H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD. (A Unit of H.P. Government Undertaking)



e-Tender

for

Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets

E-Tender No: SEDC/Server-Workstation/2K22-1109

H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD., 1st FLOOR, I.T BHAWAN, MEHLI, SHIMLA-171013, H.P. Tel. Nos.: 0177-2623259, 2623043, 2623513 (Telefax): 0177-2626320. Email: hpsedc@hpsedc.in

Website: www.hpsedc.in, tender document can also be downloaded from https://hptenders.gov.in

06-05-2022

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SECTION-1

INVITATION FOR E-BIDS

E-TENDER NO: SEDC/Server-Workstation/2K22-1109

Note: The Press e-Tender Notice published on 06/05/2022 in following daily Newspapers for inviting e-Tenders for Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets during warranty period and post warranty period. In case there is any decrease/ increase in prices, HPSEDC may asked the bidders to submit revised quotes in sealed envelopes. The rates finalised in this tender will be considered for General Rate Contract of equipment and will be valid for three years. The tender notice will be published in the following new papers.

- 1. Amar Ujala (Chandigarh/ Delhi Edition)
- 2. Indian Express (Chandigarh/ Delhi Edition)

The detailed e-Tender document contained in following sections has been prepared to elaborate all techno-commercial conditions of this tender. In case of any discrepancy between the Press Advertisement and detailed provisions of this Tender Document, the latter will prevail. For any further changes (if any, based on feedback/ queries from any quarter and pre-bid meeting) in this tender document, please see its updated version/corrigendum on www.hpsedc.in and https://hptenders.gov.in.

A) e-Tenders are invited by the undersigned from eligible bidders, i.e., Original Equipment Manufacturers (O.E.M.)/ Principal National Distributors/ Country Channel Partners in India (in case of imported equipment)/ Large Scale Systems Integrator duly authorised by the manufacturer for these Hardware Equipment as per technical specifications in Annexure-I and providing after sale support during warranty period.

Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets GIST OF IMPORTANT GENERAL CONDITIONS

- 1) The tender has been floated for Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets as per specifications mentioned in Annexure- "I'. The rate will be finalised for all the components involved in the specified hardware, where the bidder has quoted lowest (L1) rate, for individual items mentioned in the tender i.e., L1 bidder shall be determined based on the item wise lowest rates. Only L1 rates will be conveyed and accordingly purchase orders would be placed for only L1 bidder's rates for each item. However, since the equipment is to be procured and supplied so reasonability of the rates would be ascertained by the tender committee w.r.t. other tenders/ rate contracts in the market. Bidders have to ensure that the rates quoted for this tender/ rate contract are better (or at least equal) than the rates in other rate contracts/ government supplies or open market anywhere else in the country.
- 2)The rates, as discovered through this RFP, shall be considered for Rate Contract, valid for three years. The terms and conditions of the Rate Contract shall be same as per this tender document.
- 3)After finalizing the L1 rates, the work order will be placed to L1 bidder for the quantity mentioned in this RFP and only L2 bidder may be given opportunity to match the prices of L1 bidder if variation of rate will be 10% of L1 bidder, if tender committee deems fit to ensure healthy competition and timely supply of hardware. Therefore, bidders are advised to quote their best rates.
- 4) Unless otherwise specified for a part of the order, the supplies should be completed within 6-8 weeks from the date of placing the supply order except for snowbound/ tribal areas, where delivery can be made within 8-10 weeks. Delivery is to be made FOR destination and Installation has to be completed within 1 week after supply of material. In Remote and snowbound areas delivery may be done at nearest district head quarter, in case the area is cut-off for the time being. The Managing Director, HPSEDC reserves the right to extend the delivery period based on the request of the supplier, wherever required.
- 5) The committee reserves the right to negotiate the rates with L1 bidder to bring them to a reasonable level based on the best prices offered by other bidders and current market rates.
- 6) If the bidder quotes/ reduces, its price to render similar goods, works or services at a price lower than any tender/ rate contract price to anyone in the Country at any time during the currency of this tender, the price shall be automatically reduced with effect from the date of reducing or quoting lower price, for all delivery of the subject matter of procurement under this tender shall be amended, accordingly. The tender holder shall furnish the certificate to H.P. State Electronics Development Corporation Ltd.

the HPSEDC that the provisions of this clause have been complied with in respect of supplies made or billed for upto the date of this certificate. On the conclusion of the tender the successful bidder shall furnish a certificate that the provision of this clause has been complied with during the period of tender/ rate contract.

7) Any prospective bidder can procure the Tender Document from the "H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD., FIRST FLOOR, I.T. BHAWAN, MEHLI, SHIMLA-171013, (H.P)". Tender can also be downloaded from website http://www.hpsedc.in and https://hptender.gov.in.

The tender document will be available on all working days upto last date of bids submission on payment of Rs.5000/- (Rupees Five Thousand only) non-refundable, by demand draft/ RTGS in favour of "HP State Electronics Development Corporation Ltd., Shimla" payable at Shimla. If the tender document is downloaded from the website, the tender fee will have to be deposited along with the bid as a separate bank draft. E-tenders will be uploaded on HP Government e-Procurement portal https://hptenders.gov.in as well on HPSEDC website <u>www.hpsedc.in</u>. Interested bidder can participate by procuring tender.

3.) SCHEDULE OF THE TENDER PROCESS:

S. No.	Information	Details		
1.	RFP No. and Date	No: SEDC/Server-Workstation/2K22-1109		
		Date: 06/05/2022		
2.	Price of Tender Document	Rs 5,000/-		
3.	Earnest Money Deposit	Rs 2,00,000/-		
4.	Bid validity period	120 days from the last date (deadline) for submission		
		of e-Tenders.		
5.	Pre-Bid Meeting	Pre-Bid meeting will also be held on 13/05/2022 at		
		11:30AM through video conference.		
		Video Conferencing link is as under:		
		https://meet.google.com/jih-bnxk-jfm		
6.	Bid submission start date	20/05/2022 (11:00 AM)		
7.	Bid submission End date	26/05/2022 (02:30 PM)		
8.	Opening of e-Tenders Bids	27/05/2022 (02:30 PM)		
9.	Tender Download Site	www.hpsedc.in & https://hptenders.gov.in		
10.	Venue	H.P. State Electronics Development Corporation Ltd.,		
		1 st Floor, I.T. Bhawan, Mehli, Shimla-171013, H.P.		

<u>Note:</u> In case Price of Tender document and EMD will be deposited through RTGS, kindly select DD & fill RTGS No. in available columns on e-Procurement Portal and upload the copy of RTGS receipt.

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- *(i)* Eligibility-cum-Technical Bids shall be opened initially, and eligibility documents will be evaluated.
- (*ii*) Thereafter Technical Bids of Eligible Bidders shall be evaluated.
- (iii) Commercial Bids of Eligible and Technically qualified bidders will be opened thereafter.

** Any corrigendum, modifications, changes related to this tender before the day of bid submission shall be notified on website www.hpsedc.in or https://hptenders.gov.in only.

4) Notwithstanding anything else contained to the contrary in this Tender Document, the Managing Director, H.P. State Electronics Development Corporation Ltd., Shimla reserves the right to cancel/withdraw/ modify fully or partially the "Invitation for Bids" or to reject one or more of the bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.

5) INSTRUCTIONS TO BIDDERS FOR ELECTRONIC TENDERING SYSTEM

5.1 Registration of bidders on e-Procurement Portal: -

All the bidders intending to participate in the tender processed online are required to get registered on the centralized e - Procurement Portal i.e., https://www.hptenders.gov.in. Please visit this website for more details. In case of any problem in registration, please contact on toll free No. 1800-3070-2232, (Mob)

5.2 Obtaining a Digital Certificate:

- 5.2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.
- 5.2.2 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from:
- 5.2.3 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during of bid preparation stage. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system, or any other problem) he will not be able to submit the bid online. Hence, the users are advised to keep a backup of the certificate and keep the copies at safe place under proper security (for its use in case of emergencies).
- 5.2.4 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no objection certificate/power of attorney /lawful authorization to that User. The firm must authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000.

Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the company/firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.

- 5.2.5 In case of any change in the authorization, it shall be the responsibility of management/ partners of the company/firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.
- 5.2.6 The same procedure holds true for the authorized users in a private/public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.
- 5.2.7 Pre-requisites for online bidding:

In order to bid online on the portal https://www.hptenders.gov.in, the user machine must be updated with the latest Java & DC setup. The link for downloading latest java applet & DC setup is available on the Home page of the e-tendering Portal.

5.3 Online Viewing of Detailed Notice Inviting Tenders (N.I.T.):

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal e-Procurement system on the Home Page at https://www.hptenders.gov.in

5.4 Download of Tender Documents:

The tender documents can be downloaded free of cost from the e-Procurement portal https://www.hptenders.gov.in and www.hpsedc.gov.in.

5.5 Key Dates:

The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

5.6 Bid Preparation (Qualification & Financial)

- 5.6.1 Payment of Tender Document Fee & EMD of online Bids: The payment for Tender document fee and EMD can be made as mentioned in Section 3, at Sr. No. 1 and 2 of the Table.
- 5.6.2 The bidders shall upload their eligibility and technical offer containing documents, qualifying criteria, technical specifications, schedule of deliveries, and all other terms and conditions except the rates (price bid).
- 5.6.3 The bidders shall quote the prices in price bid format only.

- 5.6.4 If bidder fails to complete the Online Bid Preparation at Submission stage on the stipulated date and time, his/hers bid will be considered as bid not submitted and hence not appear during tender opening stage.
- 5.6.5 Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal https://www.hptenders.gov.in.
- 5.6.6 For help manual please refer to the 'Home Page' of the e-Procurement website athttps://www.hptenders.gov.in., and click on the available link 'How to ...?' to download the file.
- 5.6.7 Post registration, bidder shall proceed for bidding by using both his digital certificates (one each for encryption and signing). Bidder shall proceed to select the tender he is interested in.

NB: Any changes/corrigendum/revised tender related to this Tender Document will be published on our website www.hpsedc.in and https://hptenders.gov.in. Therefore, prospective bidders are requested to see the updates on these websites regularly.

SECTION 2

INSTRUCTIONS TO BIDDERS A- INTRODUCTION

2.1.Eligible Bidders

Sr. No.	Pre- Qualification Criteria	Required details to be accompanying the Bid
1.	The bidder should be registered under the Indian Companies Act, 1956/ 2013 or Proprietor's firm/ Partnership Firms (LLP) registered under LLP Act 2008 or subsequent amendments.	document Memorandum of Association (MoA), Articles of Association (AoA) of bidder and detailed profile of the Company/ Firm/ Government License and COI, GSTN, PAN for proprietors/ bidder
2.	 (i) Tender Document Fee in favour of Managing Director, H.P. State Electronics Development Corporation, I.T. Bhawan, Mehli, Shimla-13. (ii) Earnest Money Deposit (EMD) in the shape of Demand Draft/ RTGS valid for 180 days in favour of Managing Director, H.P. State Electronics Development Corporation, I.T. Bhawan, Mehli, Shimla-13. 	 (i) Demand Draft (DD)/ RTGS of Rs. 5000/- (Rupees Five Thousand only) (ii) Earnest Money (Rs. 2,00,000) Deposit (EMD) as mentioned in clause 2.10 DD / EMD may be submitted through RTGS in HPSEDC A/c : A/C No. 050010200006521, IFS Code: UTIB0000050, Axis Bank, SDA Complex, Shimla-9, HP.) Receipt/Copy of the demand draft/RTGS should be uploaded.
3.	The Bidder should have a valid GST Number, PAN Number	Relevant Registration Certificates (copies to be enclosed)
4.	A Bidder should be Original Equipment Manufacturer (OEM) or Authorised Principal National Distributor/ Regional Distributor/ Authorized Reseller/ Importer/ large Scale system integrator duly authorised by the OEM (Original Equipment Manufacturer) of the required equipments respectively. It will, however be, preferred that the Original Equipment Manufacturers (O.E.M.) quotes directly.	Authorization letter from OEM in format given at Performa-A in case OEM not bidding directly.
5.	The annual turnover (in terms of sales of hardware of similar nature as that of items listed in the RFP in India) of the OEM whose equipment are sought to be supplied,	

	should be at least Rs. 500 Crores per annum for the last 3 years, i.e., for year 2018-19, 2019-20 and 2020-21.	Audited Balance sheets from company Statutory Auditor/ CA from OEM & financial data of the last three years
6.	The Bidder should have an average annual turnover of at least Rs. 3 Crores during last three financial years from similar activities, i.e., should have supplied	
	hardware equipment and items similar to those listed in this RFP, from India Operations i.e., for year 2018-19, 2019-20 and 2020-21.	Audited Balance sheets from company Statutory Auditor/ CA from OEM & financial data of the last three years
7.	The Bidder or its OEM {themselves or through re- seller(s)} should have at least 3 years of experience in supply and maintenance of such hardware in Government/Semi Govt. / PSUs/ Autonomous bodies of Central/ State Govt. /Corporate sector.	Certificates from client regarding satisfactory supply and maintenance/ purchase orders. In case of non- disclosure agreement, confirmation regarding size and value of the project may be submitted from the client.
8.	A Bidder quoting for these items, each item must have supplied /installed Minimum 100 Nos similar equipment by the OEM/ Bidder during the last three years in Government/Semi Govt. / PSUs/ Autonomous bodies of Central/ State Govt. /Corporate sector.	Certificates from client regarding satisfactory supply and maintenance/ purchase orders. In case of non- disclosure agreement, confirmation regarding size and value of the project may be submitted from the client.
9.	The bidder should either have positive Net worth in last three years or should be a profit-making Company/ firm in any two years during the immediately preceding last	CA certificate for turnover as mentioned in the criteria.
	3 financial years as per audited balance sheets.	Audited Balance sheets from company Statutory Auditor/ CA from OEM & financial data of the last three years
10.	OEM should have presence in INDIA for more than 10 years	Supporting documents such as Company registration certificate etc.
11.	OEM Toll Free Technical Assistance Centre should be available 24X7, without any holidays. The bidder and OEM should have its own website having product related information (for OEM) and support related information (for both bidder and OEM).	Contact information and availability hour's details.
12.	The Bidder should not have been declared ineligible at the time of bid submission and at the time of placing of supply order due to corrupt and fraudulent practices with any of the departments of the Central, State Governments Deptt. and PSUs of Central/ State Govt.	Certificate from the authorized signatory prescribed in Form-E.

13.	The bidder should have submitted the declaration of acceptance of terms and conditions of this RFP as per FORM B	
14.	The Bidder should already have reasonable support base in this region. The Purchaser's discretion regarding reasonableness of support base shall be final. It is clarified that this clause pertains to only the existing level of support. The actual support required to implement this arrangement has been described in the relevant section.	certificate from company's authorised signatory shall be

Note: -

Purchase Preference for Local Micro and Small-Scale units/ Startup Enterprises of the state: -

The following purchase preference ratio shall be applicable to the Local Micro and Small-Scale Units of State and Local Micro and Small-Scale categories under H.P. State Startup Scheme: -

1. Local Micro and Small-Scale Units of State of H.P. =15%

2. Local Micro and Small-Scale categories under H.P. State, Startup Scheme=15%

Total Purchase Preference =30%)

Provided that if Startup Enterprises will not be available, then 30% purchase preference shall automatically be given to Local Micro & Small-Scale Unit and vice versa as the case may be.

Exemption, if any in evaluation criteria or any other terms & conditions of this document, will be as per Notification No. 4-Ind/SP/Misc/F/6-10/4/80-Vol-V dated 16.05.2020 issued by Controller of Stores Himachal Pradesh or any other orders issued by Govt. of Himachal Pradesh in case the committee deems it fit.

It is reiterated that Purchaser's decision regarding Bidder's eligibility will be final and binding on all the Bidders.

The Bidder can choose to have a separate Authorised Service Provider (ASP). There is no turnover criterion for the ASP, but it should provide the first level of OEM's support which is fully backed up by the O.E.M. by means of a written understanding regarding maintenance. However, the Purchaser shall have the final discretion in this regard and can even ask for a trilateral agreement with the Bidder and the OEM in such cases to ensure timely delivery and maintenance.

If the bidder happens to be a System Integrator (SI), should have a National presence besides meeting the turnover criteria and having a sustained relationship with the O.E.M. in the past. The Bidder (or his OEM) must be able to establish his capability to execute the order(s) by showing satisfactory/ timely delivery, where similar numbers of equipment(s) and its allied accessories are involved.

2.2 Cost of Bidding:

2.2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid and H.P. State Electronics Development Corporation Ltd., Shimla (hereinafter referred to as the 'Purchaser' or "HPSEDC" in short) will in no case be responsible or liable for these costs, whether or not the Bid is finally accepted.

B- TENDER DOCUMENT

- 2.3 Contents of Tender Document:
 - 2.3.1 This Tender Document comprises of the following Parts/ Sections.

Section-1: Invitation for e-Bids

Section-2: Instructions to Bidders

Section-3: General Conditions of the Tender & Contract

Section-4: Technical Specifications and Maintenance Conditions

Section-5: Technical Specifications & Annexures.

