

Tender Document

**ICAR-NATIONAL BUREAU OF PLANT GENETIC RESOURCES
PUSA CAMPUS, NEW DELHI-110012**

[LAN Upgradation at NBPGR]

[Ref: No. 5(170)/Purchase/2018-19]

e-TENDER DOCUMENT

**ICAR-NATIONAL BUREAU OF PLANT GENETIC RESOURCES
PUSA CAMPUS, NEW DELHI-110012**

Phone:011-25841022

email:nbpgr.aaopurchase@icar.gov.in

web: www.nbpgr.ernet.in

E-PROCUREMENT TENDER NOTICE

ICAR-National Bureau of Plant Genetic Resources, Pusa, New Delhi-12 invites tenders under Two Bids System (Technical and Financial) from reputed & eligible agencies through e-procurement for LAN Upgradation at NBPGR For an ICAR funded project.

Item	Details/Date
Bid Document Download Start Date	07.02.2019, 2.00 PM
Bid Submission Start Date	08.02.2019, 10.00 AM
Bid Submission End Date	04.03.2019, 12.30 PM
Technical Bid Opening Date	05.03.2019, 2.30 PM

Notes:

1. All details regarding the subject tender are available on our websites www.nbpgr.ernet.in and <https://eprocure.gov.in/eprocure/app>. Bidders are therefore, requested to visit our websites regularly to keep themselves updated.
2. **Manual bids shall not be accepted.**
3. For submission of E-Bids, bidders are required to get themselves registered with <http://eprocure.gov.in/eprocure/app>.
4. EMD should reach The Assistant Admn. Officer (Purchase), ICAR-National Bureau of Plant Genetic Resources, New Delhi, before the end date and time of bid submission. Failing which the offer will be liable for rejection. Bidder, however have to attach scanned copies of EMD along with their e-tender.
5. Clarifications/ queries, if any, can be addressed to The Assistant Admn. Officer, Purchase, ICAR-National Bureau of Plant Genetic Resources, New Delhi, on phone:011-25841022 and email:nbpgr.aapurchase@icar.gov.in.



(U.C. Sharma)
Administrative Officer

INFORMATION & INSTRUCTIONS FOR BIDDERS

Earnest Money Deposit	<p>₹ 60000/- (Rupees Sixty Thousand Only) in the form of Fixed Deposit Receipt (FDR)/Demand Draft in favour of Director, NBPGR, Payable at Delhi valid for a period of six months.</p> <p>EMD should the reach The Assistant Admn. Officer (Purchase), ICAR-National Bureau of Plant Genetic Resources, New Delhi-12 before the end date and time of bid submission.</p> <p>Bidders, however have to attach scanned copies of EMD documents along with the e-tender (technical bid).</p>
Issue of Tender Document	<p>Tender Document may be down- loaded from the NBPGR website www.nbpgr.ernet.in and CPP portal https://eprocure.gov.in/eprocure/app as per the schedule.</p>
Bid Document Download Start Date	07.02.2019, 2.00 PM
Bid Submission Start Date	08.02.2019, 10.00 AM
Bid Submission End Date	04.03.2019, 12.30 PM
Technical Bid Opening Date	05.03.2019, 2.30 PM

1. Bid Submission

“**Technical Bid**” shall be submitted as per **Annexure I**

“**Financial Bid**” shall be submitted as per **Annexure II**

Bids shall be submitted online only at CPP portal:
<https://eprocure.gov.in/eprocure/app>.

Tenderer/contractor are advised to follow the instructions provided in the ‘Instructions to the Contractor/Tenderer’ for the e-submission of the bids online through the Central Public Procurement Portal for e-procurement at <https://eprocure.gov.in/eprocure/app>.

Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

Tenderer who has downloaded the tender from the Institute website www.nbpgr.ernet.in and Central Public Procurement Portal (CPPP) <https://eprocure.gov.in/eprocure/app>, shall not tamper/modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tempered/modified in any manner, tender will be summarily rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with ICAR-NBPGR.

Intending tenderers are advised to visit again Institute website www.nbpgr.ernet.in and CPP Portal <https://eprocure.gov.in/eprocure/app> at least 3 days prior to closing date of submission of tender for any corrigendum / addendum/ amendment.

2. OPENING OF FINANCIAL BID AND EVALUATION

Financial bids of eligible and technically qualified bidder will be opened. The lowest financial bid in respect of **LAN Upgradation at NBPgR** will be considered for award.

Tenders with no earnest money deposit document will be summarily rejected. In case of successful bidder of the financial bids, the earnest money deposit will be returned on submission of performance Bank Guarantee.

In the case of unsuccessful bidders, the Earnest Money Deposit will be refunded without any interest.

3. FINAL DECISION MAKING AUTHORITY

The Institute reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders. No claim whatsoever will be entertained/paid by the Institute to the bidder(s).

4. SUMMARY REJECTION OF TENDER:

The tenders not accompanied with Earnest Money Deposit, shall be summarily rejected. Similarly, if the bidder proposes any alteration in or additions to the prescribed form of tender or decline to carry out any work of the tender document; or any conditions mentioned, etc., his tender is liable to be rejected.

5. AMENDMENT OF TENDER DOCUMENT:

Before the deadline for submission of tender, the Institute may modify the tender document by issuing addendum/corrigendum.

6. Any addendum/corrigendum thus issued shall be a part of the tender document and shall be uploaded on the Institute website (www.nbpgr.ernet.in) and CPP portal <https://eprocure.gov.in/eprocure/app>. Prospective bidders must visit the website before filling and submission of Tender Document for such information.

7. ARBITRATION AND SETTLEMENT OF DISPUTES:

In the event of any question, dispute or difference arising under this agreement or in connection therewith (except as to matter the decision of which is specifically provided under this agreement), the same shall be referred to sole arbitration of the Senior Administrative Officer or any other person as approved by the Director, ICAR-National Bureau of Plant Genetic Resources, New Delhi-12. There will be no objection for any such appointment on the found that the arbitrator is an Employee of NBPGR or that he/she has to deal with the matter to which the agreement relates or that in course of his/her duties as ICAR Employee he/she has express views on all or any of the matter under dispute. The award of the arbitrator shall be final and binding on the parties.

