H.P. STATE ELECTRONICS DEVELOPMENT CORPORATION LTD.

(A Unit of H.P. Government Undertaking)



e-TENDER

FOR

Revamping of structured networking / cabling in HP Secretariat, Shimla

E-Tender No: SEDC/ HP-SEC/ NETWORK/ 2K23-2624

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: procurement@hpsedc.in

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

29-05-2023

RFP for Revamping of structured networking / cabling in HP Secretariat, Shimla

INDEX

SECTION-I	3
INVITATION FOR E-BIDS	3
GIST OF IMPORTANT GENERAL CONDITIONS	4
SECTION 2	9
INSTRUCTIONS TO BIDDERS.	9
A- INTRODUCTION	9
B- TENDER DOCUMENT	13
C - PREPARATION OF BIDS	13
D-SUBMISSION OF BIDS	16
E-BID OPENING AND EVALUATION	18
F - AWARD OF CONTRACT	23
SECTION-3	24
GENERAL CONDITIONS OF THE TENDER &CONTRACT	24
SECTION-4	33
TECHNICAL SPECIFICATIONS AND MAINTENANCE CONDITIONS	33
PROFORMA- A	36
FORM-B	37
FORM-C	38
SCHEDULE - I	39
ANNEXURE-I	42
SECTION – V	42
TECHNCIAL SPECIFICATIONS AND COMPLIANCE SHEETS ANNEXURES	42
Annexure-II	54
Performance Bank Guarantee Template	54
Annexure-III	56
Bank Guarantee (BG) Format for EMD	56

SECTION-1

INVITATION FOR E-BIDS

E-TENDER NO: SEDC/ HP-SEC/ NETWORK/ 2K23-2624

Note: The Press e-Tender Notice published in following daily Newspapers for inviting e-Tenders for Revamping of structured networking / cabling during warranty period and post warranty period in HP Secretariat, Shimla. 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 also be considered for General Rate Contract of equipment and will be valid for two 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 the Networking/ Cabling as per technical specifications in Annexure-I to HP Secretariat, Shimla and providing after sale support during warranty period.

GIST OF IMPORTANT GENERAL CONDITIONS

- 1) The tender has been floated for finalizing the rate for structured networking / cabling in HP Secretariat, Shimla as per specifications mentioned in Annexure-"I'. The rate will be finalised for all the components involved in structured networking/ cabling, where the bidder has quoted lowest (L1) rate, for all the item as a whole i.e. L1 bidder shall be determined based on the lowest total amount for all the items combined. Only L1 rates will be conveyed to the HP Secretariat, Shimla 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 to HP Secretariat, Shimla 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 also be considered for Rate Contract, valid for two years. The terms and conditions of the Rate Contract shall be same as per this tender document.
- 3) All categories of Switches, Transceivers & Switch OS should be from same OEM & Switch / Switch OS should be IPv6 logo, RoHS and common criteria / NDPP / NDcPP certified at the time of bidding.
- 4) After finalizing the L1 rates, the work order will be placed to L1 bidder for the quantity mentioned in this RFP and other bidder(s) may be given opportunity to match the prices 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.
- 5) Unless otherwise specified for a part of the order, the supplies should be completed within 16-18 weeks from the date of placing the supply order except for snowbound/ tribal areas, where delivery can be made within 18-20 weeks. Delivery is to be made FOR destination i.e. Himachal Pradesh Secretariat, Shimla 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.
- 6) 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.

- 7) 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 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 have been complied with during the period of tender/ rate contract.
- 8) 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 www.hpsedc.in. Interested bidder can participate by procuring tender.

3.) SCHEDULE OF THE TENDER PROCESS:

S. No.	Information	Details
1.	RFP No. and Date	No: SEDC/ HP-SEC/ NETWORK/ 2K23-2624
		Date: 29/05/2023
2.	Price of Tender Document	Rs 5000/-
3.	Earnest Money Deposit	Rs 16,00,000/-
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 06/06/2023 at
		11:30AM through video conference.
		Video Conferencing link is as under:
		https://meet.google.com/vtg-ycae-jhe
6.	Bid submission start date	12/06/2023 (11:00 AM)
7.	Bid submission End date	19/06/2023 (02:30 PM)

8.	Opening of e-Tenders Bids	20/06/2023 (02:30 PM)
9.	Tender Download Site	www.hpsedc.in & https://hptenders.gov.in
10.	Venue	H.P. State Electronics Development Corporation
		Ltd., 1st Floor, I.T. Bhawan, Mehli, Shimla-171013,
		H.P.

- (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

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 also 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 has to 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 are 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.	Pre- Qualification Criteria	Required details to be
No.		accompanying the Bid document
1.	The bidder should be registered under the Indian Companies Act, 1956/ 2013 or Proprietors firm/Partnership Firms (LLP) registered under LLP Act 2008 or subsequent amendments. Thereto having valid Government licence and GSTN and PAN.	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/BG 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) of Rs. 5000/- (Rupees Five Thousand only) (ii) Earnest Money (Rs. 16,00,000) Deposit (EMD) as mentioned in clause 2.10 DD / EMD may be submitted through RTGS in HPSEDC A/c: (State bank of India Khalini, Shimla-2 Account no. 55069383586 IFSC Code-SBIN 0051132) Receipt/Copy of the demand draft/RTGS should be uploaded. DD and BG in original form needs to be submitted to this office before last date of bid submission.
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,	Authorization letter from OEM in format given at Performa-A, either the bidder on behalf of OEM or OEM itself can bid but both cannot bid simultaneously in the same tender.

	preferred that the Original Equipment Manufacturers (O.E.M.) quotes directly.	
5.	The annual turnover (in terms of sales of hardware in India/ Global) of the OEM (with respect to active components) whose equipments are sought to be supplied, should be at least Rs. 500 Crores per annum for the last 3 years, i.e., for FY 2019-20, FY 2020-21, FY 2021-22.	company Statutory Auditor/ CA from OEM & financial data of the last three years in the format
6.	The Bidder should have an average annual turnover of at least Rs. 25 Crores during last three financial years from similar activities, i.e., should have supplied networking/ cabling and related IT services, from India Operations i.e. for FY 2019-20, FY 2020-21, FY 2021-22.	company Statutory Auditor/ CA from Bidders & financial data of the last three years to be
7.	The Bidder or its OEM {themselves or through reseller(s)} should have at least 3 years of experience in supply and maintenance of networking in Government/Semi Govt./ PSUs/ Autonomous bodies of Central/ State Govt./Private Institution /Enterprises	Certificates from client regarding satisfactory supply and maintenance along with purchase orders. In case of non-disclosure agreement, confirmation regarding size and value of the project may be submitted from the client.
8.	The Bidder or its OEM {themselves or through reseller(s)} should have experience in end-to-end implementation of at least 1 project of structured networking of minimum INR 2 Cr or 2 projects of minimum INR 1 Cr each or 3 projects of minimum INR 80 L each within last 3 (three) years (as on bid publish date) in India.	Certificates from client regarding satisfactory supply and maintenance along with 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 3 financial years as per audited balance sheets.	Supporting financial documents/Balance sheet/certificate from company's Statutory Auditor/ CA.
10.	The OEM/ bidder should have ISO/IEC 27033-6:2016 and ISO 9001:2015 or any other equivalent or better quality certification	Certificate of each type from the certifying organizations.
11.	OEM should have presence in INDIA for more than 10 years	Supporting documents such as Company registration certificate etc.
12.	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. Provide detail of web linkages.