- 2.4 The Bidder is expected to examine the Tender Document carefully. Failure to furnish all information required as per the Tender Document may result in the rejection of the Bid.
- 2.5 Clarification regarding Tender Document:
 - 2.5.1 The clarifications/ changes in tender document/ corrigendum can be uploaded upto 3 days before the bid-submission date.
- 2.6 Amendment of Bids:
 - 2.6.1 Bids once submitted cannot be amended. However, in some circumstances (such as major anomaly in the technical specifications having a major impact on pricing), the Purchaser may decide to take fresh bids from all the Bidders before actually opening of the Commercial Bids.
 - 2.6.2 In order to afford prospective Bidders reasonable time to make amendment in their bids, the Purchaser may, at his discretion, extend the deadline for the submission of bids. However, no such request in this regard shall be binding on the Purchaser.

C - PREPARATION OF BIDS

- 2.7 Language of Bid & Correspondence:
 - 2.7.1 The Bid will be prepared by the Bidder in English language only. All the documents relating to the Bid (including brochures) supplied by the Bidder should also be in English and the correspondence between the Bidder & Purchaser will be in English Language only. The correspondence by Fax / E-mail must be subsequently confirmed by a duly signed copy (unless already signed digitally).

2.8 Documents comprising of Bid:

The Bidder will prepare the bid in two parts.

I. FEE-ELIGIBILITY CLAIM-CUM-TECHNICAL BID:

In support of his eligibility cum technical bid, a Bidder must submit/upload the relevant documents strictly in accordance with Proforma B marked with page numbers on e-portal https://hptenders.gov.in.

Packet-I (Fee/other Eligibility Documents/Technical) (to be uploaded in Packet-1 on e-procurement portal)

II. COMMERCIAL BID:

Commercial Bids of only eligible and technically qualified bidders will be opened as per the date notified by the purchaser on its website (www.hpsedc.in and https://hptender.gov.in). Those technically qualified bidders which have also deposited the tender cost and Bid Security shall be termed as Substantially Responsive (i.e., eligible and technically qualified and have also deposited Bid Security & tender cost). The Tender Committee's determination of a Bid's responsiveness is to be based on the contents of the Bid itself and not on any extrinsic evidence. However, while determining the responsiveness of various Bidders, the Tender Committee may waive off any minor infirmity, which does not constitute a material deviation. The decision of the Tender Committee in this regard shall be final.

The bidder has to submit their Commercial Bids online as per BOQ in Packet-2 on the e-procurement portal.

(*i*)Sample BOQ / Price Bid will be as per Schedule I.

2.9 Bid Currencies:

2.9.1 Prices shall be quoted in Indian Rupees.

- 2.9.2 The contract price shall be paid in Indian Rupees.
- 2.10 Bid Security:
 - 2.10.1 The Bidder shall furnish Bid security, as part of its bid as mentioned hereunder. Any bid submitted without bid security or with the lesser bid amount, as indicated below may be rejected being non-responsive.

Sr. No.	Description	Bid security amount in Rupees.
1.	Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets	Rs 2,00,000/- (Rupees Two lakh only).

- 2.10.2 The Bid Security is required to protect the Purchaser against the risk of Bidder's conduct which may require forfeiture of security pursuant to Para 2.10.8.
- 2.10.3. The Bid Security shall be in the shape of BG/ Demand Draft/ through RTGS in favour of "M.D., H.P State Electronics Development Corporation Ltd., Shimla" Payable at Shimla.
- 2.10.4 Any bid not secured in accordance with Para 2.10.1 and 2.10.3 will be rejected by the Purchaser.
- 2.10.5 Unsuccessful Bidders' Bid Security will be refunded as promptly as possible.
- 2.10.6 The successful Bidder's bid-security will be discharged upon the Bidders executing the contract and furnishing the performance security in accordance with Para 3.5.1.
- 2.10.7 No interest will be payable by the Purchaser on the above-mentioned Bid Security.
- 2.10.8 The Bid Security may be forfeited:
 - 1. If a Bidder withdraws its bid during the period of bid validity specified by the bidder and required by the Purchaser.
 - 2. During the tendering process, if a Bidder indulges in any such activity as would jeopardise or unnecessarily delay the tender process. The decision of the Purchaser regarding forfeiture of the Bid Security/EMD shall be final & shall not be called upon question under any circumstances.
 - 3. In the case of a successful Bidder, if the Bidder fails,
 - (i) to sign the contract by raising issues contrary to the provisions of the RFP or the Bid or undertakings given during evaluation of bids, or
 - (ii) to furnish Performance Security, or
 - (iii) Violates any of such important conditions of this tender document or indulges in any such activity as would jeopardise the interest of the Purchaser. The decision of the Purchaser regarding forfeiture of the Bid Security shall be final & shall not be called upon question under any circumstances.
- 2.11 Period of validity of Bids:

- 2.11.1 For the purpose of placing the order, the Bids shall remain valid for at least 120 days after the date of bid opening. A bid valid for a shorter period may be rejected by the Purchaser as being non-responsive. During the period of validity of Bids, the rates quoted shall not change. However, in case of general fall in prices of a product in the IT/ Electronics Industry before despatch of goods, such a reduction shall be passed on to the Purchaser after mutual negotiations.
- 2.11.2 In exceptional circumstances, the Purchaser may ask for extension of the period of validity and such a request shall be binding on the Bidder. The Purchaser's request and the response to such a request by various Bidders shall be in writing. A Bidder agreeing to such an extension will not be permitted to increase its rates.

D-SUBMISSION OF BIDS

- 2.12 Submission of Bids:
- 2.12.1 Bidder(s) shall submit their bids only on online e-procurement portal www.hptenders.gov.in. All the instructions regarding e-bids submission are also available on www.hptenders.gov.in.
- 2.12.2 The original DD or RTGS documents related to tender cost and bid security should be deposited in HPSEDC on or before the last date and time for bids opening.
- 2.12.3 Every envelop and forwarding letter of various parts of the Bid shall be addressed as follows:

The Managing Director, H.P. State Electronics Development Corporation Ltd., First Floor, IT Bhawan, Mehli, Shimla-171013.

- 2.13 Deadline for Submission of Bids:
 - 2.13.1 Bids will be online submitted/uploaded on e-procurement portal <u>https://hptenders.gov.in</u> on or before the deadline mentioned on the e-portal.
 - 2.13.2 The Purchaser may, at its discretion, extend this deadline as per Para 2.6.2. The Purchaser may also extend this deadline for any other administrative reason.
- 2.14. Bids not submitted online:
 - 2.14.1 Any bid not submitted/uploaded through e-portal will not be received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, as per clause 2.13.1 or 2.13.2, will be rejected.
- 2.15 Modification and withdrawal of Bids:
 - 2.15.1 E-bids can be modified upto last date & time has not been closed by eprocurement system.

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2.15.2 E-Bids cannot be withdrawn in the interval after its submission of bids and before the expiry of Bid's validity specified by the Purchaser. Withdrawal of Bid during this interval may result in the forfeiture of Bidder's Bid security pursuant to clause 2.10.8.

E-BID OPENING AND EVALUATION

2.16. Opening of bids by Purchaser:

- 2.16.1 The e-Bids shall be opened on the date and time already described in the tender/e-portal or on any other later day and time fixed as per Para 2.6.2 or other enabling provisions in this behalf, in H.P State Electronics Development Corporation Ltd, First Floor, IT Bhawan, Mehli, Shimla-13 (H.P.) in the presence of representatives of the Bidders who may choose to attend the proceedings. The representatives of Bidders will sign a register in evidence of their presence.
- 2.16.2 In order to assist in the examination, evaluation and comparison of Bids, the Purchaser may at its discretion ask the Bidder for a clarification regarding its Bid. The clarification shall be given in writing, but no change in the price or substance of the Bid shall be sought, offered or permitted.
- 2.16.3 Eligibility-cum-technical bid documents uploaded on the e-portal will be opened and evaluated for eligibility of each Bidder will be ascertained. The product proposed in the bid document will be evaluated as per the requirements specified in the RFP/ Tender Document. The "Fact Sheets" submitted by the Bidders shall be compared against the Product Catalogue and authenticated circulars regarding latest changes in the specifications. It will thus be ascertained whether the product offered by the Bidder matches with the minimum requirement of the Purchaser as given in the Technical Specifications in this Tender Document. In case of a doubt the Purchaser may require the bidder to produce the quoted equipment for physical inspection and demonstration, so that components could be seen to ascertain the veracity of the Bidder's claim about specifications.

The Tender Committee may undertake oral and or written clarifications with the bidders. The primary function of clarifications in the evaluation process is to clarify ambiguities and uncertainties arising out of the evaluation of the bid documents. The financial bids of only eligible and technically qualified bidders will be opened for further processing. It is, however, clarified that subject to other provisions of this document, every bidder will have to fulfil the minimum technical specifications laid down in this document for being qualified technically. In order to assist in the examination, evaluation and comparison of Bids, the Tender Committee may at its discretion ask the Bidder for a clarification regarding its Bid. The clarification shall be given in writing immediately, but no change H.P. State Electronics Development Corporation Ltd.

in the price shall be sought, offered or permitted. The Technical e-Bids of only the Eligible Bidders will be opened and the contents (particularly Compliance Sheets) will be announced in the presence of all Bidders or their representatives. An open discussion regarding technical parameters quoted by various Bidders may also take place, if The Compliance/ Deviation statement submitted by the Bidders shall be required. compared against the Product Catalogues and authenticated circulars regarding latest changes in the specifications. It will thus be ascertained whether the product offered by the Bidder matches with the minimum requirement as given in the Technical Specifications in this Tender Document. The Financial Bids of only those eligible and technically qualified bidders will be opened who also fulfil minimum technical requirements mentioned in this document. However, the Tender Committee reserves the right of giving minor relaxation, if a particular Bidder is not able to exactly match the specifications given in the Tender Document, provided that such a minor deficiency does not substantially reduce the performance level and is suitably compensated by some extra feature in the product. Therefore, all Bidders must indicate in the Compliance/Deviation, if any, in Schedule III, extra features offered by them. Similarly, the Tender Committee can give any other such minor relaxation, which does not change substance of the bid or does not prejudice the bid process from the point of view of equity and fair play. The decision of the Tender Committee about giving minor relaxation shall be final and shall not be called upon question under any circumstances.

The commercial Bids of only those bidders will be opened who fulfils the minimum technical requirements of the purchaser and are found substantially responsive as per Para 2.8 (II) read in conjunction with other relevant clauses/Forms. However, the Purchaser reserves the right of giving minor relaxation, if a particular Bidder is not able to exactly match the specifications given in the document, provided that such a minor deficiency does not substantially reduce the performance level and is suitably compensated by some extra feature in the product. Therefore, all Bidders must indicate in the Compliance Sheets, deviations, if any, extra features offered by them. The decision of the Purchaser about giving minor relaxation shall be final and shall not be called upon question under any circumstances. The evaluation committee, if so, desire may ask for the demonstration of the quoted solution/products, for which sufficient time will be given for arranging demonstration.

2.16.6. Opening of Bid Security:

The document containing bid security will be opened and checked at the time of determining eligibility of the bidders at the time of eligibility bid opening.

2.16.7. Opening of Commercial Bids of substantially Responsive Bidders:

The Commercial Bids of only those Bidders will be opened who are found substantially responsive. A Substantially Responsive Bidder is one which conforms to all the stipulations of para 2.8 (II and III) read with para 2.16.6 above. The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the Bid itself and not on any extrinsic evidence. However, while determining the responsiveness of various Bidders the Purchaser may waive off any minor infirmity, which does not constitute a material deviation. The decision of the Purchaser in this regard shall be final.

- 2.16.8 A Bid determined as not substantially responsive will be rejected by the Purchaser. Such a Bid will not be normally allowed to be made responsive subsequently by way of correction/ modification.
- 2.17. Evaluation and Comparison of Commercial Bids:
 - 2.17.1 The comparison of Commercial Bids shall be done as follows:
 - 2.17.2 Bid Comparison:

The Bidders are required to complete their Commercial Bid/ BOQ in Schedule - I. Initial evaluation/ comparison of items within a Category given in the Tender Document will be done as per clause 2.17.3.

2.17.3. Item Rate:

Item Rate for each item for all will be calculated as under. Item Rate = FOR Destination Unit Price of the Item under a category including installation charges (if any) with three years warranty inclusive GST of the Item in a Category.

<u>Note 1:</u>

The Bidder shall not quote prices subject to certain conditions. Bids containing any conditional prices may be rejected or the Purchaser may take a final decision in its discretion about such conditionality.

2.17.4 In the procurements of goods, the following procedure shall be followed:

(i) Among all qualified bids, the lowest bid will be termed as L1. If L-1 is from a local supplier, the contract for full quantity will be awarded to L1.

(ii) If L-1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L-1.

2.17.5 Thereafter, the lowest bidder among the local suppliers, will be invited to match the L-1 price for the remaining 50% quantity subject to the local

supplier's quoted price falling within the margin of @5% and contract for that quantity shall be awarded to such local supplier subject to matching the L-1 price. In case such lowest eligible local supplier fails to match the L-1 price or accepts less than the offered quantity, the next higher local supplier within the margin of @5% shall be invited to match the L-1 price for remaining quantity and so on, and contract shall be awarded accordingly.

2.17.6 In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L1 bidder.

2.18. RANKING OF BIDDERS:

- 2.18.1. Bidders will be ranked in the inverse order of Item Rate. The criterion for selection of lowest Bidder (L1) for individual item.
- 2.18.2 Reduction in Statutory Duties and Levies:

If any reduction in taxes takes place after opening the commercial bids, but before despatch of goods; the Successful Bidder shall pass on the proportional benefit to the Purchaser. However, if any such reduction takes place after the opening of bids but before the finalisation of tender, revised sealed commercial bids shall be taken.

2.19. NEGOTIATIONS:

- 2.19.1 The Purchaser may finalise the Tender & award the Contract without any negotiations if it is satisfied with reasonableness & workability of the lowest offers. Therefore, the bidders are advised to quote lowest possible rates in the first instance only.
- 2.19.2 During the negotiations a revised offer will be taken from the representative of the Bidder by way of sealed bids. This revised offer will replace/supersede the earlier Technical & Commercial Bid, provided that the original offer (i.e., Technical/ Commercial) will not be allowed to be changed to the detriment of the Purchaser, as far as rates of every individual item & terms/ conditions are concerned. Therefore, Bidders are advised to send sufficiently senior representatives (who can take spot decisions) for negotiations.
- 2.19.4 During the negotiations on prices & other related terms/conditions, prevalent worldwide street-prices of such product, prices finalised in bids of similar size on GEM portal/Other State Government tender/rate contract etc. will be kept in mind. The scope of negotiations may also include precise *modus-operandi* of

after-sales service, mode of delivery, system integration and price of add-ons & consumables etc.

- 2.19.5 During the negotiations, the Purchaser may even go in for marginally higher or lower configurations as per its absolute discretion.
- 2.19.6 After this final ranking is done based on negotiated prices, award of tender/rate contract will be made to the lowest Bidder, subject to post qualification in Para 2.20 below.

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- 2.20 Post Qualification:
 - 2.20.1 HPSEDC will devise a performance criterion in consultation with successful bidders which will include online after sales feedback from the Government departments. The lowest Bidder can be denied the right of continuing with the contract, if the equipment being supplied by him, fails the standard performance criteria. In such an event, the next lowest bidder (L-2) shall be considered.
- 2.21 Purchaser's right to vary Quantities:
 - 2.21.1 The Purchaser reserves the right to place the supply received from various Government departments/ Govt. Institutions/ Autonomous bodies on the approved vendors during the currency of the tender/rate contract.
- 2.22 Purchaser's Right to accept any Bid and to reject any or all Bids:
 - 2.22.1 Notwithstanding anything else contained to contrary in this Tender Document, The Purchaser reserves the right to accept or reject any Bid or to annul the bidding process fully or partially or modifying the same and to reject all Bids at any time prior to the award of Contract, without incurring any liabilities in this regard.
- 2.23 Notification of Award:
 - 2.23.1 Prior to the expiry of the period of Bid validity, the Purchaser will notify the successful Bidder in writing by speed post or Fax or email that his Bid has been accepted.
 - 2.23.2 The liability of the supplier(s) to deliver the Goods and perform the services will commence from the "date of Notification of Award". The Delivery Period shall be counted from the date of 'Placing the Supply Order'. The "date of delivery" shall be the date on which the equipment / material is received at the destinations.
 - 2.23.3 Upon the successful Bidders' furnishing of performance security, the purchaser will promptly notify each unsuccessful Bidder and will refund his Bid Security.
- 2.24 Signing of Contract:
 - 2.24.1 After the Purchaser notifies the successful Bidder(s) that his 'Bid' has been accepted, the Purchaser will sign an agreement (described as Contract herein after) within 10 days with the successful Bidder on mutually agreed terms for efficacious implementation of the order.
 - 2.24.2 The Purchaser's liability of taking the goods from the selected supplier(s) shall commence only from date of signing the date of the Contract.

SECTION-3

GENERAL CONDITIONS OF THE TENDER & CONTRACT

3.1 Definitions:

- 3.1.1 In this part, the following interpretation of terms shall be taken:
- (a) "The Contract" means an agreement regarding supply of the goods & provision of services entered into between the HPSEDC and the Supplier, as recorded in the Contract Form signed by the parties, including all appendices thereto and all documents incorporated by reference therein.
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
- c) "The Goods" means all the equipment and/or other material, which the Supplier is required to supply to the Purchaser under the Contract.
- d) "Services" mean services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, training, maintenance and other such obligations of the Supplier covered under the Contract.
- e) "The Purchaser" means the H.P. State Electronics Dev. Corporation Ltd" or "HPSEDC" in short.
- f) "The Supplier", means short listed Bidder supplying the goods and services under this Contract.
- g) "End User" means various Government Departments, Boards, and Corporation etc. in the State of Himachal Pradesh.
- Note: The aforesaid definitions will be valid with respect to one or more Suppliers short-listed to execute the Project. Services to be executed by each Supplier have been explained in detail in this Tender Document.