The arbitrator may from time to time with the consent of parties change the time for making and publishing the award. Subject to India Arbitration and Conciliation Act 1996 and the Rules made there under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

8. TERMS OF PAYMENT

- a) Payment will be released to the firm as per provision laid down in GFR 2017 and only after supply of equipments alongwith accessories subject to depositing of a sum equivalent to 10% (Ten percentages) of the contract Value as mentioned under security deposit /performance security clause mentioned above or submission of performance Bank Guarantee for 10% value of the order valid for a period of 14 months after satisfactory execution from any commercial bank.
- b) Payment shall be made through LC/Electronic Clearing System/RTGS.

INSTRUCTIONS FOR ONLINE BID SUBMISSION:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrolment**” on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable.
- 6) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 125 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (ie after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.
- 11) The rates for quoted shall be valid for a minimum period of 180 days from the last date fixed

for submission of bid.

- 12) The rates quoted shall be free of cost delivery and installation at the Division/Unit of NBPGR, New Delhi. However quoted in foreign currency must be quoted on FOB/FCA.
- 13) The Director, NBPGR, New Delhi reserves the right to accept or reject any or all the quotations either in full or in parts without assigning any reason.
- 14) Quotations not complying with the above conditions are liable to be rejected.
- 15) In case, any dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & Court at New Delhi. Sole arbitrator is appointed by the Secretary, ICAR, New Delhi, His decision will be final and binding on both parties (Supplier & and Purchaser).
- 16) The successful bidder has to execute the indented job/supply as mentioned in the supply order placed with them within the stipulated period as given in the supply order placed by this office failing which 0.5% per week and maximum of 10% deduction as liquidated damage charges will be made from the bill in case the job is not completed within the given stipulated period.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

TECHNICAL BID

1. Name of the Company
2. Address (with Tele No. fax No. & e-mail)
3. Contact person Name and mobile number
4. (a) The number of years of experience in dealing **LAN Upgradation at NBPGR** business.

- (b) Total value per year of Business during the last three years
(Attested certificate from Chartered Accountant should be attached.)
5. (a) Registration Number _____
- (b) PAN Number _____
- (c) GST Number _____
6. Technical details of **LAN Upgradation at NBPGR** as per details given below:

Technical Specification required for the LAN Upgradation at NBPGR.

Scope of Work

1. NBPGR has a well-functioning wired Local Area Network (LAN) of about 220+ nodes. The current job/contract includes renovation, upgrading, cable structuring, information labeling, and layout/map designing of existing network infrastructure (LAN and WiFi) at both new and old campuses of NBPGR, New Delhi. The work also includes supply installation, testing & commissioning of new LAN and WiFi systems as detailed in Annexure I & II. All new LAN equipment is to be installed and commissioned with existing LAN setup.
2. After Installation & Commissioning, onsite Support & Service is to be provided as and when required for any modification and configuring/upgrading, shifting of Active and Passive components of entire NBPGR LAN and WiFi for at least 12 months from the date of completion of the contract. Call should be attended within 2-3 hours from the time of logging of call for uninterrupted service at NBPGR, New Delhi beyond which penalty will be imposed on the Security Deposit/Bank Guarantee and deduction will be made, either part or full, as may be decided by the Competent Authority of NBPGR, New Delhi. Work should be executed under supervision of concerned NBPGR officials and as per NBPGR LAN layout/design incorporating existing/new requirements.
3. During the support and service period, the successful bidder is expected to provide support and service in implementation/transition of LAN from existing IPv4 to IPv6 configuration. An undertaking of having acquired

sufficient knowledge and experience in IPv6 implementation must be enclosed with the technical bid otherwise the bid will be summarily rejected.

4. Shifting of two working servers from one rack to another with full functionality and shifting of one wooden cupboard for rack placement along with minor carpentry work.

Work Duration

- a) The entire work including Supply, Installation, Integration, Testing and Commissioning should be completed within 45 days of releasing the work order.
- b) The entire documentation and testing reports should be submitted within the work duration of 45 days.
- c) Training to the identified group of officials in NBPGR is also to be provided within the project duration of 45 days.
- d) "Final Acceptance-cum-Completion Certificate" will be issued by NBPGR only after completing points a, b & c mentioned above.

General Terms & Conditions

1. The bidder should be in networking business for a period of Minimum 5 years (supporting documents to be enclosed).
2. The bidder should be authorized dealer/partner/reseller etc. of the concerned OEM and submit the authorization certificate; however, tender specific authorization of the respective OEM will only be considered and tenderer should enclose a copy of the same with the Technical bid.
3. The OEM / Bidder should have a clean Track record, i.e. The OEM/ Bidder / its sister concern/ any group company should not have been black listed by any Govt. or Quasi- Govt/ Govt. Undertaking companies in India at any point of time. (Declaration in this regard to be submitted along with Technical bid).
4. The Bidder shall have been assessed by the income tax department of India during last 3 Financial years, supporting copies should be enclosed.
5. The Bidder should have their service /spares centre in Delhi-NCR, details of the same should be enclosed.
6. Bidder should be single party, consortium will not be accepted.
7. The Bidder is required to quote for the complete BoQ. Partial quote are liable to be rejected.
8. Quotation should clearly specify delivery schedule.
9. Sales Tax: Full CST/VAT applicable. 'C', 'D' forms not applicable.

10. Any taxes or statutory levies payable should be shown separately; otherwise quoted price will be treated as all inclusive.
11. The validity of quotation should be for a minimum of 90 days from the bid due date.
12. The Annual turnover of the bidder for the last 3 years may be submitted.
13. The bidder should submit the list of major works carried out (Govt./ semi Govt.), with client details such as name, contact address, email, phone etc.
14. Items offered should be as per requirements mentioned in the Technical specifications in Annexure-II.
15. The bidder may quote the items, which meets the requirements and specification. In such case, the bidder shall provide the layout, make, model, material specifications, dimensions, brochures, photo catalogues of items quoted along with the bid, if available.
16. Delivery of material at site and installation including loading and unloading shall be the responsibility of supplier.
17. Bidder shall/may contact the tenderer for any clarification regarding the technical requirement.
18. The bidder should inform acceptance of Purchase Order in writing within three days of receiving the order.