13.	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-C.
14.	The bidder should have submitted the declaration of acceptance of terms and conditions of this RFP as per Form B	Declaration from Authorized Signatory as per Form B of this RFP
15.	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.	Supporting documents/certificate from company's authorised signatory shall be submitted by the bidder.
16.	The quoted product should not be End of Life (EOL) at the time of bid submission and End of Support (EOS) during warranty period.	An undertaking in this regard, shall be submitted by the OEM along with the bid.

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.

As per policy of the State Govt., the Startup Enterprises/ units registered in Himachal Pradesh, in micro and small-scale categories, sector may also be exempted from prior experience and turnover requirements provided they meet the requisite quality standards as laid down in the tender.

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.
- 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)

This part of the Bid must comprise of the following documents to be uploaded in Packet-1 on the e-procurement portal:

- (i) Fact Sheets for the products quoted by the Bidder, along with copies of requisite certifications mentioned in the fact sheets.
- (ii) Product catalogues of quoted items revised upto date. If some product up gradation has taken place since the printing of the brochures, latest authenticated releases/ bulletins must be enclosed and also indicate website links of the OEM & bidder.

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:

2.10.1The 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.	Revamping of structured networking / cabling in HP Secretariat, Shimla	Rs 16,00,000/- (Rupees Sixteen 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/ BG 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 https://hptenders.gov.in 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 e-procurement system.
- 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 In the first instance, Eligibility bid documents uploaded on the e-portal will be opened and evaluated for eligibility of each Bidder will be ascertained. Technical Bids of only those Bidders shall be evaluated who are found to be eligible as per the criteria laid down in para 2.2.1/2.8 (I) and submitted bid security and tender cost as per Para 2.10. In doubtful cases (where further documents or clarification are required to establish eligibility), the Purchaser in its discretion, may decide to open/evaluate Technical Bid. However, such Bids can be rejected subsequently, if it is found that the bidder has claimed eligibility on false grounds.
- 2.16.4 The Technical e-Bids of only the Eligible Bidders will be opened and the contents (particularly Compliance Sheets) will be announced/ displayed in the presence of all Bidders or their representatives.

2.16.5. Scrutiny of Technical Bid:

The product proposed in the bid document of only eligible bidders will be evaluated as per the requirements specified in the RFP/ Tender Document. The "Compliance 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 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 required. The Compliance/ Deviation statement submitted by the Bidders shall be 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.

Note 1:

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.

F - AWARD OF CONTRACT

2.20 Post Qualification:

2.20.1 HPSEDC will devise a performance criteria 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" of "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 63 months to safeguard the purchaser against timely delivery/installation and maintenance of ordered equipments during the currency of the contract. This will be further renewed for 39 months to ensure the after sale support of equipments supplied under the contract are under warranty.
 - (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.
 - (2) 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.
- 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).

3.6 Inspections and Tests:

- 3.6.1 The Purchaser or its representative shall have the right (if so desire) to test the 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.
- 3.6.3 Should any inspected or tested Goods fail to conform to the Specifications, the 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.
- 3.6.4 If the Purchaser decides to conduct the inspection at supplier's premises as per 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.
- 3.6.5 The sample of the proposed Equipment, if desired by the purchaser, to be supplied for approval/testing.
- 3.6.6 Bidder has to provide the required drivers etc. if essentially required for the quoted 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 installment 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 in 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.
- 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:

3.18.1Supplier 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 Liablity:

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.

3.20Arbitration:

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 addons 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, if not the successful bidder must establish the same within 15 days of award of work. 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, print-outs down loaded from INTERNET (& duly authenticated) may be acceptable.

5. Acceptance Testing After Notification of Award:

i. 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/ HP-SEC/ NETWORK/ 2K23-2624

De	ear Sir,
	ease refer to your Notice Inviting Tenders for procurement of networking / cabling published in "The lian Express" and "Amar Ujala".
M/	(Bidder), who is our reliable distributor for the las
	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
yea	ars 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, the networking/ cabling equipments will be delivered by M/s(Bidder) & maintained by M/s(ASP) properly as per the conditions of the contract. For this
	purpose, we shall provide M/S necessary technical support including 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

To

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/ HP-SEC/ NETWORK/ 2K23-2624] regarding procurement of networking/ cabling equipments 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,
	Name:
	Designation:
	Company:
	Address:
Contact No:	Email-id:

FORM-C

DECLARATION REGARDING PAST PERFOMANCE

To

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/ HP-SEC/ NETWORK/ 2K23-2624] regarding Tender/ rate contract of Networking/ Cabling by HPSEDC. I hereby declare that my company has not been debarred/black listed 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.

	·
	Name:
	Designation:
	Company:
	Address:
Email-id:	Contact No:

Yours truly,

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)

PRICE SCHEDULE

(DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

SI. No.	Item Description	Qt y	BASIC RATE with installatio n (if any) and five years warranty In Figures To be entered by the Bidder in Rs. P	GST Amount in percentag e (%)	GST amoun t in Rupees	Unit Pric e with GST	TOTAL AMOUN T Without Taxes with five year warranty Rs. P	Gross Bid Value Inclusive installatio n and Taxes (for five year onsite OEM warranty) Rs. P	TOTAL AMOUN T In Words
1.	Item No. 1.1: CORE SWITCH	2			0.00	0.00	0.00	0.00	INR Zero Only
2.	Item No. 1.2: Distribution Switch	14			0.00	0.00	0.00	0.00	INR Zero Only
3.	Item No. 1.3: Access Switch: Type I (24 Port)	27			0.00	0.00	0.00	0.00	INR Zero Only
4.	Item No. 1.4: Access Switch: Type II (24 Port)	95			0.00	0.00	0.00	0.00	INR Zero Only
5.	Item No. 1.5: Access Switch: Type III (24 Port PoE)	27			0.00	0.00	0.00	0.00	INR Zero Only
6.	Item No. 1.5: Transceivers SFP +	484			0.00	0.00	0.00	0.00	INR Zero Only
7.	Item No. 2.1 Cat6A Tool less Information outlet	1			0.00	0.00	0.00	0.00	INR Zero Only
8.	Item No. 2.2 Double port Face Plate	1			0.00	0.00	0.00	0.00	INR Zero Only
9.	Item No. 2.3 Single port Face Plate	1			0.00	0.00	0.00	0.00	INR Zero Only