3.2. Application:

3.2.1 These General Conditions shall apply to the extent that these are not superseded specific by provisions in other parts of this tender document. A detailed Contract agreement shall be signed after the order is placed. Detailed provisions of such a contract-agreement shall have an over-riding effect vis-a-vis this Tender Document.

3.3 Standards:

- 3.3.1 The goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications and the latest improvements incorporated after the finalisation of contract, but before the dispatch.
- 3.4 Patent Rights of the Goods:
 - 3.4.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof in India.
- 3.5 Performance Security:
 - 3.5.1 Performance Security for delivery/ installation and maintenance during warranty period.
 - 3.5.2 Within 10 days of 'Notification of Award', the successful bidder/ Supplier shall initially furnish a 3% Performance Bank Guarantee of total order value valid for 39 months to safeguard the purchaser against timely delivery/installation and maintenance of ordered equipments during the currency of the contract.
 - (1) In case supply orders increases the above-mentioned quantity then 3% amount of each supply order will be deducted as PBG from due payment from bidder & same will be released after expiry of the warranty period or bidder has an option to submit additional PBG against the supply order.
 - (3) EMD of successful bidder(s) will only be released after signing of agreement and submission of PBG.
 - 3.5.3 The proceeds of the Performance Bank Guarantee/ additional Performance Bank Guarantee shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete his obligations under the Contract. The Purchaser may claim such compensation in addition to initiating any other legal proceedings.
 - 3.5.4 The Performance Bank Guarantee shall be given in one of the following forms: An irrevocable and unconditional Bank Guarantee in favour of the Purchaser issued by a Nationalised/schedule bank in a format given by the Purchaser. This Bank Guarantee should be of a sufficient duration to cover the risk of the Purchaser.
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- 3.5.5 The Performance Bank Guarantee, regarding delivery & installation will be discharged by the Purchaser and returned to the Supplier not later than 30 days following the date of completion of the Supplier's performance related obligations, under the Contract (excluding after sales maintenance for which separate performance guarantee has been taken).
- Inspections and Tests: 3.6
 - The Purchaser or its representative shall have the right (if so desire) to test the 3.6.1 goods to ascertain their conformity to the specifications. The Purchaser shall notify to the Supplier in writing of the identity of the representative deputed for this purpose & nature of tests that may be conducted (if found necessary) for benchmarking.
 - 3.6.2 The inspections and tests may be conducted in the factory premises of the Supplier. All reasonable facilities and assistance including access to drawings and production data shall be furnished to the inspecting officers at no charge to the Purchaser. The Contractor shall inform the Purchaser in advance the time of starting of manufacture and the progress of manufacture of the equipments offered by him so that arrangements can be made for inspection at the premises, if so desired by the purchaser.
 - Should any inspected or tested Goods fail to conform to the Specifications, the 3.6.3 Purchaser may reject them, and the Supplier shall either replace the rejected goods or make all alterations necessary to meet specification requirements to the Purchaser.
 - If the Purchaser decides to conduct the inspection at supplier's premises as per 3.6.4 clause 3.6.1 to 3.6.3, no material being furnished against this specification shall be dispatched until inspected and approved by the Purchaser/ or his representative. Such inspection and approval will not relieve the Contractor of full responsibility for furnishing equipment conforming to the specifications nor will it prejudice any claim, right or privilege which the Purchaser may have on account of any loss sustained by it due to defective or unsatisfactory equipment supplied by the contractor. Should the inspection be waived off by the Purchaser, such waiver shall not relieve the contractor in any way from his contractual obligations.
 - The sample of the proposed Equipment, if desired by the purchaser, to be supplied 3.6.5 for approval/testing.
 - Bidder has to provide the required drivers etc. if essentially required for the quoted 3.6.6 26 | Page

equipment/peripherals being supplied.

- 3.6.8 Bidder has to provide necessary support by providing required drivers for connecting the hardware devices being used at the user site. All these drivers should be freely available on the OEM website for which necessary links may be provided.
- 3.6.9 Bidder has to install the patches/upgrades during warranty period at no extra cost.
- 3.6.10 GUI tools for configuring devices with Multilingual support for Hindi.
- 3.6.12 Bidder should provide service maintenance of System Software / driver software up-gradations, installing patches etc., at no extra cost during the warranty period.
- 3.6.13 All drivers' patches required at site are to be arranged by the supplier and should be available on the website of the respective OEM.
- 3.16.14 The Supplier of items shall depute its technical person if end user is facing problem in installation/working of software. On-line support will be made available without any charges to end user.
- 3.7 Packing Delivery & Documentation:
 - 3.7.1 The supplier shall provide such packing as is required to prevent damage or deterioration of the goods during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitations, rough handling during transit and exposure to extreme temperatures and precipitation during transit and open storage. The Supplier shall be responsible for any defect in packing.
 - 3.7.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as will be specifically provided for in the contract.
 - 3.7.3 Delivery of the goods and associated documentation will be done in such manner as may be prescribed by the Purchaser in the Contract.

3.8 Insurance:

- 3.8.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.
- 3.8.2 The supplier will indemnify the Purchaser from all responsibility of compensation etc. caused by third party injury including death while he is discharging his duties

under the contract.

- 3.9 Transportation:
 - 3.9.1 The entire cost of carriage/transportation from the port of discharge to the destination shall be borne by the Supplier.
 - 3.9.2 Where the Supplier is required to affect delivery to some other address within Himachal Pradesh, the supplier shall be required to meet all transport and storage expenses until delivery is completed.
- 3.10 Literature and Instruction:
 - 3.10.1 Each supplied equipments packing box must contain copy of illustrated literature and instruction books regarding the installation, handling, maintenance and use of the Goods at each station shall be supplied by the supplier as part of the Contract price before dispatch of the first assignment.
- 3.11 Payment:
 - 3.11.1 First Instalment: First Instalment shall be paid after delivery of the Goods at the prescribed destinations. Amount of 1st instalment shall be regulated in such a manner that the total payment after delivery is 85% of the order value. A claim for first instalment shall be staked by the Supplier, when he has supplied adequate number of machines. The first instalment of 85% will be paid only after receipt of duly acknowledged delivery challans & invoice, as required by the Purchaser.
 - 3.11.2 Second Instalment: Remaining amount of 15% of the order value shall be paid after satisfactory installation of equipments and execution of Performance Guarantee for proper maintenance during warranty period as mentioned at Clause 3.5. If the installation is delayed beyond 45 days on account of site not being ready (or any other reasons entirely attributable to the Purchaser) or any other reason attributable to the Purchaser, ²/₃ of the second instalment (i.e., 10% of the order value) shall be released to the Supplier subject to submission of site not ready (SNR) report from concerned department. In such an unlikely event of the site not being ready, the remaining amount ¹/₃ of the second instalment (i.e., 5% of order value) will be released after submission of successful installation reports of the ordered equipment(s) duly singed by the competent authority of the department(s).
- Note:First & second instalments shall be released only on production of bill supported by
delivery challan and installation report by the Supplier. Any bill supported by requisite
documents will be processed within 15 days and objections, if any, will be conveyed inH.P. State Electronics Development Corporation Ltd.28 | P a g e

one go within this period. If the claim is found in order, the payment will be made within 2 weeks from the date of submission of such bills.

- 3.12 Prices:
 - 3.12.1 Subject to the provision to Rule 2.11.1, the prices charged by the Supplier for Goods delivered and services performed under the Contract shall not vary from the prices quoted by the Supplier in his Bid. But in case of global or national fall in prices of a product in IT/ Electronics industry due to a change in Government Policy or otherwise, such a reduction shall be passed on to the Purchaser after mutual negotiations.
 - 3.12.2 There shall be no effect of the exchange rate variation etc., on the rates to be quoted by the Vendor during one-year period. However, if rates will increase/ decrease, HPSEDC will call techno-commercial bids from the empanelled bidders on requests received from them.
 - 3.13 Modification in the Order:
 - 3.13.1 The Purchaser may at any time, by written order given to the Supplier make changes within the general scope of the Contract in anyone or more of the following:
 - (a) The specifications of the Goods
 - (b) The method of shipment or packing
 - (c) The service to be provided by the Supplier
 - (d) Quantity of goods
 - (e) Any other change that the purchaser may deem fit
 - 3.13.2 If any such change causes an increase or decrease in the cost of, or the time required for the Supplier's performance of any part of the work under the Contract, an equitable adjustment shall be made in the Contract price or delivery Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be put forth within 30 days from the date of the Supplier's receipt of the Purchaser's change order.

3.14 Subcontract:

3.14.1 The Supplier shall not assign in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

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- 3.14.2 The Supplier shall notify the Purchaser, in advance in writing, of all sub-Contracts awarded under the Contract if not already specified in his bid. Such notification, in his original bid of later (even if with prior approval of Purchaser) shall not relieve the Supplier of any liability or obligations under the Contract.
- 3.14.3 Subcontracts must comply with the provisions of the clause 2.3.
- 3.15 Delays in the Supplier's Performance:
 - 3.15.1 Delivery of the goods and the performance of services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in the Contract.
 - 3.15.2 Any unjustifiable delay by the Supplier in the performance of his delivery obligation may render the Supplier liable to any or all the following:
 - (i) Forfeiture of its performance security,
 - (ii) Imposition of liquidated damages @Rs 50/- per day per equipments of the unfulfilled order. The maximum penalty will not exceed 10% of the order value.
 - (iii) Termination of the contract and risk purchase at Supplier's risk
 - (iv) Initiation of any other legal proceedings.
 - 3.15.3 The Supplier will strictly adhere to the time-schedule for the performance of Contract. However, the Purchaser can relax this time limit in force majeure conditions.
- 3.16 Termination for Default:
 - 3.16.1 The Purchaser may without prejudice to any other remedy for breach of contract, (including forfeiture of Performance Security) by written notice of default sent to the supplier, terminate the Contract in whole or in part after sending a notice to the Supplier in this regard.
 - (a) if the Supplier fails to deliver any or all of the goods within the time period(s) specified in the Contract, or any extension thereof granted by the Purchaser pursuant to clause 2.11.2, or
 - (b) If the Supplier fails to perform any other obligation under the Contract.
 - 3.16.2 In the event the Purchaser terminates the Contract in whole or in part, he may procure, upon such terms in such manner, as it deems appropriate, goods similar to those undelivered, and the Supplier shall be liable to pay excess cost of such similar goods to the Purchaser. This liability will be in addition to forfeiture of

performance guarantee and any other legal proceedings, which the Purchaser may initiate as per Para 3.15.2.

3.17 Force Majeure:

- 3.17.1 Notwithstanding the provisions of the clauses 3.15 and 3.16, the Supplier shall not be liable for forfeiture of its performance security or termination for default, or payment of any damages, if and to the extent that his delay in performance under the Contract is the result of an event of Force Majeure.
- 3.17.2 For purpose of this clause, Force Majeure means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser either in its sovereign or contractual capacity, war, revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 3.17.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing or such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract, as far as reasonably practical, and shall seek all reasonable alternative means for performance, not prevented by the *Force Majeure* event.

3.18 Taxes and Duties:

3.18.1 Supplier shall be entirely responsible for payment of all taxes, duties and levies, imposed up to/until the delivery point specified in the Contract. If there is a reduction in any of the statutory duties and levies before the despatch of goods, the benefit of the same will be passed on to the Purchaser.

3.19 Limitation of Liablitiy:

The liability of the supplier in respect of all claims under this tender including penality for delay in delivery, services, liquidity damages etc. shall not exceed the aggregate value of the goods and services supplied under this tender. Either party shall not be liable for any claim made for any indirect, consequential or incidental losses and indirect damages, costs or other expenses related thereto.

3.20 Arbitration:

All disputes, differences, claims and demands arising under this tender shall be refered to arbitration of a sole arbitrator to be appointed with mutual consent of both the parties. All arbitration will be held in Shimla. If the parties cannot agree on the appointment of the Arbitrator within a period of one month from the

notification by one party to the other of existence of any dispute and need for appointment of an arbitrator. Further action will be taken in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the award made under this tender shall be final and binding upon the parties hereto, subject to legal remedies available under the law.

SECTION-4

TECHNICAL SPECIFICATIONS AND MAINTENANCE CONDITIONS

4.1. SCOPE OF THE TENDER:

The successful Bidder(s) will provide the following services:

(i) Manufacture /Import (ii) Testing (iii) Supply (iv) Installation (v) After Sales Service during warranty and Annual Maintenance period.

(i) Manufacture/Import

The OEM/ Bidder can manufacture the Goods in India or import the same (in full or in parts) from any part of the world.

(ii) Testing

Testing/ Benchmarking as per requirement of the Purchaser and in such manner and for such size of sample as may be prescribed subsequently may be got done as a part of the Contract.

(iii) Supply

The Goods need to be supplied F.O.R. as per the list of destinations to be supplied at the time of signing the Contract.

- (iv) Installation and Commissioning of networking/ cabling equipments: The successful bidder of respective equipments will do installation and ensure that the equipment supplied works/run properly.
- (v) After-Sales-Services

The supplier shall keep equipments as spare (as finalised of tender to be mutually decided), to provide immediate replacement, with the service centre during the warranty period. It will be desirable that minor functional problems of these equipments are taken care of by the service centre only. In case of major & specific problems, respective vendors will have to rectify the defect within the time-limits prescribed in Para 4.2.2 below, otherwise must have to replace with the new one.

4.2 AFTER SALES SERVICES:

4.2.1 Comprehensive Warranty:

The Supplier shall provide Comprehensive OEM warranty (including labour and spares) for 36 calendar months. The warranty shall cover the System Software, Labour and all the hardware parts including updation/ upgradation (free of cost) of the networking infrastructure. An undertaking to this effect shall be given by the Bidder in the Compliance Sheets. The supplier of Items shall ensure genuine add-ons items & consumables for the items sold in the state for their own brand.

4.2.2 Service Centre:

The successful bidder should have a dedicated service centre in the state. The Service Centres in the State shall be manned by qualified Engineers as per Clause 4.1(v) above and one call coordinator. It will be equipped, with sufficient inventory of spares as per ABC Analysis. The supplier will provide prompt after sales support and shall attend any complaint not later than 24 hours. The minor and major defects shall be rectified not later than 36 hours and 60 hours respectively. If defect is not rectified within the time stipulated as above penalty as prescribed by the Purchaser will be imposed. However, the penalty in such instances shall not exceed 10% of the equipments cost against a non-attendance/ non rectification of defects against a service call. The exact quantum of penalty per day/ week shall be decided at the time of signing the contract. During the warranty period, this penal clause will be enforced by ensuring that the supplier gives a Performance Security by way of Bank Guarantee to the Purchaser.

4.2.3 Inventory of Spares:

An ABC analysis of inventory of spares shall be done by the Purchaser in consultation with the supplier to ensure that all critical spares/ components apart from the 1% inventory of new equipments for replacement purposes (if equipment are beyond repair within 24 hours) are available with the Service Centres in sufficient quantity.

4.2.4 The amount of non-delivery of products as mentioned in Clause No. 3.15:
Delays in the Supplier's Performance and Clause No. 4.2: After Sale Services or any other recoverable amount from bidder(s) may be adjusted/ recovered or set-off against any sum payable to the bidder against any other contract with HPSEDC or with State Government. The amount shown

against that shall be withheld to be adjusted against the compensation levied as mentioned above. Recovering or deducting of this amount on failure of delivery/ delay in delivery or not providing services in time bound manner, shall be automatic deducted without any notice to the concerned bidder.

The Managing Director, HPSEDC, will reserve the right to relax/ decrease the penalties or release recovered amount without giving any interest to the bidder(s), after receiving justified/ reasonable reasons from the bidder(s).

4.3 TECHNICAL SPECIFICATIONS & QUANTITIES:

- 4.3.1 The Technical Specifications have been given in Annexure-I in Section-5. These specifications should be carefully studied by the Bidder, so that the product could be technically evaluated as per the Purchaser's requirement.
- 4.4. Compliance sheets:
- (i) Compliance Sheets as per Annexure-I in Section-5 are to be filled in by the bidders as part of the Bid. These Compliance Sheets should be complete in all respects and should be free from errors and omissions. All required parameters must be replied to in affirmative/ negative.
- (ii) The Bidder shall also supply along with the Bid all brochures and authenticated bulletins carrying latest changes covering the technical aspects of each item appearing in schedule of requirement intended to be supplied by the Bidder. For the purpose of establishing latest changes, printouts downloaded from INTERNET (& duly authenticated) may be acceptable.
- 5. Acceptance Testing After Notification of Award:
 - The Purchaser may conduct benchmarking & acceptance test, which could involve operation of complete system for at least two consecutive days. The Supplier(s) will provide full assistance in this regard. Partial delivery/ installation/ testing of hardware/ system software will not be permissible for acceptance/ payment. The criteria for benchmarking/ acceptance will be conveyed separately.

PROFORMA- A (Declaration by the O.E.M.) [Para 2.8(I)(ii)]

To Date:

The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla- 171013.

