, SNMPv3, REST API or higher
44	Out-of-Band Management	Dedicated Management Port or higher
45	Virtualization Support	EVPN-VXLAN Datacenter Fabric Ready or higher
46	Routing Capabilities	OSPF, BGP, IS-IS, Static Routing or higher
47	Multicast Capability	IGMP v1-3 & PIM Support or higher
48	Security	ACLs, RBAC, TACACS+/RADIUS Integration or higher
49	Automation	NETCONF, REST API, Ansible Playbooks or higher
50	Optical Modules	10/25GbE SR Multi-Mode Transceivers (All Required Modules Included) or higher
51	AOC Cables	25 × 25GbE AOC (30m) or higher
52	DAC Cables	3 × 100GbE QSFP DAC (5m) or higher
53	Fiber Patch Cords	All necessary OM3/OM4 patch cords supplied or higher
54	Copper Patch Cords	All necessary Cat6A/Cat7 patch cords supplied or higher

55	Server Connectivity	All cables needed for server 25GbE uplinks supplied or higher
56	Storage Connectivity	All cables needed for storage interconnect supplied or higher
57	Tape Library Connectivity	All cables needed for interconnect supplied or higher
58	WAF/ ALB Connectivity	All cables needed for interconnect supplied or higher
59	Firewall Connectivity	All cables required for firewall uplinks supplied or higher
60	Integration Requirement	Switch to be integrated and proven with servers, storage, firewall & aggregation and all other items in the stack or higher
61	Initialization Requirement	Vendor must configure routing, switching & uplinks or higher
62	License Activation	All feature licenses must be activated by vendor or higher
63	Make	Cisco, Arista or equivalent

CORE SWITCH		
Ser	Item	Specifications
1	Switch Type	High-Performance Datacenter Core Switch or higher
2	Form Factor	1U Rack-Mountable or higher
3	Airflow Direction	Front-to-Rear Cooling or higher
4	Power Supply	Dual Hot-Swappable AC Power Supplies or higher
5	25GbE Ports	Minimum 28 × 10/25GbE SFP28 ports, supporting 10GbE and 25GbE operation.
6	100GbE Ports	Minimum 4 × QSFP28 ports, supporting 100GbE operation.
7	Routing License	Full Routing License (≥256K Routes, EVPN, VXLAN) or higher
8	Support Subscription	Software & Hardware Replacement Service - Same Day/NBD or higher
9	Interconnection Components	All SFP/SFP28/QSFP28 transceivers, DACs, AOCs, and patch cords required for full interconnection must be supplied by vendor or higher
10	Optical Transceivers	24 × 10/25GBASE-SR Optical Modules (included) or higher
11	Transceiver Reach	Up to 70–100m at 25Gb / 300–400m at 10Gb (OM3/OM4) or higher
12	25GbE AOC Cables	25 × 25GbE Active Optical Cables (30m) or higher
13	100GbE DAC Cables	3 × 100GbE QSFP DAC Cables (5m) or higher
14	Patch Cables – Fiber	All necessary OM3/OM4 fiber patch cords included or higher
15	Patch Cables – Copper	All necessary Cat6A/Cat7 copper patch cords included, as required or higher
16	Uplink Cabling	All uplink cables from core switch to aggregation/distribution included or higher
17	Server Interconnect Cables	All cables required for server uplinks (25GbE) included or higher
18	Storage Interconnect Cables	All cables for storage access networks included or higher
19	Firewall Interconnect Cables	All required cables for firewall integration included or higher
20	Management Interfaces	Console Port + Dedicated Out-of-Band Ethernet Port or higher
21	Operating System	Datacenter-Optimized Network Switching OS or higher
22	Layer-2 Features	VLAN, STP/MSTP, LACP, IGMP Snooping, LLDP or higher
23	Layer-3 Features	OSPF, BGP, IS-IS, VRRP, Static Routing or higher
24	Overlay Support	EVPN-VXLAN Fabric Capable or higher
25	Automation Support	NETCONF, REST API, Ansible, CLI or higher
26	Telemetry	Real-Time Streaming Telemetry Ready or higher
27	High Availability	Multi-Chassis LAG, Redundant Fans & PSUs or higher
28	Security Features	ACLs, Port Security, RADIUS/TACACS+, Secure Boot or higher
29	License Activation Scope	Vendor must install and activate all licenses
30	Network Setup Scope	Vendor must configure routing, switching, uplinks, & DC integration
31	Datacenter Integration	Vendor must integrate switch with servers, storage, & firewalls
32	Warranty	2-Year Hardware & Software Support
33	Documentation & Handover	Vendor must provide full configuration documentation
34	Throughput	Line-Rate Switching on All Ports or higher
35	Packet Buffer	Datacenter-Class Dynamic Packet Buffering or higher
36	Routing Table Size	≥256K Entries or higher
37	MAC Table Size	≥128K MAC Addresses or higher
38	Latency	Low-Latency Cut-Through Forwarding or higher
39	Power Redundancy	Dual Hot-Swappable PSU (N+1) or higher

