

ODISHA COMPUTER APPLICATION CENTRE BHUBANESWAR

TENDER DOCUMENT

Enquiry No. - OCAC-SEGP-INFRA-0022-2019-19043

Supply, Implementation and Maintenance of Networking Equipments at Odisha Public Service Commission (OPSC), Cuttack

Last Date for Submission of Tender : Dt. 02-12-2019 at 02:00 PM

Place of Submission of Tender Document : Odisha Computer Application Centre,

Plot No.-N-1/7-D,

Acharya Vihar Square, RRL Post Office,

Bhubaneswar-751013

General & Technical Bid Opening : Dt. 02-12-2019 at 04:00 PM

Financial Bid : To be intimated later

Cost of Tender Document : Rs.2240/- (inclusive of GST@12%)

Place: Date:

SECTION-I

NOTICE INVITING TENDER

Sealed tenders are invited from the Bidder to undertake the work of Supply, Installation, Implementation and Maintenance of Networking Equipments for setting up LAN and WiFi at Odisha Public Service Commission (OPSC), Cuttack office. RFP document shall be downloaded from the web site www.ocac.in and www.odisha.gov.in from 15.11.2019 to 02.12-2019, 01:00 P.M. The tender document shall be deposited along with a non-refundable tender document fee of Rs.2240/- (Rupees Two Thousand Two Hundred Fourty Only) in shape of Demand Draft drawn in favour of Odisha Computer Application Centre, Bhubaneswar. The authority reserves the right to accept/reject any and part of there or all the tenders and without assigning any reason thereof.

GENERAL MANAGER (Admn.)
ODISHA COMPUTER APPLICATION CENTRE
PLOT NO.-N-1/7-D, ACHARYA VIHAR SQUARE, P.O.-RRL, BBSR-13

PHONE: 91-674-2567280, 2567064, 2567295

FAX: 91-674-2567842

Place:

SECTION - II

INVITATION FOR BIDS

1.1 INTRODUCTION

Odisha Computer Application Centre (OCAC), Bhubaneswar on behalf of Odisha Public Service Commission (OPSC), Cuttack invites competitive bid proposals from interested bidders who have sufficient experience in the Supply, Installation, Commissioning and Operation & Maintenance of Networking Equipments.

1.2. OBJECTIVES

Odisha Computer Application Centre **(OCAC)** proposes to procure and implement the following networking items for Odisha Public Service Commission, Cuttack Office.

Bill of Material

SI.No.	Description	UoM	Quantity	
Active Component				
1	Core 4SFP+ Switch (24 Port)	Nos.	1	
2	Edge Switch 2SFP PPoE Switch (24 Port)	Nos.	12	
3	Dual Radio 2x2 802.11ac access point with	Nos.	12	
4	1G SFP Module SM	Nos.	8	
	Passive Components			
1	Cat6 UTP Cable 23 AWG CM Rated FR PVC	Mtr	27	
2	CAT6 INFORMATION OUTLET WITH FACE PLATE AND BACK BOX (IO Box)	Nos.	160	
3	CAT6 24 PORT JACK PANEL Loaded	Nos.	13	
4	CAT6 UTP PATCH CORDS (1Mtr)	Nos.	160	
5	CAT6 UTP PATCH CORDS (2Mtrs)	Nos.	160	
6	6 Core SM outdoor cable	Nos.	500	
7	24-Port Rack Mount sliding LIU	Nos.	1	
8	12-Port Rack Mount Sliding LIU	Nos.	4	
9	Pigtail SC SM OS2 1.5M LSZH	Nos.	84	
10	SC-LC SM OFC Patch Cord-3 mtr	Nos.	24	
11	Wall mount 15U 600D	Nos.	5	
12	27U Rack Aluminium Frame-800X1000 with Side Panels of 2nos and Heavy Duty Castors with break	Nos.	1	
PVC Component				
1	40mm HDPE Pipe for Laying of Fiber underground or surface	Mtr	250	
2	32mm PVC Conduit	Mtr	270	
3	25x25mm PVC Duct	Mtr	1000	
4	45x45mm PVC Duct	Mtr	400	