Special Instructions

- a) The Bidder shall carefully examine and understand the specifications/conditions of the tender document and if required seek clarifications in writing during the pre-bid meeting to ensure that they have understood all specifications/conditions of the tender document. If no such clarifications are sought in writing, it will be taken that the Bidder has read, understood and accepted all the terms, conditions and specifications in the tender document.
- b) The Bidder is required to upload/submit a copy of this tender document, with all pages signed by the authorized person, to confirm that Bidder has read and understood the conditions of this tender document and that the proposal is submitted in full understanding and agreement of the requirements of NBPGR.
- c) The Bidder should visit the site with prior appointment and carry out necessary inspection and test/measurement as are necessary before attending the pre-bid meeting and before submitting its bids. All costs associated with such site visit and in preparation and submission of the Bid will have to be bear by the bidder. NBPGR will in no case be responsible for such costs, regardless of the conduct or outcome of the bidding process.
- d) NBPGR reserves its rights to amend any of the terms and conditions of this tender document. Such amendment shall be published on NBPGR website and CPPP website only and will not be published in newspapers. The bidders are advised to regularly visit the website for any such update.

- e) The complete bid shall be without alteration or erasures, except those to accord with instructions issued by the NBPGR or as necessary to correct errors made by the bidder, in which case such corrections shall be initiated by the person or persons signing the bid.
- f) The bidder shall submit only one option, which is best suitable to meet NBPGR requirements. The bids submitted with more options shall be liable to be rejected.
- g) The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and NBPGR, shall be in English only.
- h) The rates quoted by the bidder shall be firm throughout the contract period and there shall be no upward revision of the rates quoted by the bidder for any reason what so ever.
- i) The bidder shall base his solution on the basis of continuous availability of spares for at least 3 years, after the specified warranty period.
- j) Repair for damages like digging, false ceiling damage, broken items caused by the contractors workmen will be responsibility of the contractor. In case, if such damages are left unattended, NBPGR will get it done from its own sources and the expenditure involved will be deducted from the payment/security deposit of the contractor.

Documents checklist for Technical Evaluation

1. Supporting documents in the form of photocopies of the “Work Orders” that the bidder is in networking business (supply, installation and commissioning of LAN equipment) preferably in govt. bodies for a period of Minimum 5 years.
2. Undertaking that the OEM/ Bidder / its sister concern/ any group company has not been black listed by any Govt. or Quasi-Govt/ Govt. Undertaking companies in India at any point of time.
3. Detailed Network Diagram / Solution document of the offered system should be attached in the technical bid.
4. The OEM/ Bidder should give an undertaking that service & spare support will be provided for at least 3 years, *after the specified warranty period* on separate commercial terms.
5. Undertaking showing that the bidder has its service /spares center in Delhi-NCR, details of the same should be enclosed.
6. An undertaking that all the offered active components are IPv6 ready from day one.
7. An undertaking of having acquired sufficient knowledge, experience and capability in IPv6 implementation, IPv4/IPv6 dual implementation/transition.
8. An undertaking that all the active components offered will be from the same OEM except the WiFi Access Points which are required to be

- configured and commissioned with existing Sophos XG230 firewall as controller.
9. An undertaking that all the passive components offered will be from the same OEM. Deviation, if any will not be permitted without written consent of NBPGR.
 10. An undertaking that the proposed OEMs are ISO 9001:2000 certified and ISO 14001 accredited.
 11. An undertaking that the firm has gone through the technical requirements and feasibility of the work carefully and agrees to all the tender terms and conditions.

Performance Security

- a) Within 15 days of receipt of the Work Order from the NBPGR, the successful Bidder shall furnish to NBPGR a Security in the form of a Bank Guarantee from Nationalised/ Scheduled bank for an amount of 10 percent of the Contract sum.
- b) The validity of the Performance Security as per the Notification of Award for work shall be up to the end of the Support and Service period with 3 months claim period after expiry of the same.
- c) Failure of the successful Bidder to submit the required Bank Guarantee shall constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security, in which event the NBPGR may make the Award to the next lowest evaluated Bidder or, if there are no other Bidders, call for new Bids.

Payment Terms

1. No advance payments will be made under any circumstances. On successful completion of the work 100% payment shall be made to the contractor subject to issue of 'Final Acceptance Certificate' as per "**Work Duration Clause (d)**" above.
2. Quantities including labour mentioned under BoQ, as per Annexure-I are approximate only and may vary upwards or downwards at the time of placing order and during execution of work. So the successful bidder should supply these items as per the order. The payment will be made only for actual/supply installed/ utilized quantities & labour at the site. However, prices as per items and quantities as detailed in Annexure-I are compulsory for financial bid evaluation.
3. The Contractor shall pay all taxes, duties, levies, work contract tax etc. of the Government provisions of the Income tax Act or as per the advice of the Income Tax Authority.

Liquidated Damages for Delay

If work is not completed in time, compensation for delay at the rate of 0.5 % of the tendered value per week will be recovered for a maximum of two months and thereafter agreement will be rescinded performance guarantee forfeited and NBPGR will be free to get the balance work done through other means at the contractor's risk & cost. Decision of the Director, NBPGR in this matter shall be final and binding.

Liability / Accident

The bidder shall indemnify and keep indemnified NBPGR against all losses and claims for injuries and damages to any person or property whatsoever which may arise out of or in consequence of the construction or maintenance of the work and against all claims, demands, proceedings, damages, costs, changes, expenses whatsoever in respect thereof in relation thereto.

Extra Item

Any unforeseen item of work/supply / extra item of work as being authorised by the Centre and not included in the contract, shall be done by the Contractor at mutually agreed rates. Written prior approval of NBPGR should be obtained before undertaking any extra work. Payment of such items shall be made at actual supported by necessary documentary evidence duly approved.