10.	Item No. 2.4 Quad port Face Plate	1		0.00	0.00	0.00	0.00	INR Zero Only
11.	Item No. 2.5 24 port Cat 6A 19" Modular Toolless Patch Panel	1		0.00	0.00	0.00	0.00	INR Zero Only
12.	Item No. 2.6 UTP 4 pair 23 AWG CAT 6A LSZH Cable	1		0.00	0.00	0.00	0.00	INR Zero Only
13.	Item No. 2.7 CAT6A UTP 24 AWG Patch Cord – 1 mtr	1		0.00	0.00	0.00	0.00	INR Zero Only
14.	Item No. 2.8 CAT6A UTP 24 AWG Patch Cord – 2 mtr	1		0.00	0.00	0.00	0.00	INR Zero Only
15.	Item No. 2.9 Fiber Optic LC style fully loaded Patch Panel (FOPP), 19" Rack Mount ,coupler plates pre-loaded with 6 Nos of LC couplers SM	1		0.00	0.00	0.00	0.00	INR Zero Only
16.	Item No. 2.10 Fiber Optic LC style fully loaded Patch Panel (FOPP), 19" Rack Mount ,coupler plates pre-loaded with 24 Nos of LC couplers SM	1		0.00	0.00	0.00	0.00	INR Zero Only
17.	Item No. 2.11 SM Fiber Optic Patch Cable (LC-LC), 3 Mtrs	1		0.00	0.00	0.00	0.00	INR Zero Only
18.	Item No. 2.12 OS1, OS2 Single mode Loose tube Outdoor / Corrugated steel tape – 48 Core Fiber	1		0.00	0.00	0.00	0.00	INR Zero Only
19.	Item No. 2.13 OS1, OS2 Single mode Loose tube Outdoor / Corrugated steel tape – 24 Core Fiber	1		0.00	0.00	0.00	0.00	INR Zero Only
20.	Item No. 2.14 Network/Server Rack – 9U (400 ~500 mm Deep)	1		0.00	0.00	0.00	0.00	INR Zero Only
21.	Item No. 2.15 Network/Server Rack – 12U (400 ~500 mm Deep)	1		0.00	0.00	0.00	0.00	INR Zero Only
22.	Item No. 2.16 Network/Server Rack – 42U (800 ~1000 mm Deep)	1		0.00	0.00	0.00	0.00	INR Zero Only
Tota l in Figu res						0.00	0.00	INR Zero Only
Quo				IND 1	Zero Onl	lv		
ted Rate in Wor ds				IIVK	Lety Offi	y .		

Note: Items at Serial No 7 to 22 will be as per actual consumption

SECTION- 5

TECHNICAL SPECIFICATIONS

ANNEXURES

Tender Document No:

SEDC/ HP-SEC/ NETWORK/ 2K23-2624



NB: Final specifications uploaded after pre-bid meeting. Please visit our web-sites www.hpsedc.in & https://hptenders.gov.in 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 five years, an undertaking for the same shall be provided by the OEM.

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.

1. Active Components

Item No. 1.1: CORE SWITCH:

(Qty. 2 Nos)

Sl. No	Specifications	Compliance (Yes/ No)
1	Product details -	
1.1	Make, Model No. /OEM Part Code. (Please specify)	
2	Architecture & Port Density	
2.1	The Core Switch shall have 48x 1G/10G/25G SFP+ Ports and 8x 40G/100G QSFP28 Port from Day 1.	
2.1.1	10G Multimode (SR) LC Transceivers support	
2.1.2	10G Single Mode (LR) LC Transceivers	
2.1.3	1G Multimode (SX) LC Transceivers support	
2.1.4	1G Single Mode (LX) LC Transceivers	
2.1.5.	1G Copper (TX) RJ45 Transceivers support	
2.2	The Core Switch shall be configured with 400Gbps or more virtual stacking bandwidth between Core Switches. All the passive infrastructure should be part of supply.	
2.3	The Core Switch shall support Virtual Switching System (VSS) or Virtual Chassis (VC) or equivalent Switch Clustering/Stacking feature 2 Switches or More, where the Switch Clustering feature shall combine multiple switches into a single network element.	
3	Performance	
3.1	Switching Bandwidth: The Switch shall provide Switch Fabric Bandwidth Capacity of 3.8Tbps or more.	
3.2	Forwarding Capacity: The Switch shall provide Packet Forwarding Capacity of 1.99 BPPS or more.	
4	Layer 2 features: it shall support from day 1	