Subject: Authorisation to a distributor for tender No: SEDC/Server-Workstation/2K22-1109

Dear Sir,

Please refer to your Notice Inviting Tenders for Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets published in "The Indian Express" and "Amar Ujala".

M/s _____(Bidder), who is our reliable distributor for the last years, is hereby authorised to quote on our behalf for this prestigious tender. M/s (Bidder)is likely to continue as our business partner during

years to come. We undertake the following regarding the supply of these equipments/ peripherals etc.

- 1. The Machines supplied in this tender shall be manufactured by us as per the specifications required by the Purchaser. M/s ______ (Bidder) shall not be allowed to do any hardware integration on our equipment.
- 2. It will be ensured that in the event of being awarded the contract, hardware equipments will be delivered M/s_____(Bidder) & maintained by M/sby (ASP) properly as per the conditions of the contract. For this necessary technical support including purpose, we shall provide M/S technical updates, & spares to the ASP. If M/s fails to maintain the equipments for any reason what-so-ever, we shall make alternative arrangements for proper maintenance of these components during the warranty period. We shall provide full support back up to the Bidder/ASP. On the whole, it shall be ensured that the clauses regarding service and maintenance of Machines do not get diluted in implementation due to non-availability of spares and lack of technical inputs from our side even during AMC/extended warranty period.
- 3. If due to any reason whatsoever, the tie up between our Company & M/s _________ (Bidder) or M/s ________ (ASP) breaks down subsequently, we shall make necessary alternatives arrangements for honouring the terms of the contract.

Yours very truly,

Name :	 	
Designation:		
Company:		

FORM-B

DECLARATION REGARDING ACCEPTANCE OF TERMS & CONDITIONS CONTAINED IN THE TENDER DOCUMENT

То

The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla-171013.

Sir,

I have carefully gone through the Terms & Conditions contained in the Tender Document [No.: **SEDC/Server-Workstation/2K22-1109**] regarding Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets for Tender/Rate Contract by HPSEDC. I declare that all the provisions of this Tender Document contained in this tender and subsequent corrigendum(s)/ clarifications issued from time to time are acceptable to my Company/firm. I further certify that I am an authorised signatory of my company and am, therefore, competent to make this declaration.

Yours very truly,

Designation:	

Company: _____

Address:

Contact No:

Email-id:

FORM-C

DECLARATION REGARDING PAST PERFOMANCE

То

The Managing Director, H.P. State Electronics Development Corporation Ltd., 1st Floor, IT Bhawan, Mehli, Shimla-13.

Sir,

I have carefully gone through the Terms & Conditions contained in the Tender Document [No. **SEDC/Server-Workstation/2K22-1109**] regarding Rate Contract of Servers, Workstations, Desktops, Laptops and Tablets by HPSEDC. I hereby declare that my company has not been debarred/blacklisted by any Government / Semi Government organizations for quality/ service products nor is there any pending dispute regarding short shipment/ installation/service. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours truly,

Compan	y:		

Address: _____

Contact No:

Email-id:

SCHEDULE - I

SAMPLE OF PRICE SCHEDULE/BOQ

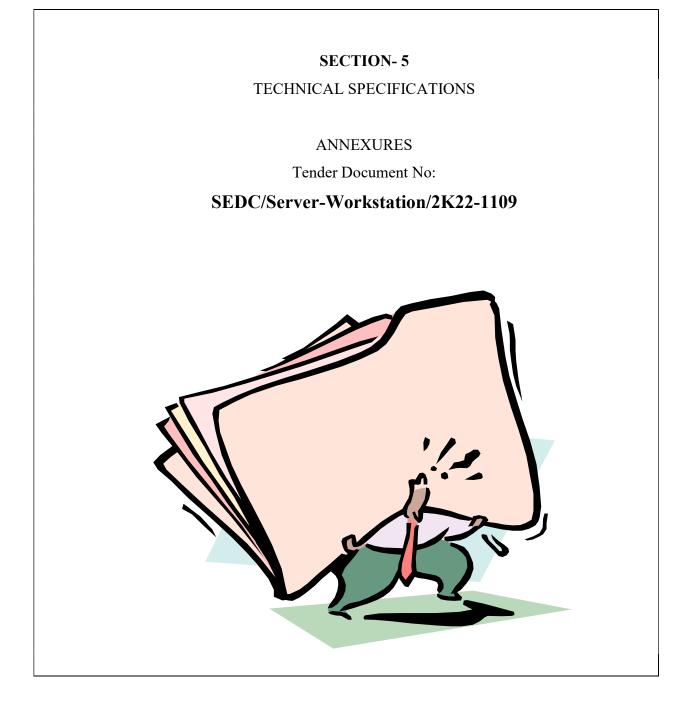
[Para 2.8 (III)(i)] (to be completed by bidder as per the format available on e-procurement portal https://hptenders.gov.in)

(Thi	s BOQ template must not be modifi	ed/repl	ERS - RATES aced by the bio	lder and the s	EN IN RU ame should	be uplo	aded after fill	ing the relevan	t columns,
SI. No.	else the bidder is liable to be rej	Qt y	BASIC RATE with installatio n (if any) and three years warranty In Figures To be entered by the Bidder in Rs. P	Bidders are al GST Amount in percentag e (%)	GST amoun t in Rupees Rs. P	Unit Pric e with GST Rs. P	Bidder Name : TOTAL AMOUN T Without Taxes with three-year warranty Rs. P	and Values on Gross Bid Value Inclusive installatio n and Taxes (for three- year onsite OEM warranty) Rs. P	y) TOTAL AMOUN T In Words
1	Item No 1: Workstation: Option 1	1							
2	Item No 2: Workstation (Option 2)	1							
3	Item No 3: Workstation (Option 3)	1							
4	Item No 4: Server (Option 1)	1							
5	Item No 5: Server (Option 2)	1							
6	Item No 6: Server (Option 3)	1							
7	Item No 7: Server (Option 4)	1							
8	Item No 8: Server (Option No 5)	1							
9	Item No 9: Server (Option No 6)	1							

10	Item No 10: Server (Option No 7)	1				
11	Item No 11: Server (Option No 8)	1				
12	Item No. 12: Desktops (Intel)	1				
13	Item No. 13: Desktops (Intel)	1				
14	Item No. 14: Desktops (Intel)	1				
15	Item No. 15: All in One Desktops (AMD), 21" or higher	1				
16	Item No. 16: All in One Desktops (AMD), 21" or higher	1				
17	Item No. 17: All in One Desktops (AMD), 21" or higher	1				
18	Item No. 18: All in One Desktops (AMD Ryzen 3), 23" or higher	1				
19	Item No. 19: All in One Desktops (AMD), 23" or higher	1				
20	Item No. 20: All in One Desktops (AMD), 23" or higher	1				
21	Item No. 21: FHD Laptop 14 Inch with Intel Core i3 Processor	1				
22	Item No. 22: FHD Laptop 14 Inch with Intel Core i5 Processor	1				
23	Item No. 23: FHD Laptop 14 Inch with Intel Core i5 Processor with SSD	1				
24	Item No. 24: FHD Laptop 14 Inch with Intel Core i7 Processor with SSD	1				
25	Item No. 25: FHD Laptop 14 Inch with AMD Ryzen 3 Processor	1				
26	Item No. 26: FHD Laptop 14 Inch with AMD Ryzen 5 Processor	1				

27	Item No. 27: FHD Laptop 14 Inch with AMD Ryzen 7 Processor with SSD	1				
28	Item No. 28: FHD Laptop 15.6" Inch with Intel Core i3 Processor	1				
29	Item No. 29: FHD Laptop 15.6" Inch with AMD Ryzen 7 Processor	1				
30	Item No 30: Tablet (Option 1)	1				
31	Item No 31: Tablet (Option 2)	1				
32	Item No 32: Tablet (Option 3)	1				
33	Item No 33: AMD Workstation (Option 1)	1				
34	Item No 34: AMD Workstation (Option 2)	1				
35	Item No 35: AMD Workstation (Option 3)	1				
36	Item No 36: AMD Workstation (Option 4)	1				
37	Item No 37: AMD Workstation (Option 5)	1				
38	Item No 38- SAN 80 TB	1				
39	Item No 39- SAN 250 TB	1				
40	Item No 40- NAS 80 TB	1				
41	Item No 41- SAN Switch	1				
42	Item No 42- 1.5 TB with 32 GB LRDIMMs server	1				
43	Item No 43- 1.5TB with 64GB LRDIMM server	1			<u> </u>	

44	Item No 44- Blade Chasis	1				
45	<i>Item No 45- 2.0 TB with 32 GB DIMMs Server</i>	1				



NB: Final specifications uploaded after pre-bid meeting. Please visit our websites www.hpsedc.in & <u>https://hptenders.gov.in</u> for latest amendments or notices in reference to this tender.

* The quoted product should not be end of life at the time of bid submission. The support shall be provided by the bidder/ OEM for next four years, an undertaking for the same shall be provided by the OEM.

Technical compliance to be provided on OEMs letterhead with signatures, name, email, contact number of Authorized signatory.

ANNEXURE-I

SECTION – V

TECHNCIAL SPECIFICATIONS AND COMPLIANCE SHEETS ANNEXURES

The specification mentioned hereunder are bare minimum requirement. Bidders are encouraged to offer better specifications in this bid or subsequently during the period of tender/rate contract. Technical compliance to be provided on OEMs letterhead with signatures, name, email, contact number of Authorized signatory.

Item No 1: Workstation: Option 1

Sr.No.			Compliance
	Parameters	Technical Specifications	(Yes/No)
1.	Processor	2 x Intel Xeon Gold 5218R, 2.1GHz, 4.0GHz Turbo, 20 Cores, 27.5MB Cache or Higher	
2.	Chipset	Intel C621 or Higher	
3.	Memory	128GB, DDR4, 2933 MHz, ECC or higher	
4.	Memory DIMM	24 DIMM Slots (12 DIMMs per CPU) for future expandability or higher	
5.	Memory Expandability	Up to 2TB DDR4 ECC memory or higher	
6.	OS SSD & HDD	1TB PCIe NVMe SSD + 2 X 2TB SATA Hard Drive 7200RPM or higher	
7.	Hard Disk Drive Bays	Free space for 8/10 SATA/SAS Drives for future expandability	
8.	Slots	(4) PCIe x16, (1) PCIe x8 , (1) PCIe x4, (1) PCIe x1	
9.	GPU Card	NVIDIA RTX A4000, 16 GB GDDR6, 4 DP	
10.			
		8 – USB 3.1 Type A 2 – USB 3.1 Type C 1 – Universal Audio Jack 1 – Serial 2 – RJ45 Network 1 –Audio Line out	
	I/O Ports	1– Audio Line in/Microphone	

11.	OS Certification	Workstation should support following OS: Windows 10 Professional, Red Hat Enterprise Linux 8.0 or higher and Ubuntu Linux 20.04 or higher	
12.	Networking	Integrated Intel i219 & i210 Gigabit Ethernet or better	
13.	Audio	Integrated High Definition Audio Codec (2 Channel) with internal speaker or higher	
14.	Power Supply	Minimum 1400W, 90% efficient (80PLUS Gold Certified) Externally accessible Power Supply without opening the cabinet	
15.	OS	Windows 11 Pro for Workstations (64-bit)	
16.	DVD	DVD RW	
17.	Security	Trusted Platform Module (TPM 2.0), Chassis Intrusion Switch, Setup/BIOS Password, I/O Interface Security, Kensington Lock slot, Padlock ring	
18.	Software	Artificial Intelligence Based system performance tuning software, which ensures optimum performance tuning for leading CAD/CAM/CAE	
19.	Regulatory Compliance	Energy Star with 80 PLUS registered Gold power supplies, EPEAT registered	
20.	Input Devices	Same OEM make wired Keyboard & Mouse	
21.	Monitor	23.8" and above IPS Antiglare display supporting 1920X 1200 @ 60 HZ, 16: 9 aspect ratio, Color gamut: sRGB 99% (typical), color depth 16.7 Mn; Height Adjustable stand	
22.	Vendor Status	Top three OEM as per latest IDC report for Workstations category	
			i

Item No 2: Workstation (Option 2)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Processor	Intel Core i7-12700 processor (25MB Cache, 12 Core (8P+4E), 2.1GHz to 4.9GHz or higher	
2.	Chipset	Intel W680 chipset or higher	
3.	Memory	16 GB (2x8GB) DDR5, 4400 MHz Memory, expandable upto 128 GB (4 DIMM) or higher	
4.	Drive Controller	On board six channel sata@ 6Gbps, RAID(0,1,5,10) or higher	
5.	Hard Disk Drive	256GB PCIe NVME M.2 SSD+ 1TB 7200rpm SATA 3.5" HDD or higher	
6.	Expansion Slots	1 PCIe x16 slot; 2 PCIe x4 slots; Min 4 SATA slots for 2.5/3.5" HDD/ODD; Min 3 M.2 slots for NVMe SSD and 1 for Wifi & BT	
7.	Graphic Card	Nvidia T1000, 4GB, with necessary mDP to DP adapter	

8.	I/O Ports	Min 4x USB TypeA 3.2 Min 4x USB TypeC 3.2 Min 2x USB TypeA 2.0 1 – Universal Audio Jack 1x RJ45 Network Connector 1x Audio Line Out	
9.	OS Certification	Workstation should support following OS: Windows 10 Professional for Workstation, 64bit or higher, Ubuntu Linux 20.04 or higher and RHEL 8.6	
10.	Networking	Intel Ethernet Connection 10/100/1000 or better	
11.	Out of Band Management	Intel vPro	
12.	Audio	Intelligent HD Audio delivers audio and mic enhancements and reduces background noise with internal speaker of higher	
13.	Power Supply	Minimum 300W (80 Plus Platinum) PSU 92% efficient PSU	
14.	OS	Windows 11 Pro for Workstations (64-bit)	
15.	DVD	DVD RW	
16.	Keyboard & Mouse	Same OEM make wired Keyboard & Mouse	
17.	Security	Trusted Platform Module (TPM 2.0), Chassis Intrusion Switch, Setup/BIOS Password, I/O Interface Security	
18.	Regulatory Compliance	Energy Star, EPEAT Gold registered	
19.	Monitor	23.8" and above IPS Antiglare display supporting 1920X 1200 @ 60 HZ, 16: 9 aspect ratio, Color gamut: sRGB 99% (typical), color depth 16.7 Mn; Height Adjustable stand	
20.	Type of Bundled Software	Artificial Intelligence Based system performance tuning software, which ensures optimum performance tuning for leading CAD/CAM/CAE	
21.	Vendor Status	Top three OEM as per latest IDC report for Workstations category	
22.	Warranty	3 Years Onsite Comprehensive Warranty	

Item No 3: Workstation (Option 3)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Processors	Intel Xeon W-2265 (19.25 MB cache, 12 cores, 3.50 GHz to 4.80 GHz Turbo) or higher	
2.	Chipset	Intel C422 or higher	
3.	Memory	64GB (4x16GB) DDR4, 2933 MHz, ECC (8DIMM Slots) or higher	
4.	Drive Controller	On board six channel sata@ 6Gbps, RAID(0,1,5,10) or higher	
5.	Hard Disk Drive	1 x 512GB PCIe NVMe Class 40 SSD + 1 x 3.5" 2TB 7200rpm SATA Hard Drive or higher	

6.	DVD	DVD RW	
7.	Graphic Card	NVIDIA T1000, 8 GB GDDR6, with necessary mDP to DP adapters	
8.	Expansion Slots	2x PCIex16	
		1x PCIex8	
		1x PCIex4	
		1x PCIex1	
		1X PCI 32bit	
9.	I/O Ports	Front: 4USB 3.1, 1 Headphone &	
<i>.</i>	2, 0 2 0 2 0	Microphone.	
		Rear: 6 USB 3.1, 1xRJ-45 integrated	
		Gigabit LAN (1xsupporting intel AMT),	
		2PS/2, 1 Audio line-In, 1 Audio Line-	
		Out	
10.	OS Certification	Workstation should support following	
		OS: Windows 10 Professional for	
		Workstation, 64bit or higher, Ubuntu	
11.	Networking	Linux 20.04 or higher and RHEL 8.0 Intel Ethernet Connection	
11.	Networking	10/100/1000 or better	
12.	Out of Band Management	Intel vPro	
13.	Keyboard & Mouse	Same OEM make wired Keyboard &	
13.	Reybourd & Mouse	Mouse	
14.	Audio	High Definition Integrated Audio with	
		Internal Speaker	
15.	Power Supply	425W or higher Externally	
		accessible/removable/lockable power	
		supply, 90% efficient (80PLUS Gold Certified)	
16.	Security	Trusted Platform Module (TPM 2.0),	
10.	Security	Chassis Intrusion Switch, Setup/BIOS	
		Password, I/O Interface Security	
17.	Regulatory Compliance	Energy Star, EPEAT Gold registered	
18.	OS	Windows 11 Pro for Workstations (64-	
		bit)	
19.	Type of Bundled Software	Artificial Intelligence Based system	
		performance tuning software, which	
		ensures optimum performance tuning	
		for leading CAD/CAM/CAE	
20.	Monitor	23.8" and above IPS Antiglare display	
		supporting 1920X 1200 @ 60 HZ, 16: 9 aspect ratio, Color gamut: sRGB 99%	
		(typical), color depth 16.7 Mn; Height	
		Adjustable stand	
21.	Vendor Status	Top three OEM as per latest IDC report	
		for Workstations category	
22.	Warranty	3 Years Onsite Comprehensive	
<i>∠∠</i> ,	wallancy	Warranty	