40	Cooling	Front-to-Rear Airflow with Redundant Fans or higher
41	Operating Temperature	0°C to 40°C
42	Humidity Range	5%–90% Non-Condensing
43	Management Capability	CLI, SSH, Web, SNMPv3, REST API or higher
44	Out-of-Band Management	Dedicated Management Port or higher
45	Virtualization Support	EVPN-VXLAN Datacenter Fabric Ready or higher
46	Routing Capabilities	OSPF, BGP, IS-IS, Static Routing or higher
47	Multicast Capability	IGMP v1-3 & PIM Support or higher
48	Security	ACLs, RBAC, TACACS+/RADIUS Integration or higher
49	Automation	NETCONF, REST API, Ansible Playbooks or higher
50	Optical Modules	10/25GbE SR Multi-Mode Transceivers (All Required Modules Included) or higher
51	AOC Cables	25 × 25GbE AOC (30m) or higher
52	DAC Cables	3 × 100GbE QSFP DAC (5m) or higher
53	Fiber Patch Cords	All necessary OM3/OM4 patch cords supplied or higher
54	Copper Patch Cords	All necessary Cat6A/Cat7 patch cords supplied or higher
55	Server Connectivity	All cables needed for server 25GbE uplinks supplied or higher
56	Storage Connectivity	All cables needed for storage interconnect supplied or higher
57	Tape Library Connectivity	All cables needed for interconnect supplied or higher
58	WAF/ ALB Connectivity	All cables needed for interconnect supplied or higher
59	Firewall Connectivity	All cables required for firewall uplinks supplied or higher
60	Integration Requirement	Switch to be integrated and proven with servers, storage, firewall & aggregation and all other items in the stack or higher
61	Initialization Requirement	Vendor must configure routing, switching & uplinks or higher
62	License Activation	All feature licenses must be activated by vendor or higher
63	Make	Cisco, Arista or equivalent

EDGE ROUTER		
Ser	Item	Specifications
1	Device Type	Enterprise Edge Router for Small-Scale Data Center or higher
2	Deployment Role	Terminal / Edge Routing Device or higher
3	Uplink Interfaces	2 × 25GbE SFP28 ports and 2 × 10GbE SFP+ ports or higher
4	Downlink Interfaces	2 × 25GbE SFP28 ports and 2 × 10GbE SFP+ ports or higher
5	Additional Ethernet Ports	8 × 1GbE Ethernet ports (usable for uplink and downlink) or higher
6	Aggregate Throughput	≥ 25 Gbps line-rate forwarding or higher
7	Routing Type	Static and Dynamic Routing or higher
8	Supported Routing Protocols	Static, IS-IS, OSPF, BGP, RIP or higher
9	IPv4 / IPv6 Support	Full dual-stack IPv4 and IPv6 or higher
10	High Availability	Supports VRRP or equivalent gateway redundancy or higher
11	VLAN Support	IEEE 802.1Q VLANs and logical sub-interfaces or higher
12	Quality of Service	Traffic shaping, prioritization, and rate limiting or higher
13	Security Features	ACLs, route filtering, anti-spoofing, basic DoS protection or higher
14	Management Interfaces	CLI, Web GUI, SSH, SNMP or higher
15	Monitoring & Telemetry	Syslog, SNMP traps, NetFlow/IPFIX or higher
16	Power Supply	Dual hot-swappable redundant power supplies (1+1) or higher
17	Form Factor	1U / 2U rack-mountable or higher
18	Operating Environment	Data-center-grade operating conditions or higher
19	Installation Requirement	Vendor to perform complete installation, rack mounting, power and network cabling
20	WAN Termination	Vendor to terminate WAN/intranet links on the router using suitable connectors
21	Firewall Integration	Vendor to configure and validate router connectivity with firewalls
22	Optics & Connectors	All required SFP/SFP+/SFP28 modules, DACs, and connectors included or higher
23	Configuration Scope	Vendor to configure routing, VLANs, QoS, security, and management access
24	Testing & Handover	End-to-end testing, documentation, and configuration handover included
25	Warranty	2-year comprehensive hardware and software support
26	Make	Cisco, Juniper or equivalent
27	Performance Class	High-throughput enterprise routing platform or higher
28	Port Flexibility	Combination of 25GbE, 10GbE, and 1GbE interfaces or higher
29	Routing Flexibility	Supports advanced IGP and EGP routing including IS-IS or higher
30	Scalability	Supports future bandwidth and routing table growth or higher
31	Reliability	Designed for continuous 24×7 data center operation or higher

32	Power Resilience	Redundant dual PSU ensures uninterrupted operation or higher
33	Latency	Low-latency hardware-accelerated packet forwarding or higher
34	Interoperability	Compatible with multi-vendor switches, firewalls, and WAN handoffs or higher
35	Network Segmentation	Supports VLAN-based and logical segmentation or higher
36	Traffic Handling	Efficient handling of control, management, and data traffic or higher
37	Manageability	Centralized monitoring and remote management via NMS tools or higher
38	Maintainability	Front-access serviceable components and hot-swappable PSUs or higher
39	Energy Efficiency	Optimized power usage for sustained performance or higher
40	Security Posture	Secure routing with granular access control or higher
41	Deployment Suitability	Ideal as terminal edge router for small-scale data centers or higher