4.2 80000 MAC addresses or more 4.3 IP multicast snooping IGMP v1, v2, v3 4.4 Jumbo Frames (up to 9216 bytes) 5 Layer 3 features: it shall support from day 1 a Up to 100K IPv4 routes and up to 7000 IPv6 routes or more Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interface, Routed Interfaces, Routed Interface, Routed Interfaces, Routed Interface, Routed Interfaces, Routed Interface, Routed In	4.1	4000 or more active VLANs	
4.3 IP multicast snooping IGMP v1, v2, v3 4.4 Jumbo Frames (up to 9216 bytes) 5 Layer 3 features: it shall support from day 1 a Up to 100K IPv4 routes and up to 7000 IPv6 routes or more Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Routed Only and Routing between directly connected subnets from Day 1. c IPv4 & IPv6 Routing protocols & multicast routing available from day 1. d RIP v1 or v2, RIPng, OSPFv2, OSPFv3, BGP4, BGP4+, Multi-VRF, VRRP for both IPv4 and IPv6 protocol, VRRPv2 & VRRPv3. e. IPv4 multicast routing. PIM-SSM, PIM Sparse, PIM Dense, PIM Anyeast RP, and PIM passive IPv4 multicast routing. FIM-SSM, PIM Sparse, PIM Anyeast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 1 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N-1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N-1 power supply redundancy or better			
4.4 Jumbo Frames (up to 9216 bytes) 5 Layer 3 features: it shall support from day 1 a Up to 100K IPv4 routes and up to 7000 IPv6 routes or more Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Routed Only and Routing between directly connected subnets from Day 1. c IPv4 & IPv6 Routing protocols & multicast routing available from day 1. RIP v1 or v2, RIPng, OSPFv2, OSPFv3, BGP4, BGP4+, Multi-VRF, VRRP for both IPv4 and IPv6 protocol ,VRRPv2 & VRRPv3. e. IPv4 multicast routing. f PIM-SSM, PIM Sparse, PIM Dense, PIM Anycast RP, and PIM passive IPv4 multicast routing. f PiM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 7 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 7 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better			
Layer 3 features: it shall support from day 1 a Up to 100K IPv4 routes and up to 7000 IPv6 routes or more Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. c IPv4 & IPv6 Routing protocols & multicast routing available from day 1. RIP v1 or v2, RIPng, OSPFv2, OSPFv3, BGP4, BGP4+, Multi-VRF, VRRP for both IPv4 and IPv6 protocol, VRRPv2 & VRRPv3. c. PIM-SSM, PIM Sparse, PIM Dense, PIM Anycast RP, and PIM passive IPv4 multicast routing. f PIM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 In Secure Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability R t shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.1 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More R.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better		1 3	
a Up to 100K IPv4 routes and up to 7000 IPv6 routes or more Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Int		, , ,	
Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. c IPv4 & IPv6 Routing protocols & multicast routing available from day 1. d RIP v1 or v2, RIPng, OSPFv2, OSPFv3, BGP4, BGP4+, Multi-VRF, VRRP for both IPv4 and IPv6 protocol, VRRPv2 & VRRPv3. e. PIM-SSM, PIM Sparse, PIM Dense, PIM Anycast RP, and PIM passive IPv4 multicast routing. f PIM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19° Universal 4 post rack mount kit 7 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better			
b Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. c IPv4 & IPv6 Routing protocols & multicast routing available from day 1. d RIP v1 or v2, RIPng, OSPFv2, OSPFv3, BGP4, BGP4+, Multi-VRF, VRRP for both IPV4 and IPV6 protocol ,VRRPv2 & VRRPv3. c. PIM-SSM, PIM Sparse, PIM Dense, PIM Anycast RP, and PIM passive IPv4 multicast routing. f PIM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better	a	1 -	
RIP v1 or v2, RIPng, OSPFv2, OSPFv3, BGP4, BGP4+, Multi-VRF, VRRP for both IPV4 and IPV6 protocol, VRRPv2 & VRRPv3. e. PIM-SSM, PIM Sparse, PIM Dense, PIM Anycast RP, and PIM passive IPv4 multicast routing. f PIM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 Is shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better	b	Routed Interfaces, Route Only and Routing between directly connected	
for both IPV4 and IPV6 protocol ,VRRPv2 & VRRPv3. PIM-SSM, PIM Sparse, PIM Dense, PIM Anycast RP, and PIM passive IPv4 multicast routing. PIM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. REPAIR SECURE SHELL SH	С	IPv4 & IPv6 Routing protocols & multicast routing available from day 1.	
6. IPv4 multicast routing. f PIM-SSM, PIM Sparse, PIM Anycast RP, MSDP and PIM6-SM Snooping IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better	d		
1 IPv6 multicast routing. 6 Security features RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	e.		
RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	f		
6.1 Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	6	Security features	
SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system Flexible Authentication with 802.1x Authentication and MAC Authentication Manageability It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring It should also support NetFlow or sFlow or equivalent Physical Attributes, Memory, Power Supply and Fans The Switch shall be provided with 19" Universal 4 post rack mount kit The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	6.1	Authorization and Accounting (AAA) with Local User Accounts and Local	
Inspection 6.4 IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system 6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	6.2		
6.5 Flexible Authentication with 802.1x Authentication and MAC Authentication 7 Manageability 7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	6.3		
Authentication Manageability It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring The Switch shall be provided with 19" Universal 4 post rack mount kit The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	6.4	IPv4 and IPv6 ACLs: with up to 8000 rules / ACL per system	
7.1 It shall be manageable using Network Management Software with Web based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	6.5		
based Graphical User Interface (GUI) 7.2 It shall support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	7	Manageability	
Telnet, TFTP, HTTP access to switch for management/monitoring 7.3 It should also support NetFlow or sFlow or equivalent 8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	7.1		
8 Physical Attributes, Memory, Power Supply and Fans 8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	7.2		
8.1 The Switch shall be provided with 19" Universal 4 post rack mount kit 8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	7.3	It should also support NetFlow or sFlow or equivalent	
8.2 The Switch should have minimum 32MB Buffers, 4GB Main Memory and 16GB Flash Memory or More 8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	8		
8.3 The Switch shall be configured with hot swappable, redundant load sharing AC power supplies to provide 1:1 or N+1 power supply redundancy or better 8.4 The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	8.1	The Switch shall be provided with 19" Universal 4 post rack mount kit	
AC power supplies to provide 1:1 or N+1 power supply redundancy or better The Switch shall be configured with hot swappable, redundant fans to provide 1:1 or N+1 fan redundancy or better	8.2		
provide 1:1 or N+1 fan redundancy or better	8.3		
9 Mandatory Compliance:	8.4		
	9	Mandatory Compliance:	

9.1	All categories of Switches, Transceivers & Switch OS should be from same OEM & Switch should be Ipv6 logo, ROHS and common criteria / NDPP / NDcPP certified at the time of bidding
10	Warranty
10.1	The Switching System shall be quoted with 5 years OEM Hardware warranty along with OEM web based / telephonic technical Support. The same shall be verifiable on OEMs website.
11	Product brochure
11.1	Vendor shall provide printed technical catalogues/brochures for the quoted model containing technical specifications, features.

Item No. 1.2: Distribution Switch

(Qty. 14 Nos)

Sl. No	Specification Required	Compliance (Yes/No)
1	Product details- Please specify	
1.1	Please mention Make, Model No. and Part Code	
2	Architecture & Port Density	
2.1	Switch should offer Wire-Speed Non-Blocking Switching & Routing Performance at Layer 2 & Layer 3.	
2.2	The Distribution Switch shall have Twelve (12) 1GbE/10GbE SFP+ Port	
2.3	Distribution Switch should support Stacking 8 Switches or More with more than 40Gbps stacking bandwidth per Switch.	
3	<u>Performance</u>	
3.1	Switching Bandwidth: Should provide Non-Blocking switch fabric capacity of 240 Gbps or more.	
3.2	Forwarding Capacity: Should provide wire-speed packet forwarding of 180 Mpps or more.	
4	<u>Layer 2 features</u>	
4.1	Shall support 4K active VLANs	
4.2	Shall support 30K MAC addresses or more.	
4.3	Shall support IP multicast snooping IGMP v1, v2, v3	
4.4	Shall support Jumbo Frames (up to 9K bytes)	
5	<u>Layer 3 features</u>	
5.1	Shall support minimum 15K IPv4 routes and 5K IPv6 routes or more	
5.2	Shall support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1.	
5.3	Shall support OSPFv2, OSPFv3, BGP4 and BGP4+, VRRP for both IPv4 & IPv6 Routing protocols and Multicast Routing Protocols.	
6	Security	
6.1	Switch shall support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords.	