Item No 4: Server (Option 1)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Form Factor	Max. 1U rack mounted with sliding rails	
3.	Supported CPU	Up to two 3rd Generation Intel® Xeon® Scalable processors with up to 40 cores per processor Support for up to 2 x 270W processors; Direct Liquid Cooling support.	
4.	Configured CPU	2* 32 Cores with clock speed of 2.6 GHz or better and with 48 MB cache or higher	
5.	Memory slots	Up to 32 x DDR4 RDIMMs/LRDIMMs or higher	
6.	Memory configured	1.5 TB populated with 64 GB RDIMMs 3200 MT/s or higher	
7.	Disks supported	Up to 4 x 3.5" SAS/SATA HDD OR Up to 10 x 2.5" SAS/SATA HDD or SSD; or NVMe OR Up to 2 x 2.5" (rear) HDD or SSD; or NVMe	
8.	Disks configured	3* 800GB SSD SAS Write Intensive 12Gbps 512e 2.5in Hot-plug AG Drive, 10 DWPD drives 20* 3.84TB SSD SAS Read Intensive 12Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD drives BOSS-S2 controller card + with 2 M.2 480GB drives	
9.	RAID Controller	HW RAID Card. Should have support for dual PERC Option	
10.	I/O slots	Up to 3 x PCIe LP Slots Gen4 (x16/x16/x16) with SNAP I/O options or 2 x PCIe FH slots (Gen4)	
11.	GPU Support	Up to 3 x SW GPUs or higher	
12.	Ethernet ports	2 x 1GbE LOM + 1 x OCP 3.0	
13.	Certification and compliances	Microsoft Windows Server, Hyper-V, VMWare, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES)	
14.	Power Supply	Platinum rated redundant Hot plug Power Supplies with hot plug fans	
15.	Management integration	Support for integration with Microsoft System Center, VMware vCenter, BMC Software	
16.	Power & temperature	Real-time power meter, graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	
17.	Pre-failure alert	Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD	

18.	Configuration &	Real-time out-of-band hardware performance	
10.	management	monitoring & alerting	
	Management	Agent-free monitoring, driver updates &	
	Management	configuration, power monitoring & capping, RAID	
		management, external storage management,	
		monitoring of FC, HBA & CNA & system health	
		• Out-of-band hardware & firmware inventory	
		• Zero-touch auto configuration to auto deploy a	
		baseline server configuration profile	
		Automated hardware configuration and Operating	
		System deployment to multiple servers	
		• Zero-touch repository manager and self-updating	
		firmware system	
		• Virtual IO management / stateless computing	
		Support for Redfish API for simple and secure	
		management of scalable platform hardware	
19.	LCD panel	Should display system ID, status information and	
-) (F	system error error code followed by descriptive text.	
		LCD background should light up in different colours	
		during normal system operation & error conditions.	
		Should have a cyber-resilient architecture for a	
		hardened server design for protection, detection &	
		recovery from cyber attacks	
		Should provide effective protection, reliable	
		detection & rapid recovery using:	
		- Silicon-based Hardware Root of Trust	
		- Signed firmware updates	
00	Server security	- Configuration and firmware drift detection	
20.	Server security	- Automatic BIOS recovery	
		- Rapid OS recovery	
		- System erase	
		Configuration upgrades should be only with	
		cryptographically signed firmware and software	
		Should provide system lockdown feature to prevent	
		change (or "drift") in system firmware image(s) &	
		prevent malicious modification of server firmware	
21.	Intrusion alert	Intrusion alert in case chassis cover being opened	
22.	OS	Windows server 2019 Standard Edition with	
	1 47	downgrade rights to 2016 R2 Std edition	
23.	Warranty	3 years On-site comprehensive warranty	

Item No 5: Server (Option 2)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Form Factor	Max. 1U rack mounted with sliding rails	

3.	Supported CPU	Up to two 3rd Generation Intel® Xeon® Scalable	
		processors with up to 40 cores per processor	
		Support for up to 2 x 270W processors; Direct	
		Liquid Cooling support	
4.	Configured CPU	2* 28 Cores Latest Gold Series with clock speed of	
		2.0 GHz or better and with 42 MB cache or better	
5.	Memory slots	Up to 16 x DDR4 RDIMMs	
6.	Memory	1024 GB populated with 64 GB RDIMMs 3200 MT/s	
	configured	or higher	
7.	Disks supported	Up to 4 x 3.5" SAS/SATA HDD OR Up to 10 x 2.5"	
-		SAS/SATA HDD or SSD OR Up to 8 x 2.5" NVMe	
		RAID	
8.	Disks	2* 960GB SATA SSD Mixed Use 6Gbps 512 2.5in	
0.	configured	Hot-plug AG Drive, 3 DWPD drive	
9.	RAID	HW RAID Card	
9.	Controller	IIW KIID Calu	
10	I/O slots	Up to $\rho \times DCI_0 Con A (v16/v9/v9) or higher$	
10.		Up to 3 x PCIe Gen4 (x16/x8/x8) or higher	
11.	Ethernet ports	4* 10G SFP+ Ports, 2 x 1GbE LOM + 1 x OCP 3.0	
12.	Fibre Channel	2* 16 Gbps FC Ports	
	Ports		
13.	Certification	Microsoft Windows Server, Hyper-V, VMWare, Red	
	and	Hat Enterprise Linux (RHEL), SUSE Linux	
	compliances	Enterprise Server (SLES)	
14.	Power Supply	Platinum rated redundant Hot plug Power Supplies	
		with hot plug fans	
15.	Management	Support for integration with Microsoft System	
	integration	Center, VMware vCenter, BMC Software	
16.	Power &	Real-time power meter, graphing, thresholds, alerts	
	temperature	& capping with historical power counters.	
	······	Temperature monitoring & graphing	
17.	Pre-failure alert	Should provide predictive failure monitoring &	
-/•		proactive alerts of actual or impending component	
		failure for fan, power supply, memory, CPU, RAID,	
		NIC, HDD	
18.	Configuration &	Real-time out-of-band hardware performance	
10.	_		
	management	monitoring & alerting	
		• Agent-free monitoring, driver updates &	
		configuration, power monitoring & capping, RAID	
	1	management, external storage management,	
		monitoring of FC, HBA & CNA & system health	
		Out-of-band hardware & firmware inventory	
		Out-of-band hardware & firmware inventoryZero-touch auto configuration to auto deploy a	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing 	
		 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure 	
	I CD papel	 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure management of scalable platform hardware 	
19.	LCD panel	 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure management of scalable platform hardware Should display system ID, status information and 	
19.	LCD panel	 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure management of scalable platform hardware Should display system ID, status information and system error code followed by descriptive text. LCD 	
19.	LCD panel	 Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure management of scalable platform hardware Should display system ID, status information and 	

		bendened arrest design for most stilling details of	
		hardened server design for protection, detection &	
		recovery from cyber attacks	
		Should provide effective protection, reliable	
		detection & rapid recovery using:	
		- Silicon-based Hardware Root of Trust	
		- Signed firmware updates	
		- Secure default passwords	
		- Configuration and firmware drift detection	
		- Persistent event logging including user activity	
		- Secure alerting	
		- Automatic BIOS recovery	
		- Rapid OS recovery	
		- System erase	
		Configuration upgrades should be only with	
		cryptographically signed firmware and software	
		Should provide system lockdown feature to prevent	
		change (or "drift") in system firmware image(s) &	
		prevent malicious modification of server firmware	
21.	Intrusion alert	Intrusion alert in case chassis cover being opened	
21.	OS	Windows server 2019 Standard Edition with	
		downgrade rights to 2016 R2 Std edition	
	Momonty	0 0	
23.	Warranty	3 years On-site comprehensive warranty	

Item No 6: Server (Option 3)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been	
		one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Form Factor	Max. 2U rack mounted with sliding rails	
3.	Supported CPU	Up to two 3rd Generation Intel® Xeon® Scalable processors with up to 40 cores per processor	
4.	Configured CPU	2* 16 Cores with clock speed of 2.9 GHz or better and with 24 MB cache or better	
5.	Memory slots	Up to 32 x DDR4 RDIMMs/LRDIMMs or higher	
6.	Memory configured	512 GB populated with 64 GB DIMMs 3200 MT/s or higher	
7.	Disks supported	Up to 24 x 2.5" SAS/SATA HDD or SSD or NVMe with universal slots	
8.	Disks configured	4* 2.4 TB 10K SAS 2* 960GB SAS SSD RI Drive, 1 DWPD	
9.	RAID Controller	HW RAID Card with 8 GB Cache or higher	
10.	I/O slots	Up to 8 x PCIe Slots Gen4	
11.	Ethernet ports	4 [*] 10/25GbE SFP28 Ports and 4 [*] 1G Base-T ports. The server should be provided with port level and card level redundancy	
12.	Certification and	Microsoft Windows Server, Hyper-V, VMWare, Red Hat Enterprise Linux (RHEL), SUSE Linux	

	compliances	Enterprise Server (SLES)	
13.	Power Supply	Platinum rated redundant Hot plug Power Supplies with hot plug fans	
14.	Management integration	Support for integration with Microsoft System Center, VMware vCenter, BMC Software	
15.	Power & temperature	Real-time power meter, graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	
16.	Pre-failure alert	Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD	
17.	Configuration & management	 Real-time out-of-band hardware performance monitoring & alerting Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure management of scalable platform hardware 	
18.	LCD panel	Should display system ID, status information and system error error code followed by descriptive text. LCD background should light up in different colours during normal system operation & error conditions.	
19.	Server security	Should have a cyber-resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Should provide effective protection, reliable detection & rapid recovery using: - Silicon-based Hardware Root of Trust - Secure default passwords - Configuration and firmware drift detection - Automatic BIOS recovery - Rapid OS recovery - System erase Configuration upgrades should be only with cryptographically signed firmware and software Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware	
20.	Intrusion alert	Intrusion alert in case chassis cover being opened	
		3 years On-site comprehensive warranty	

Item No 7: Server (Option 4)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Form Factor	Max. 2U rack mounted with sliding rails	
3.	Supported CPU	Up to two 3rd Generation Intel® Xeon® Scalable processors with up to 32 cores per processors	
4.	Memory slots	Up to 16 x DDR4 RDIMMs/LRDIMMs or higher	
5.	Disks supported	Up to 12 x 3.5" SAS/SATA HDD Up to 12 x 3.5" SAS/SATA HDD + 2 x 2.5" Rear Up to 16 x 2.5" SAS/SATA HDD or SSD Up to 16 x SAS/SATA HDD or SSD + 8 x NVMe	
6.	RAID Controller	HW RAID Card	
7.	I/O slots	Up to 5 x PCIe Gen4 (5 x16), 1 x PCIe Gen3 (1:x8)	
8.	Ethernet ports	2 x 1GbE LOM + 1 x OCP 3.0	
9.	Certification and compliances	Microsoft Windows Server, Hyper-V, VMWare, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES)	
10.	Power Supply	Platinum rated redundant Hot plug Power Supplies with hot plug fans	
11.	Management integration	Support for integration with Microsoft System Center, VMware vCenter	
12.	Power & temperature	Real-time power meter, graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	
13.	Pre-failure alert	Should provide predictive failure monitoring & proactive alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC, HDD	
14.	Configuration & management	 Real-time out-of-band hardware performance monitoring & alerting Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health Out-of-band hardware & firmware inventory Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers Zero-touch repository manager and self-updating firmware system Virtual IO management / stateless computing Support for Redfish API for simple and secure management of scalable platform hardware 	
15.	LCD panel	Should display system ID, status information and system error error code followed by descriptive text.	

16.	Server security	 Should have a cyber-resilient architecture for a hardened server design for protection, detection & recovery from cyber-attacks Should provide effective protection, reliable detection & rapid recovery using: Silicon-based Hardware Root of Trust Signed firmware updates Secure default passwords Configuration and firmware drift detection Persistent event logging including user activity Secure alerting Automatic BIOS recovery System erase Configuration upgrades should be only with cryptographically signed firmware and software Should provide system lockdown feature to prevent change (or "drift") in system firmware image(s) & prevent malicious modification of server firmware 	
17.	Intrusion alert	Întrusion alert in case chassis cover being opened	
18.	OS	Windows server 2019 Standard Edition with downgrade rights to 2016 R2 Std edition	
19.	Warranty	3 years On-site comprehensive warranty	

Item No 8: Server (Option No 5)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Factor/Height	1U / 2U rack server	
3.	Processors	One or Two AMD EPYC 8 core 3.7 GHz processor 128 MB Cache	
4.	Memory	Memory Should be offered with 128 GB memory with minimum 3200 MHz, and expandable upto 2TB	
5.	Expansion Slots	Up to two PCIe 4.0 expansion slots	
6.	Drive Bays	8 SFF (2.5-inch) SAS/SATA hot- swap drive bays. Should support NVmE drives, should be offered with 2 x 600GB 10K RPM drives	
7.	HBA/RAID Support	12 Gbps SAS server should support RAID card with 8 drives and should support RAID 0,1,5,6	
8.	Security and Availability	Power-on password, administrator's password, secure	

	Features	firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0	
9.	Power	Two redundant hot-swap power supplies	
10.	Operating System & Virtualization Support	Windows Server 2016, 2019 or most recent version, SUSE, RHEL, Ubuntu, VM ware etc	
11.	Warranty	3 years On-site comprehensive warranty	

Item No 9: Server (Option No 6)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Factor/Height	1U / 2U rack server	
3.	Processors	One or Two AMD EPYC 16 core 3 GHz processor 128 MB Cache	
4.	Memory	Memory Should be offered with 128 GB memory with minimum 3200 MHz, and expandable upto 2TB	
5۰	Expansion Slots	Up to two PCIe 4.0 expansion slots	
6.	Drive Bays	8 SFF (2.5-inch) SAS/SATA hot- swap drive bays. Should support NVmE drives, should be offered with 2 x 600GB 10K RPM drives	
7.	HBA/RAID Support	12 Gbps SAS server should support RAID card with 8 drives and should support RAID 0,1,5,6	
8.	Security and Availability Features	Power-on password, administrator's password, secure firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0	
9.	Power	Two redundant hot-swap power supplies	
10.	Operating System & Virtualization Support	Windows Server 2016, 2019 or most recent version, SUSE, RHEL, Ubuntu, VM ware etc	
11.	Warranty	3 years On-site comprehensive warranty	

Item No 10: Server (Option No 7)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Factor/Height	1U / 2U rack server	
3.	Processors	One or Two AMD EPYC 32 core 2.6 GHz processor 128 MB Cache	
4.	Memory	Memory Should be offered with 128 GB memory with minimum 3200 MHz, and expandable upto 2TB	
5.	Expansion Slots	Up to two PCIe 4.0 expansion slots	
6.	Drive Bays	8 SFF (2.5-inch) SAS/SATA hot- swap drive bays. Should support NVmE drives, should be offered with 2 x 600GB 10K RPM drives	
7.	HBA/RAID Support	12 Gbps SAS server should support RAID card with 8 drives and should support RAID 0,1,5,6	
8.	Security and Availability Features	Power-on password, administrator's password, secure firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0	
9.	Power	Two redundant hot-swap power supplies	
10.	Operating System & Virtualization Support	Windows Server 2016, 2019 or most recent version, SUSE, RHEL, Ubuntu, VM ware etc	
11.	Warranty	3 years On-site comprehensive warranty	

Item No 11: Server (Option No 8)

Sr.No.	Specifications	Description	Compliance (Yes/No)
1.	Market position	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	
2.	Factor/Height	1U / 2U rack server	

			1
3.	Processors	One or Two AMD EPYC 64 core 2 GHz processor 256 MB Cache	
4.	Memory	Memory Should be offered with 128 GB memory with minimum 3200 MHz, and expandable upto 2TB	
5.	Expansion Slots	Up to two PCIe 4.0 expansion slots	
6.	Drive Bays	8 SFF (2.5-inch) SAS/SATA hot- swap drive bays. Should support NVmE drives, should be offered with 2 x 600GB 10K RPM drives	
7.	HBA/RAID Support	12 Gbps SAS server should support RAID card with 8 drives and should support RAID 0,1,5,6	
8.	Security and Availability Features	Power-on password, administrator's password, secure firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0	
9.	Power	Two redundant hot-swap power supplies	
10.	Operating System & Virtualization Support	Windows Server 2016, 2019 or most recent version, SUSE, RHEL, Ubuntu, VM ware etc	
11.	Warranty	3 years On-site comprehensive warranty	

Item No. 12: Desktops (Intel)

Sr. No.	Item Description		Compliance (Yes/No)
1.	Processor	Intel Pentium Dual Core Processor with 10 th Generation or higher	
2.	Operating System	Windows 10 Pro 64 bit	
3.	Memory	8 GB DDR4-2400 MHz or higher expandable up to 16 GB or higher, having 2 DIMM Slots	
4.	Storage	1TB HDD (7200 RPM or above)	
5.	Optical Device	DVD R/W drive (Optional)	
6.	Graphics	Intel Integrated HD	
7.	Security	TPM 2.0 or higher	
8.	I/O Ports	2 x USB 3.0, 2 x USB 2.0, 2 x audio/ 1x Universal Audio Jack, VGA/ HDMI, 10/100/1000M Gb IPV6 Compliant LAN	
9.	Green Certifications	Green Certification: Energy Star Certified/ EPEAT Registered/ RoHS/WEEE/REACH/BIS	
10.	Keyboard	104 Keys OEM English USB Keyboard same brand as that of PC	
11.	Mouse	Plug-and-play USB mouse same brand as that of PC	
12.	Speaker	Internal/ external speaker 1 X 2	

		Watts. Or higher	
13.	Monitor	19.5" or higher antiglare LED	
		display color monitor, HD (1400	
		x 900), TCO 07 certified,	
		EMI/FCC (or ETDC Report for	
		meeting FCC norms)	
		compliance, Energy Star 6.0 or	
		higher compliance, monitor of	
		same brand as that of PC	
14.	Connectivity	802.1 1b/g/n/ac / 802.11bgn,	
	support	Bluetooth 4.0	
15.	Warranty	Three years comprehensive	
	-	onsite warranty.	