FIREWALL		
Ser	Item	Specifications
1	Firewall Type	Next-Generation Datacenter Firewall or higher
2	Form Factor	Rackmount Appliance or higher
3	25GbE Ports	4 × 25G SFP28 Slots or higher
4	10GbE Ports	4 × 10G SFP+ Slots or higher
5	1GbE RJ45 Ports	17 × GE RJ45 (1 MGMT + 16 Switch Ports) or higher
6	HA Port	1 × 2.5G High-Availability Port or higher
7	GE SFP Ports	8 × GE SFP Slots or higher
8	Hardware Acceleration	Dedicated SPU/Network Processor Acceleration or higher
9	Onboard Storage	2 × 480GB SSD or higher
10	Power Supply	Dual Redundant Hot-Swappable AC PSUs or higher
11	Threat Protection License	Advanced Threat Protection (IPS, Malware Protection, Application Control, Premium Support) or higher
12	10G SFP+ Transceivers	4 × SR SFP+ (300m MMF, LC) or higher
13	25G SFP28 Transceivers	4 × SR SFP28 (100m MMF, LC) or higher
14	Cabling Requirements	All cables, SFPs, and connectors included by vendor or higher
15	Inside/Outside Connectivity	Vendor must connect firewall to all required network zones
16	Routing Configuration	Vendor must configure routing flows from internal to external zones
17	Security Feature Setup	IPS/IDS, Application Control, Malware Protection, Threat Logging
18	Firewall Rule Creation	Vendor must build firewall rules based on datacenter requirements
19	Feature Demonstration	Vendor must demonstrate IPS, IDS, rule enforcement, policy behavior, and traffic flow
20	Documentation	Vendor must provide configuration documentation
21	Warranty	2-Year Hardware & Software Support
22	Installation Scope	Vendor must install & fully configure firewall
23	IPS Throughput	14 Gbps or higher
24	Threat Protection Throughput	10.5 Gbps or higher
25	NGFW Throughput	11.5 Gbps or higher
26	SSL Inspection Throughput	9 Gbps or higher
27	Concurrent Sessions	8 Million or higher
28	Make	Cisco, Fortinet, Palo Alto or equivalent
29	Total 25GbE Ports	4 × SFP28 25GbE or higher
30	Total 10GbE Ports	4 × SFP+ 10GbE or higher
31	Total GE RJ45 Ports	17 × 1GbE or higher
32	Management Port	1 × GE RJ45 (Dedicated) or higher
33	HA Capability	2.5Gb HA Port for Clustering/Redundancy or higher
34	SFP Slots	8 × GE SFP or higher
35	Hardware Acceleration Engines	Security Processing Units for IPS/Threat Offload or higher
36	Storage	480GB × 2 SSD or higher
37	Power Redundancy	Dual Redundant AC PSU or higher
38	Cooling	Intelligent Fan System with Thermal Protection or higher
39	Operating Temperature	0°C to 40°C or higher
40	Security Capabilities	IPS, IDS, Anti-Malware, App Control or higher
41	Throughput	High-speed hardware-accelerated inspection or higher
42	Firewall Management	Web UI, SSH/CLI, API or higher
43	Automation Support	API-driven configuration (vendor-neutral) or higher
44	Routing Protocols	Static, OSPF, BGP or higher
45	Failover	Active–Passive or Active–Active (Depending on configuration) or higher
46	IPS/IDS Features	Deep packet inspection, threat signatures, anomaly detection or higher
47	Logging & Monitoring	Centralized event logging, traffic inspection visibility or higher
48	Transceivers Included	4 × 10G SR SFP+ and 4 × 25G SR SFP28 or higher

49	Cabling Included	All required fiber patch cords and copper cables included or higher
50	Integration Requirement	Firewall must be connected to all inside/outside datacenter zones or higher
51	Policy Configuration	Vendor must create traffic rules per DC requirement or higher

OFC CABLE		
Ser	Item	Specifications
1	Cable Type	100G QSFP to QSFP Direct Attach Copper (DAC) Cable or higher
2	Data Rate	100 Gigabit Ethernet (100GbE) or higher
3	Connector Type	QSFP28 Male to QSFP28 Male or higher
4	Cable Length	5 meters or higher
5	Cable Material	Passive Twinax Copper or higher
6	AWG Rating	26–30 AWG (Vendor Neutral) or higher
7	Modulation Support	NRZ / PAM4 depending on port compatibility or higher
8	Power Consumption	< 0.1W (Passive) or higher
9	Bend Radius	Low bend radius, datacenter compliant or higher
10	EMI Shielding	Multi-layer shielding for low interference or higher
11	Jacket Material	LSZH or PVC (vendor neutral) or higher
12	Operating Temperature	0°C to 70°C or higher
13	Compliance	IEEE 802.3bj/802.3bm, SFF-8636, RoHS or higher
14	Testing	Factory tested for signal integrity & performance or higher
15	Use Case	High-speed switch-to-switch or device interconnect or higher
16	Warranty	2-Year Hardware Warranty
17	25G Fiber Optic Cables	40 × 25G Supported Fiber Optic Cable – 5 Meter or higher
18	100G QSFP Copper Cables	10 × 100G QSFP to QSFP Copper Cable – 5 Meter or higher
19	Make	FS.com, Amphenol or equivalent
20	Speed Support	100GbE (backward compatible with 40GbE depending on device) or higher
21	Latency	Ultra-low latency (sub-nanosecond) or higher
22	Signal Integrity	Enhanced shielding reduces crosstalk & noise or higher
23	Construction	Precision-matched impedance twinax copper or higher
24	Hot Swappable	Yes, in QSFP28-compatible ports or higher
25	Durability	≥100 insertion cycles or higher
26	Applications	Datacenter fabric, HPC, switch interconnects, storage connectivity or higher
27	Power Requirement	Passive—no external power needed or higher

28	Interoperability	QSFP28-compliant ports on switches, routers, NICs, HBAs or higher
29	Safety	RoHS compliant, halogen-free jacket available or higher
30	Reliability	High reliability for short-range high-speed links or higher
31	Vendor Responsibilities	Supply, label, install (if required), test cable performance or higher