6.2	Shall support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3
6.3	Shall support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection.
6.4	Shall support IPv4 and IPv6 ACLs with up to 5K
6.5	Shall support Byte and packet-based broadcast, multicast, and unknown-unicast limits with suppression port dampening.
6.6	Shall support IPv6 Router Advertisement (RA) Guard.
6.7	Shall support Flexible Authentication with 802.1x Authentication and MAC Authentication.
7	Manageability
7.1	Shall support manageability using Network Management Software with Web based Graphical User Interface (GUI).
7.2	Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring
7.3	Shall support Net Flow or sFlow or equivalent
8	Physical Attributes, Power Supply and Fans
8.1	Mounting Option: 19" Universal rack mount ears
8.2	Should be configured with a Single Hot Swappable Internal AC power supply and Fan from Day 1. Should support a second Hot Swappable Internal AC power supply and Fan in future for redundancy.
9	Mandatory Compliance:
9.1	All categories of Switches, Transceivers & Switch OS should be from same OEM & Switch / Switch OS should be Ipv6 logo , ROHS and common criteria / NDPP / NDcPP certified at the time of bidding
10	Warranty
10.1	The Switching System shall be quoted with 5 years OEM Hardware warranty along with OEM web based / telephonic technical Support. The same shall be verifiable on OEMs website.
11	Product brochure
11.1	Vendor shall provide printed technical catalogues/brochures for the quoted model containing technical specifications, features.

Item No. 1.3: Access Switch: Type 1

(Qty. 27 Nos)

Sl. No	Specification Required	Compliance (Yes / No)
1	Product details - Please specify	
1.1	Please mention Make, Model No. and Part Code.	
2	Architecture & Port Density	
2.1	The Switch should have minimum Twenty four (24) 10/100/1000Mbps RJ45 ports and should have Four (4) 1G/10G SFP+ Slots, from Day 1.	
2.2	The Switch should have Capability to Stack up to 8 Switches with more than 40Gbps stacking bandwidth per Switch. All the Accessories required for Stacking should be part of supply	

2.3	The Switch Must Support Long distance Stacking up to 2Kms.	
3	Performance	
3.1	Switching Bandwidth: The Switch should provide Switch Fabric Bandwidth Capacity of 128 Gbps or more.	
3.2	Forwarding Capacity: The Switch should provide Packet Forwarding Capacity of 95 Mpps or more.	
4	<u>Layer 2 features</u>	
4.1	Should support 4K active VLANs	
4.2	Should support 16K MAC addresses or more.	
4.3	Should support IP multicast snooping IGMP v1, v2, v3	
4.4	Should support Jumbo Frames (up to 9K bytes)	
5	<u>Layer 3 features</u>	
5.1	Should support minimum 1K IPv4 routes and 1K IPv6 route or more	
5.2	Should support Basic IPv4 and IPv6 Static Routing, ECMP, VRRP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from day 1.	
5.3	Should support Dynamic IPv4 & IPv6 Routing protocols (RIP, RIPng, OSPFv2 and OSPFv3) and Multicast Routing Protocols from Day 1.	
6	Security	
6.1	Should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords.	
6.2	Should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3	
6.3	Should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection.	
6.4	Should support IPv4 and IPv6 ACLs with up to 1K rules per ACL and a minimum of 2K rules per system.	
6.5	Should support Flexible Authentication with 802.1x Authentication and MAC Authentication.	
7	Manageability	
7.1	Should support manageability using Network Management Software with Web based Graphical User Interface (GUI).	
7.2	Should support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring.	
7.3	Should support NetFlow or sFlow or equivalent.	
8	Physical Attributes, Memory, Power Supply and Fans	
8.1	The Switch should be provided with 19" Universal 2 post rack mount kit.	
8.2	The Switch should have minimum 1GB of Main Memory and minimum 2GB Flash Memory.	
9	Mandatory Compliance:	
9.1	All categories of Switches, Transceivers & Switch OS should be from same OEM	

9.2	All categories of Switches, Transceivers & Switch OS should be from same OEM & Switch / Switch OS should be Ipv6 logo, ROHS and common criteria / NDPP / NDcPP certified at the time of bidding	
10	Warranty	
10.1	The Switching System shall be quoted with 5 years OEM Hardware warranty along with OEM web based / telephonic technical Support. The same shall be verifiable on OEMs website.	
11	Product brochure	
11.1	Vendor shall provide printed technical catalogues/brochures for the quoted model containing technical specifications, features.	

Item No. 1.4: Access Switch: Type II

(Qty. 95 Nos)

Sl. No	Specification Required	Compliance (Yes / No)		
1	Product details - Please specify			
1.1	Please mention Make, Model No. and Part Code.			
2	Architecture & Port Density			
2.1	The Switch should have minimum Twenty four (24) 10/100/1000Mbps RJ45 ports and should have Two (2) 1G/10G SFP+ Slots, from Day 1.			
2.2	The Switch should support long distance s tacking up to 8 Switches with more than 40Gbps stacking bandwidth per Switch.			
3	<u>Performance</u>			
3.1	Switching Bandwidth: The Switch should provide Switch Fabric Bandwidth Capacity of 128 Gbps or more.			
3.2	Forwarding Capacity: The Switch should provide Packet Forwarding Capacity of 95 Mpps or more.			
4	<u>Layer 2 features</u>			
4.1	Warranty			
4.2	Should support 16K MAC addresses or more.			
4.3	Should support IP multicast snooping IGMP v1, v2, v3			
4.4	Should support Jumbo Frames (up to 9K bytes)			
5	<u>Layer 3 features</u>			
5.1	Should support minimum 1K IPv4 routes and 1K IPv6 route or more			
5.2	Should support Basic IPv4 and IPv6 Static Routing, Host Routes, Virtual Interfaces, Routed Interfaces, RIP v1/v2, RIPng, Route Only and Routing between directly connected subnets from day 1.			
5.3	Should support Advanced Dynamic dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Multicast Routing Protocols.			
6	Security			
6.1	Should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords.			

6.2	Should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3	
6.3	Should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection.	
6.4	Should support IPv4 and IPv6 ACLs with up to 1K rules per ACL and a minimum of 2K rules per system.	
6.5	Should support Flexible Authentication with 802.1x Authentication and MAC Authentication.	
7	<u>Manageability</u>	
7.1	Should support manageability using Network Management Software with Web based Graphical User Interface (GUI).	
7.2	Should support Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring.	
7.3	Should support NetFlow or sFlow or equivalent.	
8	Physical Attributes, Memory, Power Supply and Fans	
8.1	The Switch should be provided with 19" Universal 2 post rack mount kit.	
8.2	The Switch should have minimum 1GB of Main Memory and minimum 2GB Flash Memory.	
9	Mandatory Compliance:	
9.1	All categories of Switches, Transceivers & Switch OS should be from same OEM	
9.2	All categories of Switches, Transceivers & Switch OS should be from same OEM & Switch / Switch OS should be Ipv6 logo, ROHS and common criteria / NDPP / NDcPP certified at the time of bidding	
10	Warranty	
10.1	The Switching System shall be quoted with 5 years OEM Hardware warranty along with OEM web based / telephonic technical Support. The same shall be verifiable on OEMs website.	
11	Product brochure	
11.1	Vendor shall provide printed technical catalogues/brochures for the quoted model containing technical specifications, features.	