Item No. 13: Desktops (Intel)

Above Desktop at Sr. No. 12 with Intel Core i3 Processor with 10th Generation Processor or higher

Item No. 14: Desktops (Intel)

Above Desktop at Sr. No. 12 with Intel Core i5 Processor with 10th Generation Processor or higher

Item No. 15: All in One Desktops (AMD), 21" or higher

Sr. No.	Item Description		Compliance (Yes/No)
1.	Processor	AMD Ryzen 3 Processor or higher	
2.	Operating System	Windows 10 Pro 64 Bit	
3.	Memory	8 GB DDR4-2400MHz or higher expandable up to 16 GB or higher, having 2 DDR4 DIMM Slots	
4.	Storage	1TB HDD (7200 RPM or above)	
5.	Optical Device	DVD R/W drive (Optional)	
6.	Webcam	Integrated HD webcam	
7.	Graphics	Intel Integrated HD Graphics	
8.	Security	TPM 2.0	
9.	Connectivity	1 x 1 802.1 1b/g/n/ac	
10.	I/O Ports	2 x USB 3.0, 2 x USB 2.0, Card reader, 2 x audio/ 1x Universal Audio Jack, VGA/ HDMI/ DP, 10/100/1000M Gb IPV6 Compliant LAN	
11.	Green Certifications	Green Certification: Energy Star Certified/ EPEAT Registered/ RoHS/WEEE/REACH/BIS	
12.	Keyboard	104 Keys OEM English USB Keyboard same brand as that of PC	
13.	Mouse	Plug-and-play USB mouse same brand as that of PC	
14.	Speaker	Internal speaker	

15.	Monitor	21" or higher, antiglare LED colour display with FHD (1920 x 1080), EMI/FCC (or ETDC Report for meeting FCC/ UL norms)	
		compliance, Energy Star 6.0 or higher compliance, monitor of same brand as that of PC	
16.	Warranty	Three years comprehensive onsite warranty	

Item No. 16: All in One Desktops (AMD), 21" or higher

Above Desktop at Sr. No. 15 with AMD Ryzen 5 Processor or higher

Item No. 17: All in One Desktops (AMD), 21" or higher

Above Desktop at Sr. No. 15 with AMD Ryzen 7 Processor or higher

Item No. 18: All in One Desktops (AMD Ryzen 3), 23" or higher

Sr. No.	Item Description		Compliance (Yes/No)
1.	Processor	AMD Ryzen 3 Processor or higher	
2.	Operating System	Windows 10 Pro 64 Bit	
3.	Chip Set	Q series	
4.	Memory	8 GB DDR4-2400MHz or better expandable up to 16 GB or higher, having 2 DDR4 DIMM Slots	
5.	Storage	1TB HDD (7200 RPM or above)	
6.	Optical Device	DVD R/W drive (Optional)	
7.	Graphics	Intel Integrated HD Graphics	
8.	Webcam	Integrated HD webcam	
9.	Security	TPM 2.0	
10.	Connectivity	1 x 1 802.1 1b/g/n/ac	
11.	I/O Ports	2 x USB 3.0, 2 x USB 2.0, Card reader, 2 x audio/ 1 x Universal audio jack, VGA/ HDMI/ DP, 10/100/1000M Gb IPV6 Compliant LAN	
12.	Green Certifications	Green Certification: Energy Star Certified/ EPEAT Registered/ RoHS/WEEE/REACH/BIS	
13.	Keyboard	104 Keys OEM English USB Keyboard same brand as that of PC	
14.	Mouse	Plug-and-play USB mouse same brand as that of PC	
15.	Speaker	Internal speaker	
16.	Monitor	23" or higher, antiglare LED colour display with FHD (1920 x 1080), EMI/FCC (or ETDC	

		Report for meeting FCC norms) compliance, Energy Star 6.0 or higher compliance	
17.	Warranty	Three years comprehensive onsite warranty	

Item No. 19: All in One Desktops (AMD), 23" or higher

Above Desktop at Sr. No. 18 with AMD Ryzen 5 Processor or higher

Item No. 20: All in One Desktops (AMD), 23" or higher

Above Desktop at Sr. No. 18 with AMD Ryzen 7 Processor or higher

Item No. 21: FHD Laptop 14 Inch with Intel Core i3 Processor

Sr. No	Item Description		Compliance (Yes/No)
• 1.	Processor Support	Intel® Core i3 with 10th Generation	
		Processor or higher	
2.	Operating System	Windows 10 Pro, 64 bit	
3.	Memory	Memory: 8 GB DDR4-2400 MHz or	
		higher expandable up to 16 GB or	
		higher, having 2 DIMM Slots. The	
		bidder can also quote with 1 DIMM	
		slot Free with expandable upto 16GB	
		or Higher and another may be	
		Soldered DIMM Slot. This will be	
		allowed for General rate Contract.	
4.	Storage	1TB HDD (5400 RPM or above)	
5.	Graphics	Intel Integrated HD	
6.	Security	TPM 2.0	
7.	Connectivity	1 x 1 802.1 1b/g/n/ac	
8.	I/O Ports	I/O Ports :2 x USB 3.0, 1 x USB	
		2.0,VGA/ HDMI/ DVI,	
		10/100/1000M Gb IPV6 Compliant	
		LAN, Bluetooth 4.0, 3.5mm audio	
		in/out or headphone/ microphone	
		combo jack, Internal Speaker	
9.	Battery	Li-Ion BATTERY Backup with	
		Advance Management capable to	
		provide 5 hours backup on standard	
		working mode	
10.	Green Certifications	Green Certification: Energy Star	
		Certified/ EPEAT Registered/	
		RoHS/WEEE/REACH, BIS	
11.	Keyboard & Mouse	OEM English Keyboard (it must have	
		soft keys) with Mouse track pad	
12.	Display	14" LED Backlit display(1920x1080 or	
		better) with integrated HD 720p or	
		better Camera	
13.	Speaker	Integrated speaker	
14.	Carry Bag	Executive Carry Bag	

15.	Warranty	Three years comprehensive onsite	
		warranty inclusive battery & adaptor	

Item No. 22: FHD Laptop 14 Inch with Intel Core i5 Processor

Above laptop at Sr. No. 21 FHD Laptop 14 inch screen with Intel Core i5 with 10th Generation Processor or higher

Item No. 23: FHD Laptop 14 Inch with Intel Core i5 Processor with SSD

Above laptop at Sr. No. 21 FHD Laptop 14 inch touch screen with Intel i5 with 10th Generation Processor or higher, stylus, with 512 GB M.2 NVMe SSD in lieu of 1TB HDD

Item No. 24: FHD Laptop 14 Inch with Intel Core i7 Processor with SSD

Above laptop at Sr. No. 21 FHD Laptop 14 inch touch screen Intel i7 with 10th Generation Processor or higher, stylus, with 512 GB M.2 NVMe SSD in lieu of 1TB HDD

Item No. 25: FHD Laptop 14 Inch with AMD Ryzen 3 Processor

Above laptop at Sr. No. 21 FHD Laptop 14 inch screen with AMD Ryzen 3 Processor or higher

Item No. 26: FHD Laptop 14 Inch with AMD Ryzen 5 Processor

Above laptop at Sr. No. 21 FHD Laptop 14 inch screen with AMD Ryzen 5 Processor or higher

Item No. 27: FHD Laptop 14 Inch with AMD Ryzen 7 Processor with SSD

Above laptop at Sr. No. 21 FHD Laptop 14 inch screen with Ryzen7 Processor or higher with 512 GB M.2 NVMe SSD in lieu of ITB HDD

Item No. 28: FHD Laptop 15.6" Inch with Intel Core i3 Processor

Above laptop at Sr. No. 21 FHD 15.6", Intel i3 with 10th Generation Processor or higher

Item No. 29: FHD Laptop 15.6" Inch with AMD Ryzen 7 Processor

Above laptop at Sr. No. 21 FHD Laptop 15.6 inch screen with Ryzen7 Processor or higher

Item No 30: Tablet (Option 1)

Sr. No.	Item Description		Compliance (Yes/ No)
1.	Processor	1.3 GHz or higher	
2.	Screen	7" Capacitive Touch Screen	
3.	Screen Resolution (Pixel)	1024X600 or Higher	
4.	Scratch resistant Screen	Yes	
5.	RAM	2 GB or Higher	
6.	Internal Storage	8 GB or Higher	

7.	Expandable Storage	16 GB or Higher	
	through Micro SD		
8.	Rear Camera with Auto	5 Megapixel or Higher	
	Focus		
9.	Camera with LED Flash	Yes	
10.	USB Port	1 No.	
11.	Micro USB Port	1 No.	
12.	Support for USB OTG	Yes	
13.	GSM SIM Card Slot	Yes	
14.	Warranty	Three year on-site	
		warranty	

Item No 31: Tablet (Option 2)

Sr. No.	Item Description		Compliance (Yes/ No)
15.	Processor	2 GHz or higher	
16.	Screen	7" Capacitive Touch Screen	
17.	Screen Resolution (Pixel)	1024X600 or Higher	
18.	Scratch resistant Screen	Yes	
19.	RAM	4 GB or Higher	
20.	Internal Storage	64 GB or Higher	
21.	Expandable Storage through Micro SD	16 GB or Higher	
22.	Rear Camera with Auto Focus	5 Megapixel or Higher	
23.	Camera with LED Flash	Yes	
24.	USB Port	1 No.	
25.	Micro USB Port	1 No.	
26.	Support for USB OTG	Yes	
27.	GSM SIM Card Slot	Yes	
28.	Warranty	Three year on-site warranty	

Item No 32: Tablet (Option 3)

Sr. No.	Item Description		Compliance (Yes/ No)
29.	Processor	3 GHz or higher	
30.	Screen	7" Capacitive Touch Screen	
31.	Screen Resolution (Pixel)	1024X600 or Higher	
32.	Scratch resistant Screen	Yes	
33.	RAM	8 GB or Higher	
34.	Internal Storage	64 GB or Higher	

35.	Expandable Storage through Micro SD	16 GB or Higher	
36.	Rear Camera with Auto Focus	5 Megapixel or Higher	
37.	Camera with LED Flash	Yes	
38.	USB Port	1 No.	
39.	Micro USB Port	1 No.	
40.	Support for USB OTG	Yes	
41.	GSM SIM Card Slot	Yes	
42.	Warranty	Three year on-site warranty	

Item No 33: AMD Workstation (Option 1)

Sr. No.	Parameter	Specification	Compliance (Yes/No)
1.	Form Factor	Tower (33L) or better	
2.	Qualified Processor	12-Core AMD Ryzen	
3.	Chipset	AMD WRX80 or higher	
4.	Memory Sockets	8 DIMM or higher	
5.	Memory Types	DDR4-3200 or higher	
6.	Total Memory	Up to 512GB or higher	
7.	M.2 PCIe Support	Yes	
8.	RAID Support	0/1/10/5	
9.	Ethernet	10GbE Ethernet	
10.	Wifi & Bluetooth	Yes	
11.	Optical	Yes	
12.	PCIe 3.No x16 (Graphics)	Yes	
13.	Kensington lock slot	Yes	
14.	Security Chip	Discrete TPM 2.0, TCG certified	
15.	Tool-less chassis	Yes	
16.	Supported OS	Windows® 10 Pro 64; / Ubuntu Linux LTS/ No operating system	
17.	Warranty	Three years comprehensive on-site warranty	

Item No 34: AMD Workstation (Option 2)

Sr. No.		~	Compliance
	Parameter	Specification	(Yes/No)
1.	Form Factor	Tower (33L) or better	
2.	Qualified Processor	16-Core AMD Ryzen	
3.	Chipset	AMD WRX80 or higher	
4.	Memory Sockets	8 DIMM or higher	
5.	Memory Types	DDR4-3200 or higher	
6.	Total Memory	Up to 512GB or higher	
7.	M.2 PCIe Support	Yes	

8.	RAID Support	0/1/10/5	
9.	Ethernet	10GbE Ethernet	
10.	Wifi & Bluetooth	Yes	
11.	Optical	Yes	
12.	PCIe 3.No x16 (Graphics)	Yes	
13.	Kensington lock slot	Yes	
14.	Security Chip	Discrete TPM 2.0, TCG certified	
15.	Tool-less chassis	Yes	
16.	Supported OS	Windows® 10 Pro 64; / Ubuntu Linux LTS/ No operating system	
17.	Warranty	Three years comprehensive on-site warranty	

Item No 35: AMD Workstation (Option 3)

Sr. No.	Parameter	Specification	Compliance (Yes/No)
1.	Form Factor	Tower (33L) or better	
2.	Qualified Processor	24-Core AMD Ryzen	
3.	Chipset	AMD WRX80 or higher	
4.	Memory Sockets	8 DIMM or higher	
5.	Memory Types	DDR4-3200 or higher	
6.	Total Memory	Up to 512GB or higher	
7.	M.2 PCIe Support	Yes	
8.	RAID Support	0/1/10/5	
9.	Ethernet	10GbE Ethernet	
10.	Wifi & Bluetooth	Yes	
11.	Optical	Yes	
12.	PCIe 3.No x16 (Graphics)	Yes	
13.	Kensington lock slot	Yes	
14.	Security Chip	Discrete TPM 2.0, TCG certified	
15.	Tool-less chassis	Yes	
16.	Supported OS	Windows® 10 Pro 64; / Ubuntu Linux LTS/ No operating system	
17.	Warranty	Three years comprehensive on-site warranty	

Item No 36: AMD Workstation (Option 4)

Sr. No.			Compliance
	Parameter	Specification	(Yes/No)
1.	Form Factor	Tower (33L) or better	
2.	Qualified Processor	32-Core AMD Ryzen	
3.	Chipset	AMD WRX80 or higher	
4.	Memory Sockets	8 DIMM or higher	
5.	Memory Types	DDR4-3200 or higher	

6.	Total Memory	Up to 512GB or higher	
7.	M.2 PCIe Support	Yes	
8.	RAID Support	0/1/10/5	
9.	Ethernet	10GbE Ethernet	
10.	Wifi & Bluetooth	Yes	
11.	Optical	Yes	
12.	PCIe 3.No x16 (Graphics)	Yes	
13.	Kensington lock slot	Yes	
14.	Security Chip	Discrete TPM 2.0, TCG certified	
15.	Tool-less chassis	Yes	
16.	Supported OS	Windows® 10 Pro 64; / Ubuntu Linux LTS/ No operating system	
17.	Warranty	Three years comprehensive on-site warranty	

Item No 37: AMD Workstation (Option 5)

Sr. No.	Parameter	Specification	Compliance (Yes/No)
18.	Form Factor	Tower (33L) or better	
19.	Qualified Processor	64-Core AMD Ryzen	
20.	Chipset	AMD WRX80 or higher	
21.	Memory Sockets	8 DIMM or higher	
22.	Memory Types	DDR4-3200 or higher	
23.	Total Memory	Up to 512GB or higher	
24.	M.2 PCIe Support	Yes	
25.	RAID Support	0/1/10/5	
26.	Ethernet	10GbE Ethernet	
27.	Wifi & Bluetooth	Yes	
28.	Optical	Yes	
29.	PCIe 3.No x16 (Graphics)	Yes	
30.	Kensington lock slot	Yes	
31.	Security Chip	Discrete TPM 2.0, TCG certified	
32.	Tool-less chassis	Yes	
33.	Supported OS	Windows® 10 Pro 64; / Ubuntu Linux LTS/ No operating system	
34.	Warranty	Three years comprehensive on-site warranty	

Item No 38- SAN 80 TB

Sr. Number	Paramater	Specification	Compliance (Yes/No)
1	Operating System & Clustering Support	1. The storage array should support industry-leading Operating System platforms including: Windows 2016 / 2019, VMware and Linux.	