SERVER		
Ser	Item	Specifications
1	Server Model	2U Rack-Optimized Compute Node or higher
2	Processor Type	64-Core x86 Server-Grade Processor or higher
3	Number of Processors	2 or higher
4	Processor Power Rating	350W Class
5	Memory Type	DDR5 ECC, minimum 6400 MT/s or higher
6	Memory Module Size	64GB Dual-Rank ECC DIMM or higher
7	CPU / vCPU Configuration	Minimum 128 physical CPU cores per server, vCPU:pCPU ratio of 1:2
8	Maximum Memory Supported	Minimum 2 TB or higher
9	Total Memory Modules	16 × 64GB DIMMs minimum, or equivalent configuration providing 1TB while meeting memory-speed requirements
10	Individual Drive Capacity	Minimum 3.84 TB per NVMe SSD.
11	Raw NVMe Capacity	Minimum 38.4 TB raw NVMe capacity per server.
12	Form Factor	2.5-inch hot-plug NVMe SSD form factor or equivalent server-supported form factor, with all 10 drives simultaneously installable.
13	Usable Capacity	The proposed configuration shall provide usable storage capacity for application/VM workloads after accounting for storage resiliency, HCI/system overhead, metadata and reserved capacity. Usable capacity shall be calculated without relying on deduplication or compression.
14	Deduplication / Compression	Deduplication and compression shall not be considered while calculating the specified usable storage capacity.
15	Storage Resiliency	Storage shall support enterprise-grade data resiliency against drive failure. The proposed HCI storage architecture shall use an appropriate RAID, replication, erasure coding or equivalent resiliency mechanism.
16	Fault Tolerance	The storage architecture shall tolerate failure of at least one NVMe SSD per server without data loss or interruption of service, subject to the proposed HCI architecture.
17	Performance	NVMe storage subsystem shall support 24×7 enterprise workloads without any reduction in the specified resiliency or usable capacity.
18	Hot-Plug/Replacement	All specified NVMe SSDs shall support hot-plug/hot-replacement, wherever supported by the server/HCI architecture, without requiring system shutdown.
19	Failure Indication	Individual NVMe drive failure/degradation shall generate hardware/HCI management alerts and provide clear identification of the affected drive.
20	SMART/Health Monitoring	NVMe SSD health, wear/endurance, temperature and failure status shall be monitorable through the server/HCI management platform.
21	Drive Cage Type	Hot-plug drive cage supporting the specified enterprise NVMe SSDs, with all 10 drives simultaneously installable.
22	Drive Cage Count	Drive cage configuration shall support minimum 10 NVMe SSDs per server simultaneously, without removal of the specified GPU or network adapters.
23	Primary PCIe Riser	PCIe riser configuration shall provide sufficient slots and PCIe lanes to simultaneously support the specified GPU and network adapters.
24	Secondary PCIe Riser	Additional PCIe riser shall be provided, wherever required, to accommodate the specified GPU, network adapters and NVMe subsystem without compromising required PCIe bandwidth.
25	NVMe Adapter	NVMe adapter/controller, where required by the proposed architecture, shall support all 10 specified NVMe SSDs simultaneously at their rated interface speed without becoming a storage performance bottleneck.
26	NVMe Adapter Count	NVMe adapter/controller configuration shall provide sufficient connectivity for all 10 NVMe SSDs simultaneously.
27	Storage Interface	NVMe over PCIe Gen4 or higher, with sufficient PCIe lanes and bandwidth to support all specified NVMe SSDs.
28	Drive Bay Capacity	Minimum 10 NVMe drive bays per server, with all bays populated with the specified NVMe drives while retaining the required GPU and network connectivity.
29	PCIe Architecture	PCIe Gen4 or higher, with sufficient PCIe lanes and bandwidth to simultaneously support the specified NVMe storage, GPU and 10/25GbE network adapters, without bandwidth limitation affecting the specified
30	Network Adapter	Minimum 2 × Quad-Port 10/25GbE SFP28 Ethernet adapters per HCI server, providing 8 × 10/25GbE ports
31	Network Port Count	Minimum 8 × 10/25GbE ports per server, all simultaneously usable
32	Network Speed	Each port shall support 10Gbps and 25Gbps Ethernet
33	Network Interface	SFP28
34	Aggregate Port Bandwidth	Up to 200 Gbps aggregate per server when all 8 ports operate at 25Gbps
35	Optical Transceivers	8 × dual-rate 10/25GbE SFP28 SR transceivers per server
36	Network Redundancy	NICs shall support NIC teaming/bonding and connectivity to redundant network switches
37	Network Connectivity	Vendor shall provide/configure all required NICs, transceivers, fibre patch cords and accessories