Item No. 1.5: Access Switch: Type III

104	27)
(Otv:	2/1

Sl. No	Specification Required	Compliance Yes / No
1	Product details- Please specify	
1.1	Please mention Make, Model No. and Part Code	
2	Architecture & Port Density	
2.1	Switch should offer Wire-Speed Non-Blocking Switching & Routing Performance at Layer 2 & Layer 3.	
2.2	Switch should have Twenty Four (24) 1GbE PoE+ RJ45 ports and Four (4) 1GbE/10GbE SFP+ Slots.	
2.3	Access Switch should support long distance stacking up to 8 Switches with more than 40 Gbps stacking bandwidth per Switch.	
3	Performance	

3.2 Forwarding Capacity: Should provide wire-speed packet forwarding of 95 Mpps or more. 4. Laver 2 features 4.1. Switch should support 10K MAC addresses or more. 4.2 Switch should support 10K MAC addresses or more. 4.3 and MLD v1 & v2 4.4 Switch should support I multicast snooping with support for IGMP v1, v2, v3 and MLD v1 & v2 4.4 Switch should support Imminimum 1K IPv4 Routes or more 5.1 Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.3 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Switch should support Poynamic IPv4 & IPv6 Routing protocols (OSPFv2) and System through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Switch should support IPv sucre communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Switch should support IPv and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support IPv and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support IPv6 Router Advertisement (RA) Guard. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 7. Manageability 7.1 Switch should support Provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19° Universal rack mount cars 9 OF Power Budget: The Switch should provide a minimum of 370 watts of PoE+ power. 9 Mandatory Compliance: 9	3.1	Switching Bandwidth: Should provide Non-Blocking switch fabric capacity of 128 Gbps or more.				
4 Layer 2 features 4.1 Switch should support 10K MAC addresses or more. 4.2 Switch should support 1P multicast snooping with support for IGMP v1, v2, v3 and MLD v1 & v2 4.4 Switch should support Jumbo Frames (up to 9K bytes) 5 Layer 3 features 5.1 Switch should support minimum 1K IPv4 Routes or more Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.3 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSIv2), Secure Copy and SNMPv3 6.3 Dynamic ARP Inspection. 6.4 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with support IPv6 Router Advertisement (RA) Guard. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 6.7 Switch should support IPv6 Router Advertisement (RA) Guard. 6.8 Switch should support IPv6 Router Advertisement Software with Web based Graphical User Interface (GUI). 7.1 Switch should support IPv6 Router Advertisement Command Line Interface (CLI), Telent, TFTP, ITTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 90 Poe Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 91 Hall actegories of Switches, Transecivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	2.2					
4.1 Switch should support 10K MAC addresses or more. 4.2 Switch should support 10K MAC addresses or more. 4.3 and MLD v1 & v2 4.4 Switch should support Jumbo Frames (up to 9K bytes) 5 Laver 3 features 5.1 Switch should support minimum 1K IPv4 Routes or more Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.2 Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 6 Security Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 System through SSL, Secure Shell (SSIV2), Secure Copy and SNMPv3 8 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 8 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should support Plexible Authentication with 802.1x Authentication and MAC Authentication. 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 9 De Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9 Macdatory Compliance: 10 Macdatory Compliance: 11 Macdatory Compliance: 12 Potent Compliance:	3.2					
4.2 Switch should support 10K MAC addresses or more. 4.3 Switch should support IP multicast snooping with support for IGMP v1, v2, v3 and MLD v1 & v2 4.4 Switch should support Jumbo Frames (up to 9K bytes) 5 Laver 3 features 5.1 Switch should support minimum 1K IPv4 Routes or more Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Routed Only and Routing between directly connected subnets from Day 1. 5.2 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.1 for Authentication, Authorization sto the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownuncast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 6.7 Switch should support Revail Revailed Authentication with 802.1x Authentication and MAC Authentication. 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support Revailed Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount cars PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 1 All actegories of Switches, Transceivers &	4					
4.3 Switch should support IP multicast snooping with support for IGMP v1, v2, v3 and MLD v1 & v2 4.4 Switch should support Jumbo Frames (up to 9K bytes) 5.1 Switch should support minimum 1K IPv4 Routes or more Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.2 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6. Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.3 Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknown-unicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 6.7 Switch should support TPe Router Advertisement (RA) Guard. 6.8 Switch should support TPe Router Advertisement (RA) Guard. 6.9 Switch should support TPer Suble Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19° Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	4.1	Switch should support 4K Active VLANs				
4.3 and MLD v1 & v2 4.4 Switch should support Jumbo Frames (up to 9K bytes) 5. Laver 3 features 5.1 Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.3 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Switch should support er Source Communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Dynamic ARP Inspection. 6.4 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.5 Switch should support Ryte and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknown-unicast limits with supprression port dampening. 6.6 Switch should support Pv6 Router Advertisement (RA) Guard. 6.7 MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19° Universal rack mount cars 9 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoEpower. 9 Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	4.2					
5.1 Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.2 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.1 Switch should support Ever communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 5.3 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 5.7 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 8 Physical Attributes & Poe Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8 Poe Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	4.3					
5.1 Switch should support minimum 1K IPv4 Routes or more Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.3 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). Switch should support IPv4 and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support Plexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability Web based Graphical User Interface (GUI). Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring Switch should support Puniversal rack mount ears Physical Attributes & Poe Power Budget Mounting Option: 19" Universal rack mount ears Poe Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	4.4	Switch should support Jumbo Frames (up to 9K bytes)				
Switch should support Basic IPv4 and IPv6 Static Routing, ECMP, Host Routes, Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.3 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). Switch should support Byte and packet based broadcast, multicast, and unknown-unicast limits with suppression port dampening. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	5	<u>Layer 3 features</u>				
5.2 Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly connected subnets from Day 1. 5.3 Switch should support Dynamic IPv4 & IPv6 Routing protocols (OSPFv2 and OSPFv3) and Layer 3 Multicast Routing Protocols from Day 1. 6 Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 5 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	5.1	1				
6. Security Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. 6.2 Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 5 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	5.2	Virtual Interfaces, Routed Interfaces, Route Only and Routing between directly				
Switch should support RADIUS, TACACS/TACACS+ and username/password for Authentication, Authorization and Accounting (AAA) with Local User Accounts and Local User Passwords. Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. Manageability Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring Switch should support NetFlow or sFlow or equivalent Physical Attributes & PoE Power Budget Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	5.3					
6.1 for Authentication, Authorization and Accounting (AAA) with Local Ûser Accounts and Local User Passwords. 6.2 Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 6.3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 6.7 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6	Security				
Switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and Dynamic ARP Inspection. Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. Manageability Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 3 Switch should support NetFlow or sFlow or equivalent Physical Attributes & PoE Power Budget Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6.1	for Authentication, Authorization and Accounting (AAA) with Local User				
Dynamic ARP Inspection. 6.4 Switch should support IPv4 and IPv6 ACLs with up to 500 rules per ACL and a minimum of 6K rules per system (Standalone Switch or Stack). 6.5 Switch should support Byte and packet based broadcast, multicast, and unknownunicast limits with suppression port dampening. 6.6 Switch should support IPv6 Router Advertisement (RA) Guard. 6.7 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6.2	Switch should support secure communications to the management interface and				
minimum of 6K rules per system (Standalone Switch or Stack). Switch should support Byte and packet based broadcast, multicast, and unknown-unicast limits with suppression port dampening. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. Manageability Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring Switch should support NetFlow or sFlow or equivalent Physical Attributes & PoE Power Budget Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6.3	Switch should support IP Source Guard, DHCP snooping, DHCPv4, DHCPv6 and				
 unicast limits with suppression port dampening. Switch should support IPv6 Router Advertisement (RA) Guard. Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. Manageability Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring Switch should support NetFlow or sFlow or equivalent Physical Attributes & PoE Power Budget Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified 	6.4					
6.7 Switch should support Flexible Authentication with 802.1x Authentication and MAC Authentication. 7 Manageability 7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6.5					
MAC Authentication. Manageability Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring Switch should support NetFlow or sFlow or equivalent Physical Attributes & PoE Power Budget Mounting Option: 19" Universal rack mount ears PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6.6	1				
7.1 Switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	6.7					
Web based Graphical User Interface (GUI). 7.2 Switch should provide Integrated Standard based Command Line Interface (CLI), Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	7	Manageability				
Telnet, TFTP, HTTP access to switch management/monitoring 7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	7.1					
7.3 Switch should support NetFlow or sFlow or equivalent 8 Physical Attributes & PoE Power Budget 8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	7.2					
8.1 Mounting Option: 19" Universal rack mount ears 8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+ power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	7.3	Switch should support NetFlow or sFlow or equivalent				
8.2 PoE Power Budget: The Switch should provide a minimum of 370 watts of PoE+ power. 9 Mandatory Compliance: All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	8	Physical Attributes & PoE Power Budget				
power. 9 Mandatory Compliance: 9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	8.1	Mounting Option: 19" Universal rack mount ears				
9.1 All categories of Switches, Transceivers & Switch OS should be from same OEM. The Switch OS should be EAL/NDPP Certified	8.2					
The Switch OS should be EAL/NDPP Certified	9	Mandatory Compliance :				
10 Warranty	9.1					
	10	Warranty				