		2. Offered Storage Shall support all	
		above operating systems in Clustering.	
2	Capacity & Scalability	 The Storage Array shall be offered with 80 TB Usable Capacity using NL- SAS Drive. For effective power saving, Storage subsystem shall be supplied with 2.5" Small form factor SFF drives however storage subsystem shall also support LFF drives with the addition of required disk enclosures. Storage shall be scalable to minimum of 240 number of SAS SFF 	
		drives.	
3	Front-end Ports & Back- end Ports	 Offered Storage system shall be supplied with 4 * 16 Gbps/10GbE ports per controller. Offered storage system shall support 12G SAS Back-end connectivity. 	
4	Architecture	The storage array should support dual, redundant, hot-pluggable, active-active array controllers for high performance and reliability	
5	No Single point of Failure	Offered Storage Array shall be configurable in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.	
6	Disk Drive Support	 Storage system shall support Enterprise SAS spinning drives, SSD and near line SAS / 7.2K RPM drives. Offered storage array shall also have support for FIPS 140-2 validating self-encrypted drives. 	
7	Cache	 Offered Storage Array shall be given with Minimum of 12GB cache per controller in a single unit. Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology. Offered Storage shall also have support for Flash cache using SSD / Flash drives. Offered storage shall support at-least 8TB Flash Cache. Offered Flash cache shall be tuned for random read operations and shall 	

		remain activated even at less than 70% of random average read workload.	
		1. Offered Storage Subsystem shall support Raid 1, 10, 5 and Raid 6	
		2. All Raid Sets shall support thin provisioning. Vendor shall offer the license of thin provisioning for complete supported capacity of the array.	
8	Raid Support	3. Thin provisioning shall be supported with offered Flash Cache.	
		4. Raid processing shall be offloaded to a dedicated ASIC instead of CPU. In case vendor is not supporting it then vendor shall ensure that additional 64GB cache per controller is configured to offset the raid processing workload.	
9	Point in time and clone copy	1. Offered Storage array shall be configured with array based Snapshot and clone functionality and shall be configured for minimum of 512 snapshot licenses.	
		2. Offered Storage array shall support at-least 512 point in time copies (Snapshots) and 128 volume / Clone copies	
10	Replication	1. Offered storage subsystem shall support storage based replication to DR location. License for maximum supported capacity of the array shall be offered.	
10	Replication	2. Offered storage subsystem shall support replication to multiple storage array of the same family in fan-out mode. At least 1:4 mode shall be supported.	
11	Virtualization and Thin provisioning	1. Offered storage shall be offered and configured with virtualization capability so that a given volume can be striped across all spindles of given drive type within a given disk pool. Disk pool shall support all listed raid sets of Raid 1, Raid 10, Raid 5 and Raid 6.	
		2. Offered Storage shall be offered and configured with Thin Provisioning	

		capability.	
12	Data Tiering	Offered Storage shall also be configured for Sub-Lun Data tiering in real time fashion across different type of drives within a given pool like SSD, SAS, NL-SAS etc. License shall be configured for maximum supported capacity of the array.	
13	Global and dedicated Hot Spare	 Offered Storage Array shall support Global hot Spare for offered Disk drives. Atleast 2 Global hot spare drive shall be configured for every 30 drives. Offered storage array shall have the support for distributed hot spare 	
14	Logical Volume & Performance	Support for distributed not spare1. Storage Subsystem shall supportminimum of 512 Logical Units.Storage Array shall also supportcreation of more than 120TB volumeatcontrollerlevel.2. Offered Storage shall have inbuiltperformance management software.Configuration Dashboard shall showoverallIOPSperformance.	
15	Load Balancing & Multi- path	1. Multi-path and load balancing software shall be provided, if vendor does not support MPIO functionality of Operating system.	
16	Performance	Offered storage shall have listed benchmark for performance of more than 250,000 in Raid 5 using appropriate drives at 8k block size. Vendor shall provide documentary proof for it.	
17	Array Integration	Offered storage array shall have plug- in for VMware VCenter, Microsoft System center as well as vStorage APIs (VAAI) for array integration.	
18	Warranty	Three years comprehensive on-site warranty	

Item No 39- SAN 250 TB

Sr. No.	Parameter	Functionality	Compliance (Yes/No)
1.0.1	Data Availability and All Flash	1. Offered storage shall be an Enterprise Storage array & 100% data availability guaranteed architecture and All Flash array only. Shall be marketed / Published as All Flash enterprise array on the vendor web site.	
		2. 100% data availability guaranty shall be clearly mentioned on vendor web site for the offered model. If vendors are not supporting the 100% data availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations.	
1.0.2	Operating System & Clustering Support	3. The storage array should support industry- leading Operating System platforms & clustering including: Windows Server 2016 / 2019, VMware 6 & 7 and Solaris	
1.0.3	Capacity & Scalability	1. Offered Storage array shall support combination of SAS SSD as well NVMe SSD inside the storage array and shall be scalable to at-least 250TB of native raw capacity while using the combination of drives.	
		2. Offered storage shall support more than 100 Flash drives.	
		3. Offered Storage array shall be supplied minimum with 250 TB Capacity and shall be configured in Raid 6. Vendor shall not use more than 10D+2P while sizing the array.	
		4. Offered Storage shall be able to protect at-least 2 drives failure simultaneously within a given raid group.	
1.0.4	Storage Encryption	1. Vendor shall offer only the encrypted drives with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor shall not offer any controller based or Software based encryption.	
		2. Offered FIPS 140-2 Validated encryption drives shall support both KMIP 1.3 and KMIP 1.4 for key management solutions. Vendor shall offer at-least internal Key manager engine for key management.	
1.0.5	No. of Controllers	Offered Storage array shall be offered with at-least dual controller and all offered controllers shall be connected to a common backplane instead of loosely connecting to SAN Switches, Ethernet Switches or InfiniBand switches.	

1.0.6	Cache and CPU Processing Power	 Offered Storage array should have at-least 256GB protected DRAM cache. Complete offered cache shall be both Global and coherent. DRAM Cache shall be completely dynamic for read and write ratios and operations and vendor shall not offer any additional card / module / drive for write cache operations. Offered storage shall be based upon latest 	
		generation Intel CPUs, minimum skylake series, and shall be supplied with at-least 20 numbers of CPU cores.	
1.0.7	Processing Power - Parallel processing engine	1. Offered Storage shall have dedicated, separated processing engines, apart from CPU cores, for effectively handling of NVMe parallelism (Command queue and no. of commands per queue), Raid-Rebuilding and data striping, thin re-claim etc.	
		 Storage array shall be supplied with at-least 2 dedicated above processing engines either in the form of ASICs or other equivalent technologies. If vendor doesn't support above critical feature, 	
1.0.8	Architecture & Processing Power	then additional 16 CPU Cores shall be supplied.1. Controllers shall be true symmetric active-activeso that a single logical unit can be shared across alloffered controllers in symmetrical fashion, whilesupporting all the major functionalities like ThinProvisioningetc.	
		2. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application.	
1.0.9	No Single point of Failure	Offered Storage Array shall be configured in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.	

1.1.0	Cloud Enabled Monitoring and Analytics	a. Providing Firmware upgrade and patch upgrade recommendations proactively along with release notes and with awareness of the peripheral infrastructure connected to the array.	
		b. Dashboard shall clearly highlight whether there is any issue with array with respect to best practices and shall recommend the required action, if any.	
		c. Providing extremely granular per-minute historical capacity and performance trend analysis by default, without the need to enable extra logging, install any appliances (physical or virtual), or install any software.	
		d. Providing overall saturation level of the array while combining while analyzing various parameters like IOPS, MB/sec, Block size etc.	
		e. Providing the status of at-least top 5 volumes where latency is extremely high.	
		f. Vendor cloud enabled monitoring and analytics engine shall be completely integrated with their support team so that it can provide history of support cases logged with Support team under different column like Critical, Normal and low severity along with closed cases. Cloud monitoring tool shall be able to provide the complete month- wise breakup.	
		g. Shall be able to provide the executive Dashboard covering various critical and must aspects of Total Capacity, overall health / wellness score of array. De-duplication and compression ratio, over-all front-end performance etc.	
1.1.1	Cloud Enabled - Analytics	Cloud enabled Analytics engine shall have capability to provide following: a. Shall have capability of global learning – Analytics engine shall collect control information from at- least 50000+ arrays across vendor installed base for meaningful output. Vendor shall provide the documentary proof for it.	
		b. Analytics engine shall have capability of proactive recommendation for arresting the issues / problems noticed at other install base of vendor after identifying the problematic signature.	

1.1.2	Cloud Enabled - Hypervisor Integration	Cloud enabled monitoring and analytics engine integration with Hypervisor a. Offered Cloud enabled monitoring and analytics	
	integration	engine shall be tightly integrated with Hypervisor layer and shall be certified to work with at-least VMware.	
		b. Hypervisor integration shall be able to provide end to end monitoring of hypervisor Datacentre, Data-store, Hypervisor Host and VMs running within the hypervisor datacentre and shall be able to link with offered storage array.	
		c. Cloud monitoring and integration tool shall provide the detailed analysis of CPU Contention, Memory contention, IO contention for each VM – including the latency.	
		d. Cloud monitoring and integration tool shall have capability to identify the top VMs which are contributing towards maximum IOs and Latency.	
		e. In case vendor doesn't support the above offered functionality then Vendor shall supply the enterprise license for VMware vRealize suite for at- least 20 Physical servers, each running with dual physical CPUs.	
1.1.3	On Site - Edge Analytics - Performance and Workload Management (Without	a. Shall have saturation panel which can depict the overall saturation level of the storage array at different time intervals instead of looking into individual parameters like IOPS, CPU utilization, Cache utilization etc.	
	external world IP connectivity)	b. Shall have capability to display top 5 volumes by hotspots as well as by latency.	
		c. If similar nature of arrays being used in the environment then offered engine shall show the top systems by saturation level within the same console.	
		d. Shall have capability at storage for tagging the Storage volume to given host applications so that performance charts can be drawn for application instance for easy management and troubleshooting.	
		e. Offered storage shall advise about Placement of application on best fit system based on saturation, free usable capacity and saturation forecast after application tagging.	

1.1.4	Cloud native data console (Management)	Offered Storage array should have cloud native data console for managing unlimited number of arrays. Cloud native console shall provide following functionalities:	
		a. Common Dashboard for all managing multiple arrays through a single cloud native data console.	
		b. Main Dashboard shall provide the information of Total number of Arrays, Volumes, hosts, Capacity and performance information of top Arrays and Volumes.	
		c. Common role based access control for managing multiple arrays through a single data console instead of creating users and assigning roles individually at each array.	
		d. Common Audit management for all arrays	
		e. Shall have capability for tagging the Storage volume to given host applications so that performance charts can be drawn for application instance for easy management and troubleshooting.	
		f. Offered console shall advise about Placement of application on best fit system based on workload after application tagging.	
		g. Shall be able to provide the context aware software updates on the storage array.	
		h. Shall be able to offer storage management and configuration as a service instead of controlling, patching and upgrading the management application by onsite team	
1.1.5	Cloud Native data console Management - Life Cycle	1. Management application shall be truly cloud native so that there shall be no need to configure, upgrade, patching of management application during the life-cycle of support contract and shall be offered as a service.	
		2. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console and doesn't have cloud native data console – then all required accessories like dual Ethernet switches, cables, at-least dual management server in HA etc. shall be provided upfront for at- least 16 arrays.	
1.1.6	Site Assessment	1. Vendor shall do comprehensive Cloud based assessment, at-least for VMware environment on a quarterly basis and shall factor the required services for it.	
		2. Assessment shall provide the detailed analysis of VMware Hosts – CPU & Memory utilization, Storage analysis and relevant findings of contention, Culprit	

		and Victim VMs in the environment attached to offered storage. Offered assessment shall do complete analysis of licensing as well.	
1.1.7	Data Protection	1. In case of power failure, storage subsystem shall have de-staged mode so that un-committed information can be protected. De-staging shall happen to vault drives and vault drives shall be encrypted.	
		2. Vendor shall not use any Vault drive as data drives for capacity calculation. Offered Vault drives shall not be the part of supplied disk enclosures.	
1.1.8	Host Ports and Back-end Ports	1. Offered Storage array shall have minimum of 8 x 32Gbps Fiber Channel ports & 8 x 25Gbps ISCSI ports. All offered ports shall have capability to work at line speed.	
		2. Offered Storage array shall have minimum of 16 SAS PCI lanes in the back-end for disk connectivity running at 12Gbps speed.	
		3. Offered Storage array system shall be supplied with two additional native 10Gbps IP ports per controller for storage based replication. Both offered ports shall use SFP+ transceiver for fiber connectivity on each controller.	
1.1.9	Investment Protection	Offered storage array shall provide data in place upgrade to next generation model non-disruptively without any downtime to at-least 2TB Cache	
1.2.0	Global Hot Spare	1. Offered Storage Array shall support distributed Global hot Spare for offered Disk drives.	
		2. Global hot spare shall be configure as per industry practice.	
1.2.1	Quality of service	1. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service / response time for different application logical units.	
		2. Quality of service engine shall allow to define minimum and maximum cap for required IOPS / bandwidth for a given logical units of application running at storage array.	
		3. It shall be possible to change the quality of service Response time (In both milliseconds as well as Sub- milliseconds), IOPS, bandwidth specification at real time.	

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1.2.2	Capacity efficiency	1. Offered storage array shall support inline data efficiency engine (Supporting Thin Zero detect and re-claim, De-duplication and Compression) and shall be enabled by default.	
		2. Vendor shall have flexibility to enable / disable the data efficiency engine at the time of Volume creation.	
		3. Storage subsystem shall be supplied with Thin Provisioning, Thin Re-claim, Snapshot, De- duplication, Compression, Performance Monitoring, and Quality of service on day 1 for the maximum	
100	Firmerrano	supported capacity of array.	
1.2.3	Firmware Upgrade	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller.	
1.2.4	Storage Management	Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities:	
		a. Common Dashboard for all managed arrays through a single management console.	
		b. Data migration through same console for all supported heterogeneous arrays	
		c. On-premise analytics like performance analysis, workload planning etc. through a single console	
		d. End to end connected topology view in pictorial format within management console, from Hypervisor to Storage arrays. At-least one of the hypervisor among VMware or Hyper-V shall be qualified.	
		e. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.	
1.2.5	Integration - VMWARE	1. Offered storage array shall be tightly integrated with VMware and shall be certified for VVOL. Shall provide following functionalities for VVOL	
		2. Shall be certified for vVol based replication	
		3. Shall support more than 25,000 vVol and at-least 5000VMs using Vvol.	
		4. Shall support both compression and de- duplication for VVOL	
		5. Shall be qualified to work with both Fiber Channel and ISCSI for VVOL.	

1.2.6	Integration - Container	 Offered Storage array shall be integrated with Redhat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration: a. Shall support both Static and Dynamic provisioning b. Shall be able to expand, re-size the persistent volumes given to statefulset applications. c. Shall be able to create and delete the snapshots. d. Shall support CSI Raw block volume as well as CSI Volume cloning. 	
		e. Support for both Fiber channel as well as ISCSI.	
1.2.7	Snapshot / Point in time copy & No. of Volumes	 The storage array should have support for controller-based snapshots (At-least 1024 copies for a given volume). Offered Storage array shall support more than 	
		32000 base volume on the storage array without snapshot and clone.	
1.2.8	Application Consistent Copies	1. Offered storage shall be supplied with unlimited license for creation of application consistent copies for Oracle, SQL, Exchange, SAP HANA and VMware through Storage console GUI.	
		2. Offered Storage shall be supplied with in-built copy management and backup S/W unlimited license for movement of data copies of Oracle, SQL, Exchange, SAP HANA and VMware to disk based backup device, public Cloud like AWS, Azure and object storage.	
		3. In case, vendor doesn't support this feature then additional 100TB Front-end capacity, full featured backup s/w shall be supplied.	

1.2.9	Remote Replication	1. The storage array should support hardware based data replication at the array controller level	
		2. Offered Storage array shall support both Synchronous and Asynchronous replication across 2 storage arrays natively without using any third party or software based solution.	
		3. Offered Storage array shall support 3 Data center solution natively where Primary site shall be able to replicate synchronously to near-by / Bunker location and at the same time shall be able to replicate to Far location asynchronously.	
		4. In case of Primary site failure – Far site shall have capability to pull the incremental information from Near-by / Bunker location natively without using any third party or software based solution.	
		5. Offered storage array shall have capability to create the application consistency group for replication operations. Shall have flexibility to have more than 256 volumes per consistency group.	
		6. Offered storage subsystem shall support incremental replication after resumption from Link Failure situation or during failback operations between 2DC or 3DC solution	
1.3.0	Active / Active Stretch Clustering	1. Offered Storage array shall have capability to provide true Active / Active Replication and Stretch clustering at metro distances for Zero RPO and RTO so that a given volume pair between primary and DR location can have concurrent access to both read and write operations simultaneously.	
		2. Active / Active replication shall be supported for all well-known OS like VMware, Redhat, Windows etc.	
1.3.1	Multi-tenancy	Offered storage array shall be true multi-tenant and shall support more than 512 Tenant per storage array. Every tenant shall be treated as a separate logical storage array with its own user control access.	
1.4			
	Warranty	Three years comprehensive on-site warranty	

Item No 40- NAS 80 TB

S.No.	Features	Requirements	Compliance (Yes/No)
4	Rack mount	NAS Controller Should be rack mounted with a form factor of not more than 2U	
5	Processor	Dual processor of 8 Core each. Shall be Intel Intel® Xeon-Silver 4208 (2.1GHz/8-core/85W) or AMD equivalent	
6	Memory	64GB Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory or higher, scalable to 384GB DDR4 RAM	
7	Hard Drives	Shall be supplied with minimum of Min 80 TB usable offered NAS Storage with NL-SAS disk, shall have separate dedicated SSD drives for Operating system in Raid 1+0.	
8	Storage expandability	 Offered NAS controller shall support at-least 28 internal LFF Slots and shall be offered with at- least 24 LFF Slots. Offered storage shall also have capability to attach additional drive enclosures. NAS shall support at-least 1000TB of external capacity using 14/16/18TB drives. 	
9	Network Connectivity	Min. 4 X 1Gbps auto sensing NICs ports and shall be further scalable to additional 8 numbers of 10Gbps ethernet port.	
10	Protocols support	ISCSI, FTP, FTPS, CIFS/SMB 3.1.1, HTTP, HTTPS, NFS 4.1, WebDev etc.	
11	Fault Tolerance for internal drives	Offered NAS shall support Raid 0, Raid 1, Raid 1+0, Raid 5 and Raid 6 for internal drives. Offered Raid controller shall have minimum of 4GB flash back write cache.	
12	Fault Tolerance for external drives	Offered NAS shall support Raid 0, Raid 1, Raid 1+0, Raid 5 and Raid 6 for external drives. Supported Raid controller shall have minimum of 4GB flash back write cache.	
13	Network Client Types Support	Should support Windows 10, Windows 2016/2019, AIX, vSOLARIS, Linux etc.	
14	Operating System	The storage system should have only Microsoft Windows Server IOT 2019 - 64 bit edition (NAS optimized) including powered OS drivers.	