Termination of contract

Notwithstanding anything elsewhere provided herein and in addition to any other right or remedy available to NBPGR under the contract or otherwise including right of NBPGR to claim compensation for delay, the NBPGR may, without prejudice to his right against Contractor in respect of any delay, bad workmanship or otherwise or to any claims for damage in respect of any breaches of the contract and without

prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date for completion has or has not elapsed by intimation in writing, absolutely determine the Contract.

Default or failure by the contractor in any of the under mentioned cases, including but not limited to the following shall be the basis of taking action under this clause of the contract:

- 1) Failure to provide at the job site, sufficient labor, material, equipment, machinery, and / or facilities, required for the proper and / or due execution of the work or any part thereof.
- 2) Failure to execute the works or any of them in accordance with the contract.
- 3) Disobedience of any order or instruction of the Site Officer InCharge viz, OIC, AKMU, NBPGR New Delhi.
- 4) Negligence in carrying out the work or carrying out of work found to be unsatisfactory by the Site Officer InCharge.
- 5) Abandonment of the works or any part thereof.
- 6) Failure to execute the Contract in terms of the form of Contract forming part of the tender documents within Ten days of notice in this behalf from NBPGR.
- 7) If the Contractor is incapable of carrying out the work.
- 8) If the Contractor misconducts in any manner.
- 9) If there is any change in the constitution of the Contractor (if a firm) or in the circumstances or organization of the Contractor, which is detrimental to the interests of NBPGR.
- 10) Delay in execution of work, which in opinion of NBPGR shall delay the completion of work beyond the stipulated date of completion.
- 11) Distress, execution, or other legal process being levied on or upon any of the Contractors goods and /or assets.
- 12) If the Contractor or any person employed by him shall make or offer for any purpose connected with the contract any gift, gratuity, royalty, commission, gratification or other inducement (whether money or in any other form) to any employee or agent to NBPGR.

The decision of the Director, NBPGR as to whether any of the events/ contingencies mentioned in aforesaid clauses entitling NBPGR to terminate the contract has occurred shall be final and binding upon the Contractor. The reason for the termination stated in the notice of termination shall be final and binding upon the Contractor and shall be non-arbitral. The jobs left however by the Contractor shall be got done at his risk and cost through the other agencies and the Contract shall be determined accordingly.

Annexure-I

CORE SWITCH		
SNO.	SPECIFICATIONS	COMPLAINEE YES/NO
1	Architecture	
1.1	Shall be 1RU, 19" Rack Mountable	
1.2	16 SFP 100/1000 Mbps ports 8 SFP dual-personality ports— 10/100/1000BASE-T RJ-45 or 100/1000BASE-X Combo Ports	
1.3	The switch shall support up to four 10-Gigabit ports SFP+ in addition to the above ports	
1.4	1 RJ-45 serial console port	
1.5	1 GB SDRAM and 512 MB flash	
1.6	Shall have switching capacity of 128 Gbps	
1.7	Shall have up to 96 million pps switching throughput	
1.8	Shall provide Gigabit (1000 Mb) Latency of < 5 μ s and 10 Gbps Latency of < 3 μ s	
2	Resiliency	
2.1	Shall have the capability to extend the control plane across multiple active switches making it a virtual switching fabric, enabling interconnected switches to perform as single Layer-2 switch and Layer-3 router and and switch should support single IP management upto 8 Switch	
2.2	The modules/cables to create virtual switching fabric shall be provided, wherever multiple switches are co-located	
2.3	Shall support up to 80 Gbps total stacking bandwidth (full duplex) in a resilient stacking configuration	
2.4	IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning	

CORE SWITCH		
SNO.	SPECIFICATIONS	COMPLAINCE YES/NO
	Tree Protocol	
2.5	IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
2.6	Ring protocol support to provide sub-100 ms recovery for ring Ethernet-based topology	
3	Layer 2 Features	
3.1	Shall support up to 4,000 IEEE 802.1Q-based VLANs	
3.2	Shall support GARP VLAN Registration Protocol or equivalent feature to allow automatic learning and dynamic assignment of VLANs	
3.3	Shall have the capability to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops	
3.4	Shall support IEEE 802.1ad QinQ and Selective QinQ to increase the scalability of an Ethernet network by providing a hierarchical structure	
3.5	Shall support Jumbo frames on GbE ports	
3.6	Internet Group Management Protocol (IGMP)	
3.7	Multicast Listener Discovery (MLD) snooping	
3.8	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
3.9	Shall support Voice VLAN feature to automatically assigns VLAN and priority to devices like IP phones	
5	Layer 3 Features (any additional licenses required shall be included)	
5.1	Static Routing and RIP V1/V2 for IPv4	
5.2	Static Routing and RIP for IPv6	
5.3	User Datagram Protocol (UDP) helper function to allow UDP	

CORE SWITCH		
SNO.	SPECIFICATIONS	COMPLAINCE YES/NO
	broadcasts to be directed across router interfaces	
5.4	Dynamic Host Configuration Protocol (DHCP) client and Relay	
5.5	Proxy ARP to allow normal ARP operation between subnets	
6	QoS and Security Features	
6.1	Access Control Lists for Layer 2 to Layer 4 traffic filtering	
6.2	Shall support global ACL, VLAN ACL, port ACL, and IPv6 ACL	
6.3	Traffic classification using multiple match criteria based on Layer 2, 3, and 4 information	
6.4	Powerful QoS feature supporting strict priority (SP) queuing, weighted round robin (WRR) and and SP+WRR	
6.5	Shall support applying QoS policies on a port, VLAN, or whole switch, to set priority level or rate limit selected traffic	
6.6	IEEE 802.1x to provide port-based user authentication with multiple 802.1x authentication sessions per port	
6.7	Media access control (MAC) authentication to provide simple authentication based on a user's MAC address	
6.8	Dynamic Host Configuration Protocol (DHCP) snooping to prevent unauthorized DHCP servers	
6.9	Port security and port isolation	
6.10	STP BPDU port protection to prevent forged BPDU attacks	
6.11	STP Root Guard to protect the root bridge from malicious attacks or configuration mistakes	
6.12	IP Source guard to prevent IP spoofing attacks	
6.13	Dynamic ARP protection blocking ARP broadcasts from unauthorized hosts	