10.1	The Switching System shall be quoted with 5 years OEM Hardware warranty along with OEM web based / telephonic technical Support. The same shall be verifiable on OEMs website.	
	Product brochure	
11	Vendor should provide printed technical catalogs/brochures for the quoted model	
	containing technical specifications, features.	

Item No. 1.6: Transceivers SFP +

(Qty. 484 Nos)

Sl. No	Specification Required	Compliance (Yes / No)
1	10,000Base-LR Fiber SFP+ with Digital Optical Monitoring	
2	LC duplex connector	
3	1310 nm, for distances up to 10 Km	
4	Single-Mode Fiber	
5	ROHS Compliant	
6	Compliant with SFP Transceiver MSA specification	
7	Compliant with Specifications for IEEE 802.3ae/10 Gigabit Ethernet	
8	Compliant with Industry Standard RFT Electrical Connector and Cage	
9	Laser Class 1 Product which comply with the requirements of IEC FDA 21CFR, 1040.10, Class 1 and CSA 60950-1-03/ UL 60950-1	

2. Passive Components:

(Bidders shall provide unit rate of the following passive components. However, exact quantities shall be determined as per actual consumption at the time of project execution)

Sl. No	Specification Required	Compliance (Yes / No)
2.1	Supply, Installation, testing and commissioning of Cat6A Tool less Information outlet for Data & Voice. Cat6A U/UTP built in crimping mechanism with capability of retermination without refreshing the wires. LCS2 Toolless RJ45 Information outlet with insertion cycle (in & out) should be 2500 times (I/O) along with front side Label holder and transparent shutter. The Information Outlet connector shall be of gold/nickel, thickness of gold > 0.8µm. The connectors shall be compatible as per IEEE 802.3af standard for POE application.	
2.2	SITC of Double port Face Plate: Polycarbonate Hi-Grade Plastic FR Grade & UV Resistant 850 degree C/ Glow Wire Test. The face plate should be compatible for Cat5e, Cat6 range of RJ45 and AV connectors. The face plate Size should be of minimum 86x86mm	
2.3	SITC of Single port Face Plate: Polycarbonate Hi-Grade Plastic FR Grade & UV Resistant 850 degree C/ Glow Wire Test. The face plate should be compatible for Cat5e, Cat6 range of RJ45 and AV connectors. The face plate Size should be of minimum 86x86mm	

2.4	SITC of Quad port Face Plate: Polycarbonate Hi-Grade Plastic FR Grade & UV Resistant 850 degree C/ Glow Wire Test. The face plate should be compatible for Cat5e, Cat6 range of RJ45 and AV connectors. The face plate Size should be of minimum 86x86mm	
2.5	Supply, Installation, testing and commissioning of 24 port Cat 6A 19" Modular Toolless Patch Panel (loaded) enable all possible combinations of the various types of cable. Mounted on the same panel by using various toolless connector blocks/modules. Have a metal structure enabling them to be durably fixed to the uprights of the 19" chassis and assuring automatic grounding between toolless RJ-45 connectors, the panel, and the 19" uprights of the enclosure. Include rear cable support with plastic cable guides to hold cable without need for cable ties. Include quick mounting system to mount the panel into the 19" rails without use of cage-nuts. Front Removal IO's option for maintenance and troubleshooting with 6 Different Colours Labels for Labelling & Identification of Individual Ports. Tested and guaranteed under dual circuit IEEE PoE+ up to 50W for up to 2500 on-load connections / disconnections.	
2.6	Supply and drawing of UTP 4 pair 23 AWG CAT 6A LSZH Cable in the existing surface/ recessed steel/ PVC conduit as required conforming to the following standards like ANSI/TIA 568 C.2, IEC 60332-1, IEC 60754-1. Cable Dia 8.0 mm with bending radius -4 X Cable Diameter Operates at frequency of 500 Mhz	
2.7	Supply, Installation, testing and commissioning of CAT6A UTP 24 AWG Patch Cord - 1 mtr with cross separator , Manufactured from stranded wires for longer flex-life , Minimum length of 1m, and maximum length of 5m Conforming to the following standards like EN 50173, ISO/IEC 60603-7 & 11801/IEC 60332-1, UL VW-1	
2.8	Supply, Installation, testing and commissioning of CAT6A UTP 24 AWG Patch Cord - 2 mtr with cross separator , Manufactured from stranded wires for longer flex-life , Minimum length of 1m, and maximum length of 5m Conforming to the following standards like EN 50173, ISO/IEC 60603-7 & 11801/IEC 60332-1, UL VW-1	
2.9	Supplying & Fixing of Fiber Optic LC style fully loaded Patch Panel (FOPP), 19" Rack Mount ,Shall have all accessories including coupler plates pre-loaded with 6 Nos of LC couplers SM with all accessories complete in all respect. Pigtails Should Complie to ITU-G657.B-Bend insestive fiber.	
2.10	Supplying & Fixing of Fiber Optic LC style fully loaded Patch Panel (FOPP), 19" Rack Mount ,Shall have all accessories including coupler plates pre-loaded with 24 Nos of LC couplers SM with all accessories complete in all respect. Pigtails Should Complie to ITU-G657.B-Bend insestive fiber.	
2.11	Supplying & Fixing of SM Fiber Optic Patch Cable (LC-LC), 3 Mtrs. Long, , LSZH, Shall have LC-LC Connector connectors at the ends, Conform to IEC, EIA-TIA, and Telecordia performances requirements, RoHS, REACH & SvHC compliant complete in all respect.	
2.12	Supply, Installation, testing and commissioning of OS1, OS2 Single mode Loose tube Outdoor / Corrugated steel tape – 48 Core Fiber, Loose Tube:2.3 mm jelly filled loose tubes, with 12 fibres each, Armouring:0.15 mm corrugated steel tape, IEC/EN 60793-2-50 Category B.1.3, Tensile strength (permanent): E1 - 1200N.	