38	Link Validation	Vendor shall demonstrate successful 10/25Gbps link establishment and redundancy/failover
39	PCIe Requirement	PCIe architecture shall provide sufficient slots and lanes for all specified NVMe, GPU and network adapters simultaneously
40	Power Supply Quantity	2 of IEC C13–C14 10A 2m or higher
41	Management License	Advanced Out-of-Band Management Enabled
42	Cooling System	High-Performance Redundant Fan Kit or higher
43	Front Security	Front-Bezel Lock Assembly or higher
44	Front Panel	2U Bezel Assembly or higher
45	Security Settings	Common Password Policy Enabled or higher
46	Regulatory Configuration	CE Mark Removal (when applicable) or higher
47	Rack Rail System	Tool-Less Sliding Rail Kit or higher
48	Localization Settings	System Localization Pack or higher
49	Heat Sink Type	High-Performance CPU Cooling Unit or higher
50	Heat Sink Quantity	2 or higher
51	Balanced PCIe Layout	24-Bay SFF Balanced PCIe Configuration or higher
52	Boot Device	Minimum 2 × NVMe SSDs shall be configured as dedicated boot/OS devices in RAID 1 and shall be included within the total 10 NVMe SSDs specified per server.
53	Environmental Tracking	25°C Inlet Temperature Configuration or higher
54	HCI Software Enablement	Hyperconverged Software Pre-Enablement or higher
55	Virtualization Layer	Type-1 Bare-Metal Hypervisor (Vendor-Neutral) or higher
56	Virtualization License and Features Included	Live Migration, VM Snapshots, Cloning, High Availability (HA), VM Resource Scheduling or higher
57	Virtualization Licensing Scope	Vendor must provide installation and configuration of a fully functional cluster-capable hypervisor
58	Warranty	2-Year Hardware Support with Parts Replacement or higher
59	Installation Service	Rack-Mount & Initial Setup Service
60	Consumable Connectors	All connectors for initialization, network uplinks, and storage connectivity included or higher
61	Virtual Machine Initialization	Vendor must deploy and validate sample Windows and Linux virtual machines or higher
62	CPU Total Cores and Threads	128 Cores (2 × 64-Core) 256 Threads or higher
63	CPU Thermal Design Power	350W per Processor
64	Total Installed Memory	1 TB DDR5 ECC or higher
65	Memory Speed	6400 MT/s or higher
66	Cooling Architecture	Redundant High-Performance Fans or higher
67	Redundancy Features	Dual Hot-Plug Power Supply Redundant (1+1) and Cooling or higher
68	Operating Temperature Humidity	10°C to 35°C, 10%–90% Non-Condensing
69	Remote Management	Integrated Remote Management Controller or higher
70	Security Framework	Secure Boot, Firmware Validation, TPM Support or higher
71	HCI Platform Compatibility	Compatible with Major Hyperconverged Platforms or higher
72	Boot Architecture	NVMe-Based Boot Device (Hot-Plug) or higher
73	Rack Mounting	Tool-Less Sliding Rail System or higher
74	Hardware Lifecycle	2-Year Supported Lifecycle Warranty or higher
75	Hypervisor Type	Type-1 Bare-Metal Hypervisor (Vendor-Neutral) or higher
76	Hypervisor Capabilities	Supports HA, Live Migration, Resource Scheduling, VM Cloning, Snapshots or higher
77	Hypervisor Management	Centralized cluster management dashboard required or higher
78	VM Deployment Requirement	Vendor must deploy functional Windows and Linux virtual machines or higher
79	Connectivity Materials	All consumable network and storage connectors supplied or higher
80	Network Initialization Requirement	Vendor must establish full network connectivity and validate link integrity or higher
81	NVMe Disk Count	10 × 3.84TB NVMe or higher
82	Power Supply	Dual Hot-Plug Redundant (1+1), 1400W Mixed Mode or higher
83	Make	HP / Dell / Lenovo or eq

SERVER RACK 42U		
Ser	Item	Specifications
1	Rack Type	42U Standard Floor-Standing Server Rack or higher
2	Construction	Heavy-duty steel welded/bolted structure or higher
3	Load Capacity	Static ≥ 1000 kg or higher
4	Rails	Adjustable 19" EIA standard mounting rails (front & rear) or higher
5	Front Door	Perforated mesh door with key lock or higher
6	Rear Door	Perforated, lockable or higher
7	Side Panels	Removable, lockable or higher
8	Airflow Design	Optimized front-to-rear ventilation or higher
9	Cable Management	Vertical channels + horizontal organizers or higher
10	Internal Lighting	Automatic LED lighting triggered via door sensor or higher
11	Lighting Power	Low-power LED illumination strip or higher
12	PDUs Included	Dual Intelligent PDUs (redundant power feeds) or higher
13	PDU Socket Mix	20 $\times$ IEC C13 + 4 $\times$ IEC C19 per PDU or higher
14	PDU Protection	Load metering, surge protection, circuit breaker or higher
15	KVM Console	Integrated 17–19" sliding rack-mount LCD console or higher
16	KVM Input Devices	Built-in keyboard & touchpad or higher
17	KVM Port Count	Minimum 8/16-port KVM switch or higher
18	KVM Switching	On-screen display + hotkey switching or higher
19	KVM Connectivity	Supports USB/PS2 server input ports or higher
20	KVM Cabling	All KVM cables for servers, iLOs & switches included or higher
21	Mounting Hardware	All cage nuts, screws, rails, grounding kit included or higher
22	Grounding	Integrated grounding points or higher
23	Warranty	2-Year Hardware Warranty
24	Documentation	Rack elevation & wiring diagrams included
25	Vendor Scope – Connectivity	Vendor must connect all servers, iLO ports, and switch consoles to the KVM
26	Vendor Scope – Demonstration	Vendor must demonstrate KVM switching, BIOS/OS access, console access, lighting & PDU functionality
27	Vendor Scope – Installation	Full installation, labeling, cabling, testing & documentation provided by vendor
28	Temperature Sensor	Integrated rack temperature sensor or higher
29	Humidity Sensor	Integrated rack humidity sensor or higher
30	Cooling Responsibility	Room air conditioning provided externally or higher
31	Make	APC, Vertiv or equivalent
32	Rack Height	42U usable mounting height or higher
33	Rack Depth	Suitable for deep servers (900–1200mm) or higher
34	Material	High-strength steel or higher
35	Airflow	High perforation for thermal efficiency or higher
36	PDU Mounting	Zero-U vertical mounted PDUs or higher
37	PDU Features	Metering, surge protection, breaker safety or higher
38	Lighting Type	Door-triggered LED lighting or higher
39	KVM Display	17–19" LCD with sliding rail mechanism or higher
40	KVM Rack Space	Occupies 1U–2U depending on model or higher
41	KVM Switching Function	Multi-server switching via OSD & hotkeys or higher
42	KVM Support	Supports server, iLO, and switch console connectivity or higher
43	Cable Routing	Brush panels + vertical cable management or higher
44	Security	Front/rear door locks, side panel locks or higher
45	Maintenance	Removable panels & sliding KVM rails or higher
46	Power Input	Dual power feed (A/B) redundancy supported or higher
47	Vendor Responsibilities	Install, cable, label, test & demonstrate all rack, PDU, KVM functions