15	De-duplication	 Offered NAS shall have block based De-duplication which can be enabled for all required volumes. De-duplication engine shall have: 1. Flexibility to decide the multiple schedules when de-duplication process can be run. 2. Flexibility to limit the time period of de-duplication process so that production operations remains intact. 3. Flexibility to bypass the recent files under the de-duplication process so that production operations remains intact. 4. License for De-duplication shall be provided. 5. Shall support more than 64TB of file system for de-duplication. 	
16	File screening and quota management	 Offered NAS shall have support for file screening so that administrator can ensures that users shall not be able to store unwanted files on offered NAS device. Offered NAS shall have Quota management for both Volume and Directory. Software for both File screening as well as Quota management shall be provided. 	
17	File Management	 Shall have flexibility to expire or move files to different folder / Location / Volumes / drives on the basis of polices like day of creation / modification / access of on the basis of file pattern like extension. Shall also be able to expire or move files to different folder / Location / Volumes / Drives on the basis of content classification within files. 	
18	SAN storage (iSCSI based)	Integrated iSCSI for block access over LAN.	
19	Snapshots	Point in time copies of your data to guard against data corruption.	
20	Encryption and compression	Shall have support for encryption and Compression. License for both of same shall be offered.	
21	Cloud Integration	Offered NAS shall be able to integrate with Microsoft Azure, AWS, NIC Cloud and similar platforms with valid subscription with following features: 1. File Sync 2. Backup	
22	Web Based Management	Shall have web based interface to manage and monitor system health, capacity, performance, hardware events, quotas,	
23	Capacity Insights	Capacity planning with a granular historical utilization dashboard with growth rate and usage trends	

24	Power Supply and FAN	Offered NAS shall also have Hot Plug redundant power supply and FAN	
25	Replication Support	 Replication Solution should support Replication technology to capture changes at the byte level and replicate them between source system and target system. Replication solution should support byte-level replication to send only changed bytes rather than entire blocks. Replication solution should support Continuous replication to minimizes data loss Replication Solution Should support efficient compression mechanism for bandwidth-saving. Replication Solution should support Data encryption in flight between the source and the target 	
26	Warranty	Three years comprehensive on-site warranty	

Item No 41- SAN Switch

S. No.	Features	Comp liance (Yes/ No)		
Arc	Architecture/Scalability/Performance/Management/Availability:			
1	Minimum Dual SAN switches shall be configured where each SAN switch shall be configured with scalability to 24 ports.			
2	Required scalability shall not be achieved by cascading the number of switches and shall be offered within the common chassis only			
3	Should deliver 32 Gbit/Sec Non-blocking architecture with 1:1 performance for up to 24 ports in an energy-efficient fashion			
4	Should protect existing device investments with auto-sensing 8, 16, and 32 Gbit/sec capabilities.			
5	The switch shall support different port types such as F Port, E Port, M Port, D Port.			
6	The switch should be rack mountable			
7	Offered SAN Switch shall support less than 900 nanosecond for port to port latency with no contention.			
8	Offered switch shall support at-least 2000 dynamically allocated frame buffers.			
9	The switch shall provide Aggregate bandwidth of 768 Gbit/sec end to end.			
1 0	Switch shall have support for web based management and should also support CLI.			
11	The switch should have USB port for firmware download, support save, and configuration upload/download.			
12	Offered SAN switches shall be highly efficient in power consumption. Bidder shall ensure that each offered SAN switch shall consume less than 80 Watt of power.			
13	Switch shall support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).			
Int	elligent Networking:			

Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high- priority traffic	
The switch shall be able to support ISL trunk up to 256 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing.	
SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.	
It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning	
The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric.	
Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device.	
	 be possible to define high, medium and low priority QOS zones to expedite high-priority traffic The switch shall be able to support ISL trunk up to 256 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing. SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths. It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric. Offered SAN switches shall support to measure the top bandwidth-consuming

Item No 42- 1.5 TB with 32 GB LRDIMMs server

Sr.No.	Features	Specification	Compliance (Yes/No)
1	Processor	4/4, Intel® Xeon® processor E5-4600 v2 series or better	
2	Level 2 (L2) Cache	256 KB per core or better	
3	Level 3 (L3) Cache	4C – 10 MB, 6C – 15 MB, 8C – 20 MB, 10C – 25 MB, 12C – 30 MB or better	
4	Chipset	Intel C600 or better	
5	Memory	48 DDR3/DDR3L LP, 1.5 TB (32 GB LRDIMMs) or better	
6	Internal Storage	2 x hot-swap 2.5-inch (SAS/SATA/SSD) or better	
7	Internal RAID	LSI 2004, RAID-0, -1 / ServeRAID M5115/RAID-0, -1, -5, -6, -10, -50 or better	
8	Internal USB	2 x Standard USB Flash Key +1 x Front Access USB Key or better	
9	I/O Expansion	4 x Mezzanine Cards (x16 + x8 PCI Express 3.0) Flex System Enterprise Chassis	
10	Network Interface	1/10 Gb Ethernet, Fibre Channel over Ethernet, iSCSI, 4/8/16 GB Fibre Channel Flex System Enterprise Chassis	
11	Management	RTMM KVM Dongle	
12	Operating Systems	Microsoft Windows Server, SUSE, RedHat Enterprise Linux, VMware	
13	RAS Features	Chassis redundant/hot-plug power and cooling, Front Panel and FRU/CRU LEDs	
14	Warranty	Three years comprehensive on-site warranty	

Sr.No.	Features	Specification	Compliance (Yes/No)
1	Processor	Up to 2 Intel® Xeon® processors E5-2600	· · · ·
		v4 series, up to 44 cores per node or better	
2	Cache Per	Up to 55MB, 2.5MB per core or better	
	Processor		
3	Memory	24 DDR4 LP, 1.5TB maximum with 64GB	
		LRDIMM, all x4 DIMMs support	
		2DPC@2400MHz or better	
4	Internal Storage	2 x hot-swap 2.5-inch	
		(SAS/SATA/SSD/NVMe) or 4 x hot-swap	
		1.8-inch SSDs or better	
5	Internal RAID	Standard LSI 3004, RAID 0/1, ServeRAID	
		M5215 based on LSI 3108, RAID $0/1/5$ with	
		2GB Flash Enablement or better	
6	Internal SD	2 x dual-slotted SD card +1 x Front Access	
	Flash/USB	USB Key or better	
7	Network	•x 10GbE	
	Connectivity	•x 1GbE adapter	
		•2-port, 4-port and 8-port x 10GbE	
		adapters	
		•2-port x 40GbE adapter	
		•2-port and 4-port x 8/16Gb Fibre	
		Channel adapters	
		•2-port x QDR/FDR InfiniBand adapter	
8	Management	RTMM KVM Dongle	
9	Operating	Microsoft Windows Server, SUSE, RedHat	
	Systems	Enterprise Linux, VMware	
10	RAS Features	Chassis redundant/hot-plug power and	
		cooling	
		Front panel and FRU/CRU LEDs	
11	Warranty	Three years comprehensive on-site warranty	

Item No 43- 1.5TB with 64GB LRDIMM server

Item No 44- Blade Chasis

Sr.No.	Features	Specification	Compliance (Yes/No)
1	Module bays (on rear)	One standard management module for KVM/Management and one additional management module bay	
2	I/O modules	Ten I/O module bays - Supports installation of a wide variety of switch modules	
3	Networking	The chassis supports up to four traditional fabrics using networking switches, storage switches, or pass though devices. The chassis also supports up to four new high-speed fabrics for future support of protocols like 4X Infiniband or 10Gb Ethernet	
4	Redundant cooling	Two hot-swap, redundant blower assemblies in the center, mounted one on top of the other	
5	Power supply	Blade Chassis comes with one pair of 2,900- watt 200 to 240 V ac power modules. These	

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		standard power modules support blade server bays one through seven with power redundancy. The second pair of power modules is required if any of 3 blade server bays 8 to 14 or I/O module bays 5 to 10 will be occupied	
6	Configuration	The Blade Chassis 9 U rack drawer enclosure is designed to be installed in a 19 inch rack cabinet designed for 28 inch deep devices	
7	Warranty	Three years comprehensive on-site warranty	

Item No 45- 2.0 TB with 32 GB DIMMs Server

Sr.No.	Features	Specification	Compliance (Yes/No)
1	Form factor/height	Rack/4U per chassis	
2	Scalability	 One server (4U rack-mounted complex) One server with memory expansion unit (5U rack-mounted complex) Two servers with two memory expansion units (10U rack-mounted complex) 	
3	Processor type	Intel Xeon E7-8800 and E7-4800 families, up to 10 cores or better	
4	Number of processors	2 standard (some 4 standard); 4 maximum or better	
5	Cache (max)	Up to 30 MB L3 cache or better	
6	Memory DIMM sockets	Up to eight memory cards, each with eight DIMM sockets (64 DIMM sockets total) or better	
7	Memory	2.0 TB using 32 GB DIMMs, expandable up to 3.0 TB	
8	Expansion slots	 Eight slots total: Seven PCIe 2.0 slots (one used by 10 Gb Ethernet card, if included). One PCIe 2.0 slot for supported RAID card. 	
9	Disk bays	Eight 2.5" hot-swap SAS or sixteen 1.8" solid-state drives (SSD)	
10	Maximum internal storage	Using NL SAS HDDs: 8 TB per chassis with eight 1 TB drives Using 2. 5-inch SSDs: 12.8 TB per chassis with eight 1.6 TB drives Using solid-state drives: 8 TB per chassis with 16x 512 GB SSDs	
11	Network interface	Two 1 Gb Ethernet ports. Broadcom 5709C controller. 10Gb Virtual Fabric Adapter with two 10 Gb Ethernet ports	
12	Power supply (std/max)	Up to two hot-swap redundant 1975 W power supplies	
13	Hot-swap	Power supplies, fans, hard disk drives, and	

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	components	solid-state-drives	
14	RAID support	Integrated RAID-0, RAID-1 with ServeRAID in dedicated PCIe slot RAID-5, 6, 10, 50, 60	
15	External ports	Rear: Four scalability ports , one Ethernet for systems management, one serial port, four USB 2.0, one VGA, two Gb Ethernet Front: Two USB 2.0 Internal: One USB 2.0 port for Embedded Hypervisor	
16	Systems management	Alert on LAN 2, Automatic Server Restart, light path diagnostics (independently powered), Predictive Failure Analysis on hard disk drives, processors, VRMs, fans and memory, Wake on LAN, Dynamic System Analysis, QPI Faildown	
17	Operating systems supported	Microsoft® Windows Server® 2008 (Standard, Enterprise and Data Center Editions 64-bit), 64-bit Red Hat Enterprise Linux®, 64-bit SUSE Enterprise Linux, (Server and Advanced Server), VMware vSphere Hypervisor	
18	Warranty	Three years comprehensive on-site warranty	

Annexure-II

Performance Bank Guarantee Template

[Date]

To,

The Managing Director, H.P. State Electronics Development Corporation Ltd., First Floor, IT Bhawan, Mehli, Shimla-171013.

Dear Sir,

1. Whereas M/s _______ (hereinafter called "CONTRACTOR") has supplied _______ (as per Bill of Material Specified in this Document) as per agreement/supply order No.______ dated ______ signed between the HPSEDC (hereinafter called "Client") and them and as per the agreement/supply order the M/s. ______ is supposed to furnish Performance Security for supply of ______ and maintain the same for a period of _____years.

- 2. NOW THEREFORE KNOW ALL THE MAN THESE PRESENTS THAT WE, __(Bank Name)______ having its Head Office at ______(hereinafter called "the Bank") are bound up to the Client in the sum of Rs. ______) only) for which payment will and truly to be made to the said Client, the Bank binds itself, its successors and assignees by these presents.
- 3. The Bank further undertakes to pay to the purchaser up to the above amount on receipt of its first written demand, without the Client having to substantiate its demand. The Client's decision in this regard shall be final and shall not be called upon to question under any circumstances. The Bank Guarantee will remain in force up to _____. However, its validity can be got extended before ______ solely at the instance of the Purchaser. This clause shall remain valid not withstanding anything else contained to the contrary in this document.

- 4. Our responsibility under this guarantee is restricted to Rs. _____/- (Rupees ______) only and it will remain enforce up to ______ unless a demand in writing is received by the bank on or before ______, all your rights under the said guarantee shall be forfeited and we shall be released and discharged from all the liabilities thereunder.
- 5. This guarantee will remain in force up to <date of validity> and any demand in respect thereof should reach the Bank not later than the specified date/dates. However, notwithstanding anything else contained to the contrary in this Guarantee, if the implementing agency does not submit the fresh performance bank guarantee (as per required schedule and amount) till 15 days before expiry of this performance bank guarantee, the Purchaser may either forfeit the PBG or ask the Bank to extend validity of the Bank Guarantee for a further period not exceeding six months. In the latter situation, the Bank shall comply with such a request of extension.
- 6. Sealed with the Common Seal of the said Bank this _____ day of _____, 2022. In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this _____ day of _____, 2022 for Bank ______

Witness

Signature

Name

M/s._____ (complete address)

Note: This guarantee will attract stamp duty as a security bond.

A duly certified copy of the requisite authority conferred on the official/s to execute the Guarantee on behalf of the bank should be annexed to this guarantee for verification and retention thereof as documentary evidence.

Annexure-III

Bank Guarantee (BG) Format for EMD

Date _____

То

The Managing Director, H.P. State Electronics Development Corporation Ltd., First Floor, IT Bhawan, Mehli, Shimla-171013.

Dear Sir,

1.Whereas M/s. _____ (hereinafter called "Bidder") has quoted against the Tender No: SEDC/Server-Workstation/2K22-1109

2. Invited by M/s H.P. State Electronics Development Corporation Ltd. (HPSEDC) towards supply of _______ is supposed to furnish Bank Guarantee the same valid for a period of 120 days.

the Bank binds itself, its successors and assignees by these presents.

- 4. The Bank further undertakes to pay to the purchaser up to the above amount on receipt of its first written demand, without the Client/ HPSEDC having to substantiate its demand. The Client's decision in this regard shall be final and shall not be called upon to question under any circumstances. The Bank Guarantee will remain in force up to 120 days. However, its validity can be got extended before expiry of its validity solely at the instance of the HPSEDC. This clause shall remain valid not withstanding anything else contained to the contrary in this document.
- 5. Our responsibility under this guarantee is restricted to Rs._____/- (Rupees ______) only and it will remain enforce up to ______ unless a demand in writing is received by the bank on or before ______, all your rights under the said guarantee shall be forfeited and we shall be released and discharged from all the liabilities thereunder.

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- 6. This guarantee will remain in force up to <date of validity> and any demand in respect thereof should reach the Bank not later than the specified date/dates. However, notwithstanding anything else contained to the contrary in this Guarantee, if the bidder does not submit the fresh bank guarantee or extend the existing Bank Guarantee till 15 days before expiry of this bank guarantee, the Purchaser/ HPSEDC may either forfeit the BG or ask the Bank to extend validity of the Bank Guarantee for a further period not exceeding six months. In the latter situation, the Bank shall comply with such a request of extension.
- 7. Sealed with the Common Seal of the said Bank this _____ day of _____, 2021. In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this _____ day of _____, 2021 for Bank ______

Witness

Signature

Name

M/s._____ (complete address)

Note: This guarantee will attract stamp duty as a security bond.

A duly certified copy of the requisite authority conferred on the official/s to execute the Guarantee on behalf of the bank should be annexed to this guarantee for verification and retention thereof as documentary evidence.

Latest instructions for bidders:

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
 - a. An entity incorporated, established, or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established, or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established, or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (III) above will be as under:
 - 1.In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company.
- "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has

ownership of entitlement to more than fifteen percent of capital or profits of the partnership.

- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

The Bidder has to provide following declarations (duly signed and stamped):

Declaration 1 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered."

Declaration 2 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]

Declaration 3 of Latest instructions to bidders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached"

In case bidder is Himachal based company/ firm/ entity then the bidder should submit a self-declaration certificate regarding above mentioned Declaration 1, 2 and 3.

Note: Interested bidder may refer to Office Memorandum (F. No. 6/18/2019-PPD) dated 23.07.2020 of Department of Expenditure, Ministry of Finance, Govt. of India for further details and all the requirements will be in accordance with this memorandum.