CORE SWITCH		
SNO.	SPECIFICATIONS	COMPLAINEE YES/NO
7	Management Features	
7.1	Configuration through the CLI, console, Telnet, SSH and Web Management	
7.2	SNMPv1, v2, and v3 and Remote monitoring (RMON) support	
7.3	sFlow (RFC 3176) or equivalent for traffic analysis	
7.4	Management security through multiple privilege levels	
7.5	FTP, TFTP, and Secure FTP support	
7.6	Port mirroring to mirror ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port	
7.7	RADIUS/TACACS+ for switch security access administration	
7.8	Network Time Protocol (NTP) or equivalent support	
7.9	Shall have Ethernet OAM (IEEE 802.3ah) management capability	
8	Environmental Features	
8.1	Shall provide support for RoHS and WEEE regulations	
8.2	Shall have features to improve energy efficiency like variable-speed fans, shutoff unused ports etc	
8.3	Operating temperature of 0°C to 45°C	
8.4	Safety and Emission standards including UL 60950-1; IEC 60950-1; VCCI Class A; EN 55022 Class A	
9	Software Defined Networking (SDN) Capability	
9.1	Open Flow protocol capability to enable software-defined networking	
9.2	Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an	

CORE SWITCH		
SNO.	SPECIFICATIONS	COMPLAINCE YES/NO
	external SDN Controller, utilizing Open flow protocol	
10	Warranty and Support	
	The below Warranty shall be offered directly from the switch OEM.	
10.1	Lifetime warranty with advance replacement and next-business-day delivery	
10.2	The Switch should be enterprise class switch and having Full CLI support	

ACCESS SWITCH		
SNO.	SPECIFICATIONS	COMPLAINEE YES/NO
1	Architecture	
1.1	24 RJ-45 autosensing 10/100/1000 Mbps ports	
1.2	4 Fixed SFP Ports.	
1.3	1 RJ-45 (serial RS-232C) or USB micro-B console port	
1.4	256 MB DRAM, 128 MB Flash	
1.5	Packet buffer size of minimum 1.5 MB to support video/streaming traffic and huge file transfers	
1.6	Shall have switching capacity of 56 Gbps for providing non-blocking performance on all Gigabit ports	
1.7	Shall have up to 41 million pps switching throughput to achieve wire-speed forwarding on all Gigabit ports	
1.8	Shall provide Gigabit (1000 Mb) Latency of < 3 us	
2	Resiliency	
2.1	IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol	
2.2	IEEE 802.3ad Link Aggregation Control Protocol (LACP) up to eight links (ports) per group	
3	Layer 2 Features	
3.1	MAC address table size of 16000 entries	
3.2	Shall support up to IEEE 802.1Q (4,094 VLAN IDs) and 512 VLANs simultaneously	
3.3	Shall support GARP VLAN Registration Protocol or equivalent feature to allow automatic learning and	

ACCESS SWITCH		
SNO.	SPECIFICATIONS	COMPLAINEE YES/NO
	dynamic assignment of VLANs	
3.5	Shall support Jumbo frames to improve the performance of large data transfers	
3.6	Internet Group Management Protocol (IGMP)	
3.7	Multicast Listener Discovery (MLD) snooping	
3.8	IEEE 802.1AB Link Layer Discovery Protocol (LLDP) and LLDP-MED (Media Endpoint Discovery)	
3.9	IPv6 host and Dual stack (IPv4/IPv6) support to provide transition mechanism from IPv4 to IPv6	
4	QoS and Security Features	
4.1	Access Control Lists for traffic filtering	
4.2	Source-port filtering or equivalent feature to allow only specified ports to communicate with each other	
4.3	Traffic prioritization based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ	
4.4	Shall support traffic classification into eight priority levels mapped to two or four queues using Weighted deficit round robin (WDRR) queuing	
4.5	Shall support traffic rate-limiting per port	
4.6	IEEE 802.1x to provide port-based user authentication with multiple 802.1x authentication sessions per port	
4.7	Media access control (MAC) authentication to provide simple authentication based on a user's MAC address	
4.8	Web-based authentication to provide a browser-based environment to authenticate clients that do not support the IEEE 802.1X supplicant	

ACCESS SWITCH		
SNO.	SPECIFICATIONS	COMPLAINEE YES/NO
4.9	Concurrent IEEE 802.1X and Web or MAC authentication schemes per port	
4.10	Port security to allow access only to specified MAC addresses	
4.11	MAC address lockout to prevent particular configured MAC addresses from connecting to the network	
4.12	STP BPDU port protection to prevent forged BPDU attacks	
4.13	STP Root Guard to protect the root bridge from malicious attacks or configuration mistakes	
5	Management Features	
5.1	Configuration through the CLI, console, Telnet, SSH and browser-based management GUI (SSL)	
5.2	SNMPv1, v2, and v3 and Remote monitoring (RMON) support	
5.3	sFlow (RFC 3176) or equivalent for traffic analysis	
5.4	TFTP and Secure FTP support	
5.5	Dual flash images to provide independent primary and secondary operating system files	
5.6	Multiple configuration files to allow multiple configuration files to be stored to a flash image	
5.7	RADIUS/TACACS+ for switch security access administration	
5.8	Simple Network Time Protocol (SNTP) or equivalent support	
5.9	Shall support single IP address management of up to 16 switches	
6	Environmental Features	
6.1	Shall support IEEE 802.3az Energy-efficient Ethernet (EEE)	

ACCESS SWITCH		
SNO.	SPECIFICATIONS	COMPLAINCE YES/NO
	to reduce power consumption	
6.2	Operating temperature of 0°C to 45°C	
6.3	Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A	
7	Warranty and Support	
	The below Warranty shall be offered directly from the OEM.	
7.1	Lifetime warranty with advance replacement and next-business-day delivery	
7.2	OEM of the switch should be in the Leaders quadrant of latest Gartner magic quadrant report	

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.				
SNo	Specifications	Complied/ Not-Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
	All passive components should be from same OEM.			
	The OEM shall be ISO 9001:2000 certified			
	The OEM shall be ISO 14001 accredited			
	The UTP cabling system shall be certified by OEM to have application support warranty for 25 years.			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.

SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(A)	Specifications: Copper cabling system:-			
1	CAT6 U/UTP UNSHIELDED TWISTED PAIR CABLE			
(i)	Category 6 Unshielded Twisted Pair 4 pair 100 Ω cable shall be compliant with ANSI/TIA-568-C.2 Additional Transmission Performance Specifications for 4-pair100 Ω Category 6 Cabling.			
(ii)	Category 6 U/UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP LSOH cable jacket.			
(iii)	The 4 pair Unshielded Twisted Pair cable shall be ETL Verified to ANSI/TIA-568-C.2 Category 6 standard and shall be UL Listed. UL & ETL Certificate is to be submitted at the time of bid.			
	The Category 6 cables shall meet or exceed the following characteristics:			
(iv)	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine /full separator. Half shall not be accepted.			
(v)	Conductor: Solid Copper			
(vi)	Conductor Size:23 AWG			
(vii)	Primary Insulation: Solid Polyethylene			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.

SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(viii)	Jacket/ Sheath Type: LSZH (Low Smoke Zero Halogen) in Violet Color			
(ix)	Outer Diameter: 6.1mm			
(x)	Max. Operating Temperature: 75° C			
(xi)	Tested Frequency: 250 MHz			
(xii)	Propagation Delay: 537.6@100MHz			
(xiii)	Delay Skew: 45ns Max			
(xiv)	Shipping Weight : 305m reel in a box.			
(xv)	Fire Propagation Test: UL 1581 VW1, IEC 60332.1, IEC 60332-3-22			
(xvi)	Flame Test : According to IEC 60332-1			
2	FACE PLATE			
(i)	One Port & Two Port square plate, 86mmx86mm			
(ii)	Write on labels in transparent plastic window - supplied with plate			
(iii)	Screw hole covers - to be supplied with plate			
(iv)	Plug in Icons - Icon tree - to be supplied with plate			
(v)	Should be able to support variety of jacks - UTP, STP, Fiber, Coax etc.			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.

SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
3	CAT6 UNSHIELDED RJ45 JACK FOR RACK END & FIELD END.			
(i)	Category 6, TIA/EIA 568C.2 - 250MHz			
(ii)	All information outlets for 100 Ω, 22-24 AWG copper cable shall use insulation displacement connectors (IDC)			
(iii)	Allow for a minimum of 20 re-terminations without signal degradation below standards compliance limits.			
(iv)	Be constructed of high impact, flame-retardant thermoplastic with color and icon options for better visual identification.			
(v)	Shall have built in shutter for protection from dust and contaminants.			
(vi)	Shall have Terminator cap			
(vii)	IDC posts should be pointed			
(viii)	Color options in jacks should be available.			
(ix)	Information outlet (RJ45 Jack) should be covered under ETL Verification program for compliance with TIA/EIA 568B.C-2, ETL certificate to be submitted with offer. IO shall be UL Listed			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.

SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(x)	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent			
(xi)	Operating Life: Minimum 750 insertion cycles			
(xii)	Contact Material: Copper alloy			
(xiii)	Contact Plating: 50 μ" gold over 100μ" nickel			
(xiv)	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent			
(xv)	Plug Retention Force: 6.8kg minimum			
(xvi)	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent			
(xvii)	Operating Life: Minimum 20 Re-terminations			
(xviii)	IDC Contact Plating: Tin Plate (tin/lead)			
(xix)	Jack Color : Shall be available in different color like Red, Blue, Orange, Green, Purple etc.			
4	CAT6 24 PORT UNSHIELDED JACK PANEL UN-LOADED			
(i)	Be made of cold rolled steel, in 24 port configurations. Each jack for Jack Pabel should have shutter in the jack for protection from dust and contaminants.			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.				
SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(ii)	RJ45 Jack for Jack Pabel should allow for a minimum of 750 plug mating cycles.			
(iii)	Have port identification numbers on the front and rear of the panel.			
(iv)	Should have self adhesive, clear label holders (transparent plastic window type) and white designation labels with the panel, with optional color labels / icons.			
(v)	Each port / jack on the patch panel should be individually removable on field from the panel.			
(vi)	Jack Panel shall be RoHS Compliant and UL Listed. UL Certificate need to be submitted with the bid.			
(vii)	Should comply to the following : TIA/EIA-568-C.2 FCC Subpart F68.5 Compliant, IEC-603-7 Compliant, ISO 11801 Class E Compliant, UL1863,			
5	CAT6 UNSHIELDED MOUNTING CORDS (1Mtr, 2 Mtr & 3Mtr)			
(i)	Category 6 Equipment cords (Length - 1Mtr, 2 Mtr & 3Mtr)			
(ii)	The work area equipment cords shall, at a minimum comply with proposed ANSI/TIA/EIA-568-C-2 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.

SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
	100Ω Category 6 Cabling.			
(iii)	Category 6 modular equipment cords: Shall be round, and consist of eight insulated 24 AWG, stranded copper conductors, arranged in four colour-coded twisted-pairs within a flame-retardant jacket.			
(iv)	Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.			
(v)	Should have 50 micro inches of gold plating over nickel contacts.			
(vi)	Should be covered by ETL verification program for compliance with TIA 568B.C-2.Certificate to be submitted with bid.			
(vii)	Approvals: ETL Verified & UL Listed			
(viii)	Conductor size: 24 AWG stranded bare copper			
(ix)	Max O.D.: 5.9mm (.23")			
(x)	Jacket: LSZH (Low Smoke Zero Halogen)			
(xi)	Jacket Color : Shall be available in different color like Red, Blue, Orange, Green, Purple etc..			
(B)	Specifications: Optical Fiber Cable			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.				
SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
1	12 Core 9/125µm OS2 Singlemode Multi-Tube Outdoor Armoured Optical Fiber Cable :-			
(i)	The fiber type should be of Matched Cladding Multi Mode optical fiber.			
(ii)	Fiber dual coated with acrylate coating			
(iii)	The fiber should be optimized for operation at 1310 nm and at 1550 nm.			
(iv)	Should fulfill the requirements of ISO.IEC 11801 - 2nd Edition, type OS2, ITU-T REC G 652D spec for spec for Low Water Peak fibre			
(v)	The OFC cable should support supports 10G+ data applications			
(vi)	Testing methods are in accordance with the following standards: • ITU-T G.652D, IEC 60793/60794-1 Telcordia(BELLCORE) GR 20 STDS, TIA/EIA 568-C.3, EIA 455			
(vii)	No of Cores : 12 Core			
(viii)	Core diameter : $9.0 \pm 0.6 \mu\text{m}$			
(ix)	Cladding diameter : $125 \pm 0.7 \mu\text{m}$			
(x)	Diameter of outer coating layer : $242 \pm 5 \mu\text{m}$			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.

SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(xi)	Max. Attenuation:-			
	At 1310 nm <= 0.36 dB/km			
	At 1550 nm <= 0.23 dB/km			
(xii)	Fibre/Tube Identification : Color Coded Tubes			
(xiii)	Armouring : Copolymer Laminated Steel (ECCS Tape)			
(xiv)	Sheath : UV Stabilised Polyethylene (HDPE)			
(xv)	Central Strength Member: Fibre Reinforced Plastic(FRP)			
(xvi)	Cable Diameter (D) : 10.8 mm			
(xvii)	Mass (Nominal) : 135 kg/km			
(xviii)	Min. Bending Radius (during Installation) : 20 D;D-Outer Diameter			
(xix)	Max. Tensile Strength-Short Term : 3500N			
(xx)	Max. Crush Resistance-Short Term : 4400N/10 cm			
(xxi)	Operating Temperature range : -40°C to +75°C			
2	Fiber Optic LIU Rack Mount LIU :-			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.				
SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(i)	Fiber optic patch panel : Fiber optic patch panel (FMS) Termination Drawer should have sufficient slots to accommodate loaded LC adaptor plates.			
(ii)	Lock Facility: The FMS should have a keyed lock to provide a compact, secure termination.			
(iii)	Height: 1 U, 1.75 inches			
(iv)	No. of fiber ports: 12/24			
(v)	Material: 16 Gauge Cold Rolled Steel in graphite finish			
(vi)	Cable Management rings: Management rings within the system to accommodate excess fibre cordage behind the through adapters and maintain fibre bend radius.			
(vii)	Slots: FMS Termination Drawer should have sufficient slots to accommodate 12 Port duplex LC Adapters Plates individually. Empty slots of LIU should be fixed by blank plates.			
(viii)	Sliding cover:LIU should be of Drawer Style for ease of troubleshooting and maintenance.			
(ix)	Splice Tray : Splice Tray of ABS polymer material should be supplied with LIU.			
3	12 Port LC Type Adaptor Plates (Singlemode):-			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.				
SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
(i)	The adaptor plate should be pre-loaded with LC Duplex Type Singlemode Adaptors.			
(ii)	All LC adapters should be duplex type with shutter for protection. Adapters should be snap mount for easy insertion and removal.			
(iii)	RoHS Compliant			
(iv)	Operating Temperature: -10°C to +60°C			
4	Fiber Optic Pigtail 9/125 OS2 Singlemode LC Type:-			
(i)	Fiber optic pigtail : Singlemode Pigtail with LC connector			
(ii)	Type : 9/125 µm OS2 fibre performance			
(iii)	Cordage Outer Diameter: 2.0mm ±0.1mm x 4.1 ± 0.2mm			
(iv)	Buffer Diameter: 900µm			
(v)	Primary Coating : 245µm			
(vi)	Jacket Material: LSZH (Low Smoke Zero Halogen)			
5	Fiber Optic Patch Cord LC-LC 9/125 OS2			

UTP CAT 6 and 12C SINGLEMODE FIBER CABLE/LIU/PATCH CORDS ETC.				
SNo	Specifications	Complied/ Not- Complied	Part code of Product, being supplied against this specs	Reference Data Sheet / Brochure/ Any other Remarks
	Singlemode:-			
(i)	Cable : LC-LC 9/125 µm OS2 Singlemode Duplex Patch Cord			
(ii)	Length : 3mtrs			
(iii)	Connectors : The optical fiber patch leads shall comprise of Singlemode 9/125µm fiber with 2XLC type fiber connectors terminated at both ends of fiber patch cord.			
(iv)	Cordage O.D : (Duplex): 2mm x4.1mm			
(v)	Buffer Diameter : 900µ tight buffer			
(vi)	Strength Member : Aramid Yarn			
(vii)	Jacket Material : LSZH complying to IEC 61034-1 & 2, IEC-60332-1, IEC-60754-1 & 2			
(viii)	Operating Temperature : -40°C to +85°C			

NOTE: - PRICES TO BE OFFERED F.O.R. , ICAR-NATIONAL BUREAU OF PLANT GENETIC RESOURCES, NEW DELHI. However, equipment quoted in foreign currency must be quoted on FOB/FCA basis.

7.. Confirm the Attachment:-

S.No.	Document	Whether Attached (Yes /No)
1.	Whether the firm is in existence for three years or more in the trade in Central/State Govt/Autonomous bodies. If yes necessary documents should be attached.	
2	Have you attached copies of ITR of the last three financial years	
3	Have you attached a copy of authorization certificate	
4	Have you attached a certificate regarding the technical assistance, repair and maintenance charges will be included in the financial bid	
5	Have you attached a copy of GST Registration Certificate and PAN Certificate	
6	Have you attached details of complete address of the company office and service centre with names of contact person (s) and their telephone/mobile/fax numbers	
7	Have you attached a letter that company/vender has not been blacklisted by any state/central government/public section undertaking/Institute in India in the last 3 years	
8	Have you attached a copy of the tender acceptance letter	