SERVER SYSTEM MANAGER		
Ser	Item	Specifications
1	Product Type	Integrated Server System Manager Suite (On-Premise) or higher
2	Components Included	Server Security, NMS, APM, Service Desk or higher
3	Deployment Mode	On-Premise / Virtual Appliance or higher
4	Supported Platforms	Windows, Linux, Virtualization Platforms or higher
5	Integration Capability	Integrates with AD, servers, switches, firewalls, storage, backup systems or higher
6	Reporting	Automated & on-demand reporting for security, network, apps, and ITSM or higher
7	Dashboards	Custom dashboards for all modules or higher
8	Documentation	Full configuration & operational documentation
9	Warranty	2-Year Software Support & Updates
10	Vendor Scope	Install, configure, integrate, discover devices, create dashboards, demonstrate full functionality
11	Server Security – Coverage	Minimum 50 servers or higher
12	Server Security – Capabilities	IPS, Integrity Monitoring, ML-based Detection, Application Control or higher
13	Server Security – Logging	Centralized event logging or higher
14	Server Security – Forensics	Threat investigation & event correlation or higher
15	Server Security – License	Full suite license for 50 servers or higher
16	NMS – Server Coverage	Minimum 50 servers or higher
17	NMS – Network Element Coverage	Minimum 50 switches/firewalls/network devices or higher
18	NMS – Endpoint Coverage	500 computers or higher
19	NMS – Features	Fault monitoring, discovery, performance analysis, dashboards or higher
20	NMS – Alerts	Threshold, event-based, performance alerts or higher
21	NMS – License	License covering required servers, network devices & endpoints or higher
22	APM – Application Coverage	Minimum 50 core applications or higher
23	APM – Application Types	Web apps, databases, APIs, Windows/Linux services or higher
24	APM – Capabilities	Transaction tracing, dependency mapping, SLA tracking or higher
25	APM – License	License for 50 applications or higher
26	Service Desk – User Capacity	At least 100,000 users or higher
27	Service Desk – Authentication	Active Directory Single Sign-On (SSO) or higher
28	Service Desk – ITSM Modules	Incident, Problem, Change, Release, Asset Management or higher
29	Service Desk – RBAC	Full role-based access control or higher
30	Service Desk – Escalation Matrix	Customizable multi-level escalation workflows or higher
31	Service Desk – License	Enterprise license for 100,000+ users or higher
32	Vendor – Installation Scope	Full installation, configuration, and integration
33	Vendor – Device Discovery	Discover 50 servers, 50 network devices, 500 endpoints
34	Vendor – Application Discovery	Discover and configure monitoring for 50 applications
35	Vendor – Dashboard Creation	Create dashboards for NMS, APM, Security, ITSM
36	Vendor – Demonstration Scope	Demonstrate security triggers, performance analytics, network monitoring, ITSM flows, backup/recovery with tape library
37	Make	ManageEngine, SolarWinds or equivalent
38	Deployment	On-Premise or Virtual Appliance or higher
39	Scalability	Supports expansion of endpoints, devices, applications or higher
40	Integration	Integrates with AD, firewalls, servers, switches, backup/tape library systems or higher
41	Security Monitoring	ML-based detection, IPS, integrity monitoring or higher
42	Network Monitoring Depth	L2 to L7 metrics, topology mapping or higher
43	Application Monitoring Depth	End-to-end tracing across multi-tier apps or higher
44	Automation	Automated workflows, alerts, and escalations or higher
45	API Support	REST APIs for external integration or higher
46	SLA Monitoring	Available for network, apps, and service desk or higher
47	Data Retention	Configurable for logs, metrics, tickets or higher
48	High Availability	Supports HA deployment (optional/licensed) or higher
49	User Access Control	RBAC with AD integration or higher
50	Backup & Recovery	Supports tape library integration via vendor configuration or higher
51	Vendor Responsibilities	Install, configure, integrate, demonstrate all modules