2.13	Supply, Installation, testing and commissioning of OS1, OS2 Single mode Loose tube Outdoor / Corrugated steel tape – 24 Core Fiber, ø2.8 mm jelly filled loose tube with 2-16 fibres; ø3.5 mm loose tube with 24 fibres, Armouring:0.15 mm corrugated steel tape, IEC 60794-1/IEC 60793-2-50 class B1.3, OS1/ISO/IEC 24702:2006, cat. OS2; also OS1 requirements are fulfilled/IEEE 802.3 - 2002 incl. 802.3ae.	
2.14	Supplying & Fixing of Floor Standing Network/Server Rack - 9U (400 ~500 mm Deep) Supply, installation, testing and commissioning of following size, 9" free standing/ wall mount front openable type equipment rack having provision for cable entry, with front opening Lockable door, 2/4 nos. ventilating fans,, equipment mounting structure as per necessary requirement, PDU unit, cable Manager with necessary earthing	
2.15	Supplying & Fixing of Floor Standing Network/Server Rack - 12U (400 \sim 500 mm Deep) Supply, installation, testing and commissioning of following size, 12" free standing/ wall mount front openable type equipment rack having provision for cable entry , with front opening Lockable door , 2/4 nos. ventilating fans, , equipment mounting structure as per necessary requirement , PDU unit , cable Manager with necessary earthing	
2.16	Supplying & Fixing of Floor Standing Network Rack - 42U (800~1000 mm deep) Supply, installation, testing and commissioning of following size, 42" free standing/ wall mount front openable type equipment rack having provision for cable entry, with front opening Lockable door, 2/4 nos. ventilating fans,, equipment mounting structure as per necessary requirement, PDU unit, cable Manager with necessary earthing	

PRE - BID QUERIES

(To be submitted in excel file format at procurement@hpsedc.in)

Bidder Name:				
Contac	et Person :			
Contac	et no / email id:			
S. No	RFP Ref Page no	RFP Clause no	Existing clause Details	Clarification Sought
1				
2				
3				
4				
5				
(
6				
Si	gnature :			

Signature :
Name:
Designation:
Company seal:

Annexure-II

Performance Bank Guarantee Template

	[Date]
0,	
	The Managing Director, H.P. State Electronics Development Corporation Ltd., First Floor, IT Bhawan, Mehli, Shimla-171013.
ear S	Sir,
•	Whereas M/s (hereinafter called "CONTRACTOR") has supplied (as per Bill of Material Specified in this Document) as pagreement/supply order No dated signed between the supplied signed between supplied
	HPSEDC (hereinafter called "Client") and them and as per the agreement/supply order the M/s is supposed to furnish Performance Security for supply and maintain the same for a period ofyears.
	NOW THEREFORE KNOW ALL THE MAN THESE PRESENTS THAT WE,(Bar Name) having its Head Office (hereinafter called "the Bank") are bound up to the Clie
	in the sum of Rs/- (Rs) only) for which payment w and truly to be made to the said Client, the Bank binds itself, its successors and assigne by these presents.
-	The Bank further undertakes to pay to the purchaser up to the above amount on receipt its first written demand, without the Client having to substantiate its demand. The Client decision in this regard shall be final and shall not be called upon to question under an circumstances. The Bank Guarantee will remain in force up to However, validity can be got extended before solely at the instance of the Purchase This clause shall remain valid not withstanding anything else contained to the contrary
•	this document. Our responsibility under this guarantee is restricted to Rs/- (Rupe

unless a demand in writing is received by the bank on or before	, all you
rights under the said guarantee shall be forfeited and we shall be released and d	ischarged
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	, 2023. In witness
	whereof the Bank, through its authorized officer, has	set its hand	and stamp on this
	day of, 2023 for Bank		
Witnes	SS		
Signat	nure		
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 Direct H.P. State Electronic Bhawan, Mehli, Shin	es Development Corporation Ltd., First Floor, IT
Dear Sir,	
1.Whereas M/s.	(hereinafter called "Bidder") has quoted
against the Tender No: SEDC/ HP	2-SEC/ NETWORK/ 2K23-2624
•	lectronics Development Corporation Ltd. (HPSEDC)is supposed to furnish Bank Guarantee the same
3.NOW THEREFORE KNOW A	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/- (Rs
) only) for which	n payment will and truly to be made to the said Client
the Bank binds itself, its successors	s and assignees by these presents.
its first written demand, without to The Client's decision in this regard under any circumstances. The Best However, its validity can be got instance of the HPSEDC. This claes contained to the contrary in this do Our responsibility under this	y to the purchaser up to the above amount on receipt of the Client/ HPSEDC having to substantiate its demand d shall be final and shall not be called upon to question ank Guarantee will remain in force up to 120 days t extended before expiry of its validity solely at the ause shall remain valid not withstanding anything else ocument. guarantee is restricted to Rs/- (Rupees ly and it will remain enforce up to/-
	beived by the bank on or before, all you
	_,

4.

5.

rights under the said guarantee shall be forfeited and we shall be released and discharged from all the liabilities thereunder.

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, 2023. In witness
	whereof the Bank, through its authorized officer, has set its hand and stamp on this
	day of, 2023 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;
- b. "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 requirement will be in accordance with this memorandum.