BoQ

SNo	Item description	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)	Amount in words
ACTIVE COMPONENTS (as per enclosed specifications)						
1	Core Switch: Fully Managed As per enclosed specifications	Nos	2	In BOQ	In BOQ	In BOQ
2.	Redundant power supply for Item at SNo. 1 above	Nos.	2	In BOQ	In BOQ	In BOQ
3.	Access Switch: L2 Fully Managed As per enclosed specifications (Non-PoE)	Nos.	28	In BOQ	In BOQ	In BOQ
4.*	Access Switch: L2 Fully Managed As per enclosed specifications (PoE)	Nos.	2	In BOQ	In BOQ	In BOQ
5.	1Gbps, Single mode SFP Fiber Module (Compatible with Core and Access Switches) As per enclosed specifications	Nos.	30	In BOQ	In BOQ	In BOQ
6.	Gigabit Ethernet Media Converter, Up to 1000Mbps RJ45 to 1000M Single-Mode SC Fiber	Nos.	5	In BOQ	In BOQ	In BOQ
7.	Indoor Wireless AP: Dual-band 802.11ac Indoor Wireless Access Point (POE) with Mounting Brackets Make: Sophos AP55 (to be commissioned with existing Sophos XG230 Firewall as controller including adder	Nos.	8	In BOQ	In BOQ	In BOQ

SNo	Item description	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)	Amount in words
	license if required					
8.*	Outdoor Wireless AP: Dual-band 802.11ac Indoor Wireless Access Point (POE) with Mounting Brackets Make: Sophos AP55 (to be commissioned with existing Sophos XG230 Firewall as controller including adder license if required	Nos.	1	In BOQ	In BOQ	In BOQ
9.	8-PORT PS/2-USB KVM SWITCH to control up to 64 computers with rack mount kit and multiplatform support for Windows 10/Windows Advanced Server/Linux/ Sun/Mac; resolution 2048 x 1536; DDC2B with 8 x 2 mtr USB cables and 4 x 2 mtr PS/2 to USB cables Supply, Rack (19" 1U) mounting, installation, configuration, tuning, cable connecting, and one year support after installation	Nos.	1	In BOQ	In BOQ	In BOQ
A.	TOTAL (for Active Components)	-	-	In BOQ	In BOQ	In BOQ
PASSIVE COMPONENTS (as per enclosed specifications)						
1.	12 Core 9/125µm OS2 Single-mode Multi-Tube Outdoor Armoured Optical Fiber Cable (In batches of 1000 mtrs as per	Mtr	2000	In BOQ	In BOQ	In BOQ

SNo	Item description	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)	Amount in words
	site requirement)					
2.	SM Fiber Patch Panel (LIU) 24 Ports fully loaded	Nos.	6	In BOQ	In BOQ	In BOQ
3.	SM Fiber Patch Panel (LIU) 12 Ports fully loaded	Nos.	12	In BOQ	In BOQ	In BOQ
3.	SC-LC patch cord, Duplex Type, SMF, OM3, Length 2 Mtr	Nos.	36	In BOQ	In BOQ	In BOQ
4.	UTP Cable CAT 6, 23AWG 4 pair	Mtr	610	In BOQ	In BOQ	In BOQ
5.	Single port information outlet CAT 6 I/O with face plate and Gang Box	Nos.	50	In BOQ	In BOQ	In BOQ
6.	CAT 6 24 Port unshielded Jack Panel Un-Loaded	Nos.	10	In BOQ	In BOQ	In BOQ
7.	CAT 6 unshielded RJ45 female modular connector for Rack End and Field End	Nos.	200	In BOQ	In BOQ	In BOQ
8.	CAT 6 UPT patch cords 1 mtr.	Nos.	100	In BOQ	In BOQ	In BOQ
9.	CAT 6 UPT patch cords 3 mtr.	Nos.	150	In BOQ	In BOQ	In BOQ
10.	UPS 2KVA with minimum 60 minutes backup to be installed in LAN Rack	Nos.	1	In BOQ	In BOQ	In BOQ
11.	PVC Casing/Capping or PVC Pipe for laying of UTP Cable as per site requirement (25 mm)	Mtr	500	In BOQ	In BOQ	In BOQ
B.	TOTAL (for Passive Components)	-	-	In BOQ	In BOQ	In BOQ
LABOUR COMPONENT						
1.	Laying of PVC as per site	Mtr.	Per	In BOQ	In BOQ	In BOQ

SNo	Item description	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)	Amount in words
	requirement		Mtr			
2.	Laying of UTP Cable as per site requirement	Mtr.	Per Mtr.	In BOQ	In BOQ	In BOQ
2.	I/O install/termination (at I/O and Jack Panel/Switch)	Nos.	Per No.	In BOQ	In BOQ	In BOQ
3.	Laying of Fiber cable (on wall/false ceiling/non-digging) as per site requirement	Mtr.	Per Mtr.	In BOQ	In BOQ	In BOQ
4.	Laying of Fiber cable (digging 3 ft deep hard soil) as per site requirement	Mtr.	Per Mtr.	In BOQ	In BOQ	In BOQ
5.	Laying of Fiber cable (digging 3 ft deep soft soil) as per site requirement	Mtr.	Per Mtr.	In BOQ	In BOQ	In BOQ
5.	Termination of Fiber cable at both ends	Nos.	Per No.	In BOQ	In BOQ	In BOQ
6.	Structuring/Labeling of existing LAN connections (both ends)	Nos.	220	In BOQ	In BOQ	In BOQ
7.	Shifting of two servers from existing server rack to another	Nos.	02	In BOQ	In BOQ	In BOQ
C.	Total (for Labour Component)	-	-	In BOQ	In BOQ	In BOQ
	GRAND TOTAL (A+B+C)	-	-	In BOQ	In BOQ	In BOQ

Authorized Signature
With seal of company

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

To,

Sub: Acceptance of Terms & Condition of Tender.

Tender Reference No: _____

Name of Tender / Work:-

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

As per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No. ____ to ____ (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I/we shall abide hereby by the terms / conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department / organization too have also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in its totality/entirely.
5. I/we do hereby declare that our firm has not been blacklisted/debarred by any Govt. Department/Public Sector undertaking.
6. I/we certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully,

(Signature of the Bidder, with Official Seal)

Declaration

I hereby certify that the information furnished above are full and correct to the best of our knowledge. We understand that in case any deviation is found in the above statement at any stage, the company will be black-listed and will not have any deal with the Organizations in future.

**Authorized
Signature with Seal
of Company**