SERVER WITH GPU		
Ser	Item	Specifications
1	Server Model	2U Rack-Optimized Compute Node or higher
2	Processor Type	64-Core x86 Server-Grade Processor or higher
3	Number of Processors	2 or higher
4	Processor Power Rating	350W Class
5	Memory Type	DDR5 ECC, minimum 6400 MT/s or higher
6	Memory Module Size	64GB Dual-Rank ECC DIMM or higher
7	Total Memory Modules	16 × 64GB DIMMs minimum, or equivalent configuration providing 1TB while meeting memory-speed requirements
8	CPU / vCPU Configuration	Minimum 128 physical CPU cores per server, vCPU:pCPU ratio of 1:2
9	Storage Type	Enterprise/Data-Centre class NVMe SSD
10	NVMe Quantity	Minimum 10 × NVMe SSD per server, all simultaneously usable.
11	Individual Drive Capacity	Minimum 3.84 TB per NVMe SSD.
12	Raw NVMe Capacity	Minimum 38.4 TB raw NVMe capacity per server.
13	Form Factor	2.5-inch hot-plug NVMe SSD form factor or equivalent server-supported form factor, with all 10 drives simultaneously installable.
14	Usable Capacity	The proposed configuration shall provide usable storage capacity for application/VM workloads after accounting for storage resiliency, HCI/system overhead, metadata and reserved capacity. Usable capacity shall be calculated without relying on deduplication or compression.
15	Deduplication / Compression	Deduplication and compression shall not be considered while calculating the specified usable storage capacity.
16	Storage Resiliency	Storage shall support enterprise-grade data resiliency against drive failure. The proposed HCI storage architecture shall use an appropriate RAID, replication, erasure coding or equivalent resiliency mechanism.
17	Fault Tolerance	The storage architecture shall tolerate failure of at least one NVMe SSD per server without data loss or interruption of service, subject to the proposed HCI architecture.
18	Performance	NVMe storage subsystem shall support 24×7 enterprise workloads without any reduction in the specified resiliency or usable capacity.
19	Hot-Plug/Replacement	All specified NVMe SSDs shall support hot-plug/hot-replacement, wherever supported by the server/HCI architecture, without requiring system shutdown.
20	Failure Indication	Individual NVMe drive failure/degradation shall generate hardware/HCI management alerts and provide clear identification of the affected drive.
21	SMART/Health Monitoring	NVMe SSD health, wear/endurance, temperature and failure status shall be monitorable through the server/HCI management platform.
22	Drive Cage Type	Hot-plug drive cage supporting the specified enterprise NVMe SSDs, with all 10 drives simultaneously installable.
23	Drive Cage Count	Drive cage configuration shall support minimum 10 NVMe SSDs per server simultaneously, without removal of the specified GPU or network adapters.
24	Primary PCIe Riser	PCIe riser configuration shall provide sufficient slots and PCIe lanes to simultaneously support the specified GPU and network adapters.
25	Secondary PCIe Riser	Additional PCIe riser shall be provided, wherever required, to accommodate the specified GPU, network adapters and NVMe subsystem without compromising required PCIe bandwidth.
26	NVMe Adapter	NVMe adapter/controller, where required by the proposed architecture, shall support all 10 specified NVMe SSDs simultaneously at their rated interface speed without becoming a storage performance bottleneck.
27	NVMe Adapter Count	NVMe adapter/controller configuration shall provide sufficient connectivity for all 10 NVMe SSDs simultaneously.
28	Storage Interface	NVMe over PCIe Gen4 or higher, with sufficient PCIe lanes and bandwidth to support all specified NVMe SSDs.
29	Drive Bay Capacity	Minimum 10 NVMe drive bays per server, with all bays populated with the specified NVMe drives while retaining the required GPU and network connectivity.
30	PCIe Architecture	PCIe Gen4 or higher, with sufficient PCIe lanes and bandwidth to simultaneously support the specified NVMe storage, GPU and 10/25GbE network adapters, without bandwidth limitation affecting the specified
31	Network Adapter	Minimum 2 × Quad-Port 10/25GbE SFP28 Ethernet adapters per HCI server, providing 8 × 10/25GbE ports
32	Network Port Count	Minimum 8 × 10/25GbE ports per server, all simultaneously usable
33	Network Speed	Each port shall support 10Gbps and 25Gbps Ethernet
34	Network Interface	SFP28
35	Aggregate Port Bandwidth	Up to 200 Gbps aggregate per server when all 8 ports operate at 25Gbps

36	Optical Transceivers	8 × dual-rate 10/25GbE SFP28 SR transceivers per server
37	Network Redundancy	NICs shall support NIC teaming/bonding and connectivity to redundant network switches
38	Network Connectivity	Vendor shall provide/configure all required NICs, transceivers, fibre patch cords and accessories
39	Network Setup	Vendor shall configure and validate all network interfaces, uplinks, VLANs and link redundancy
40	Link Validation	Vendor shall demonstrate successful 10/25Gbps link establishment and redundancy/failover
41	PCIe Requirement	PCIe architecture shall provide sufficient slots and lanes for all specified NVMe, GPU and network adapters simultaneously
42	Power Supply Quantity	2 or higher
43	Power Cords	IEC C13–C14 10A 2m or higher
44	Management License	Advanced Out-of-Band Management Enabled
45	Cooling System	High-Performance Redundant Fan Kit or higher
46	Front Security	Front-Bezel Lock Assembly or higher
47	Front Panel	2U Bezel Assembly or higher
48	Security Settings	Common Password Policy Enabled or higher
49	Regulatory Configuration	CE Mark Removal (when applicable) or higher
50	Rack Rail System	Tool-Less Sliding Rail Kit or higher
51	Heat Sink Type	Two High-Performance CPU Cooling Unit or higher
52	Balanced PCIe Layout	24-Bay SFF Balanced PCIe Configuration or higher
53	Boot Device	Minimum 2 × NVMe SSDs shall be configured as dedicated boot/OS devices in RAID 1 and shall be included within the total 10 NVMe SSDs specified per server.
54	Environmental Tracking	25°C Inlet Temperature Configuration or higher
55	HCI Software Enablement	Hyperconverged Software Pre-Enablement or higher
56	Virtualization Layer	Type-1 Bare-Metal Hypervisor (Vendor-Neutral) or higher
57	Virtualization Features Included	Live Migration, VM Snapshots, Cloning, High Availability (HA), VM Resource Scheduling or higher
58	Virtualization Licensing Scope	Vendor must provide installation and configuration of a fully functional cluster-capable hypervisor
59	Warranty	2-Year Hardware Support with Parts Replacement or higher
60	Installation Service	Rack-Mount & Initial Setup Service
61	Consumable Connectors	All connectors for initialization, network uplinks, and storage connectivity included or higher
62	Virtual Machine Initialization	Vendor must deploy and validate sample Windows and Linux virtual machines or higher
63	CPU Total Cores	128 Cores (2 × 64-Core) or higher
64	CPU Threads	256 Threads or higher
65	CPU Thermal Design Power	350W per Processor
66	Total Installed Memory	1 TB DDR5 ECC or higher
67	Memory Speed	6400 MT/s or higher
68	Maximum Memory Supported	Minimum 2 TB or higher
69	System Form Factor	2U Rackmount or higher
70	Cooling Architecture and Acoustic	Redundant High-Performance Fans, 7–9 Bel (Typical Operation) or higher
71	Redundancy Features	Dual Hot-Plug Power Supply Redundant (1+1) and Cooling or higher
72	Operating Temperature and Humidity	10°C to 35°C, 10%–90% Non-Condensing
73	Remote Management	Integrated Remote Management Controller or higher
74	Security Framework	Secure Boot, Firmware Validation, TPM Support or higher
75	HCI Platform Compatibility	Compatible with Major Hyperconverged Platforms or higher
76	Boot Architecture	NVMe-Based Boot Device (Hot-Plug) or higher
77	Rack Mounting	Tool-Less Sliding Rail System or higher
78	Switch Compatibility	Compatible with Data Centre Grade Switch
79	Hypervisor Type	Type-1 Bare-Metal Hypervisor (Vendor-Neutral) or higher
80	Hypervisor Capabilities	Supports HA, Live Migration, Resource Scheduling, VM Cloning, Snapshots, Centralized cluster management dashboard required or higher or higher
81	VM Deployment Requirement	Vendor must deploy functional Windows and Linux virtual machines or higher
82	Connectivity Materials	All consumable network and storage connectors supplied or higher
83	Power Supply	Dual hot-plug power supply units, 1+1 redundant configuration, 1400W each , mixed-mode, with independent power input and hot-swappable capability.
84	Make	HP / Dell / Lenovo or eq
85	GPU Configuration	Data Center-Class PCIe GPU Accelerator equivalent to NVIDIA L40S or higher
86	GPU Architecture	Modern Data Center GPU Architecture optimized for AI/ML and Graphics workloads or higher

87	GPU Memory and Bandwidth	≥48 GB GDDR6 GPU Memory and Bandwidth ≥864 GB/s or higher
88	GPU Form Factor	Full-Height Full-Length PCIe GPU or higher
89	GPU Interface	PCIe Gen4 x16 or higher
90	GPU Power Consumption	≤350W TDP
91	GPU Quantity Supported	Minimum 1 GPU per server or higher
92	GPU Software Support	CUDA-equivalent, OpenCL, Vulkan, DirectX support or higher

SCHEDULE OF REQUIREMENTS (SoR)
UPGRADATION OF HARDWARE FOR IPADS V2.0

Ser.	Particulars	Details
1.	Scope of supply and, also, end-use of the required goods/ services.	Upgradation of Hardware for IPADS V2.0
2.	All essential technical, qualitative, functional, environmental and performance characteristics and requirements.	Included in TCM
3.	Drawings.	NA
4.	Requirement of the BIS mark, where applicable, mentioning all parameters where such a specification provides options.	NA
5.	Requirement of an advance sample, if any, at the post-contract stage before bulk production.	Nil
6.	Special requirements of preservation, packing and marking, if any.	Nil
7.	Inspection procedure for goods/ services ordered and criteria of conformity.	Nil
8.	Requirements of special tests or type test certificate or type approval for compliance of statutory requirements with reference to pollution, emission, noise, if any.	NA

Ser.	Particulars	Details
9.	Other additional work and/ or related services required to achieve full delivery/ completion, installation, commissioning, training, technical support, after-sales service and Annual Maintenance Contract (AMC) requirements, if any.	Supply of hardware items, inclusive of transportation, Installation, setup and commissioning. All the items supplied shall be fully compatible with each other and shall be supplied, configured and integrated to operate at their full intended performance and functional potential. Any changes required in port allocation, port configuration, interfaces, protocols, firmware, software or other configuration parameters to establish such compatibility, interoperability, and full potential shall be identified, implemented and tested by the vendor at no additional cost.
10.	Support requirements.	Two years from date of installation/ acceptance of products by Buyer whichever is later. All patches of firmware/ supplied software released have to be installed by the vendor as and when released by OEM.
11.	Qualification criteria of the bidders, if any.	Past experience – At least three years of supplying similar products. Annual turnover for last three FY – At least Rs. 3.6 Cr. Certificate of Malicious Code Free Design. Products supplied not to be Made in China. Mandatory submission of Manufacturing Authorisation Certificate from OEM. PBG – Mandatory to submit PBG valid till two months post expiry of Warranty period.
12.	Any other aspects peculiar to the goods/ services in question, such as shelf life of the equipment, and so on.	Evaluation of Bids – Composite L1. Delivery Period – 120 days for delivery of items, Installation, configuration, commissioning, and user acceptance of equipment at Data Centre, Naval Pay Office, Shahid Bhagat Singh Road, Mumbai- 400023.

Ser.	Particulars	Details
		Products delivered to be the latest available version in the Market. Bidder / OEM has to give an undertaking that after expiry of warranty period, it will provide Comprehensive Maintenance Service for next 5 years for the offered products at the rate not more than % of contract price per annum. Buyer reserves the right to enter into a CMC agreement with the Successful Bidder / OEM after expiry of the Warranty period at above mentioned rate and the payment for the CMC charges would be made Quarterly after rendering of the CMC Services of the relevant CMC period. Performance Security of the successful bidder shall be forfeited if it fails to accept the CMC contract when called upon by the buyer. CMC would include cost of Not more than the specified percent. The original Performance Security of contract will be returned only after submission and verification of AMC Performance Security for 10% of total CMC value valid up to CMC period plus 2 months (if there is no other claim). Acceptable Down time – Max 0.1 Percent. The firm has to supply High end server products from reputed brands like Dell, HP, IBM, Nutanix etc. All items to be compliant to TCM. Payment Terms and conditions – 100 percent payment on installation and commissioning at Data Centre, Naval Pay Office, Shahid Bhagat Singh Road, Mumbai- 400023. Support – Firm to provide 24*7 support during Warranty. Seller Response time

Ser.	Particulars	Details
		to be less than 24 hours on receipt of any compliant. In case of downtime exceeding 30 days, firm to undertake repair by replacement.