Place: Date: Signature & Seal of the Bidder

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5	25mm Flexible Pipe for laying of Cat-6 / Fiber on surface	Mtr	20
	Services		
1	Digging and refilling of Hard Soil / Concrete road- 1 mtr	Mtr	250
2	Installation Of 40mm HDPE Pipe underground or on surface	Mtr	250
3	Installation of 25mm Flexible Pipe	Mtr	20
4	Installation of 32mm PVC Conduit	Mtr	270
5	Installation of 25x25mm PVC Duct	Mtr	1000
6	Installation of 45x45mm PVC Duct	Mtr	400
7	Installation of Patch Panel	Nos	13
8	Installation of 15 U Rack with all accessories	Nos	4
9	Installation of 27 U Network Rack with all accessories	Nos	1
10	Laying of Cat 6 cable	Mtr	8235
11	Termination of cable both end	Nos	160
12	Installation of Face plate	Nos	160
13	Labelling & Dressing of Cat 6 Patch cords	Nos	340
14	Installation of OFC LIU	Nos	6
15	Labelling & Dressing Of OFC Patch Cords	Nos	400
16	Fusion / Mechanical Splicing of OFC Cable	Nos	84

SECTION-III GENERAL TERMS & CONDITIONS

Place: Date:

RFP REF NO - OCAC-SEGP-INFRA-0022-2019-19043

Signature & Seal of the Bidder

1. Scope of Work

Scope of work includes Supply, Installation; Commission & Maintenance of Networking Equipments at Odisha Public Service Commission (OPSC), Cuttack. The selected bidder shall be responsible for execution of the following work.

- Site survey & feasibility is to be undertaken for identification of the actual places in the premises where network & WiFi points are required to be installed.
- Design and deployment of LAN & Wireless infrastructure in order to provide mobility with latest wireless security with benefits like seamless roaming and connectivity anywhere and anytime to the staff.
- Deployment of wireless network across the OPSC building and to form 1G backbone connectivity to distribution/access switches.
- Deployment of 24 ports PoE/PoE+ switches across the locations for powering of wireless access points & IP devices and providing endpoint connectivity to PC, printers etc.
- Deployment of the latest 802.11ac standard Wireless Access Points (WLAN AP's) across various floors with centralized control, provisioning and management through one Wireless AP as Controllers.
- Supply of all the networking equipments for implementation LAN & WiFi Complying to the Technical Specifications given in **SECTION-IV**.
- Supply, Installation, Commission & Maintenance of the entire networking equipments for a period of 5 years from the date of final acceptance.
- Supply any other items (like screws, clamps, fasteners, ties, anchors, supports, grounding strips, wires, termination kits etc.) required for installation of all the required items for implementation of Networking Equipments for setting up LAN and WiFi at Odisha Public Service Commission (OPSC).
- Coordination for resolution of reported issues within the timeframe as per the SLA.
- The selected bidder shall be responsible to provide maintenance support of all supplied items for a period of 5 years.
- The warranty & maintenance support shall start from the date of Final Acceptance Test (FAT).
- At the time of equipment delivery, the selected bidder shall submit a certificate/ undertaking from OEMs mentioning the fact that the equipment supplied are covered under warranty & support for a period of 5 years.

2. Eligibility Criteria

i. The bidder should be a company registered under Indian Companies Act, 1956 or a partnership firm registered under Indian Partnership Act, 1932 and operating since

Place:

last 5 years from the date of publication of RFP. It should be registered with GST Authorities. The bidder should furnish the copy of company registration certificate, GST registration certificate, PAN card and up to date IT return till 31st March 2019 along with the tender document.

- ii. Consortiums are not allowed.
- iii. The firm should have a local office at Bhubaneswar.
- iv. The average annual turnover of the firm for last three Financial Years must be ₹3 Crore.
- v. The Bidder should have valid ISO 9001 Certification.
- vi. In case of authorized partners, the bidder has to submit the valid authorization certificate(s) from the Original Equipment Manufacturer (OEM) for the entire product quoted mentioned in Technical Specification (Section-IV).
- vii. Proof of successful execution of **similar** nature of work of during the last three Financial Years ending 31st march 2019 must be submitted.

The "Similar Nature" of the work shall mean supply, installation and maintenance of Networking related equipments to any Government/Public Sector Enterprises units having the criteria mentioned below:-

- A. One similar completed work, costing not less than the amount equal to ₹30 lakh cost.
- B. Two similar completed works, each costing not less than the amount equal to ₹20 lakh cost.
- viii. The bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India or any State Government/PSU in the country of India. A self-declaration certificate to this effect should be enclosed

Necessary supporting documents on fulfillment of eligibility criteria should be attached for authentication along with a signed copy of the tender document to indicate acceptance of all terms and conditions set forth in the tender. Organizations failing to provide complete information on any of the requirements are liable to be rejected.

3. Cost of Tender Document

Cost of Tender document will be 2240/- (inclusive of 12% GST).

4. Time of completion of Project:

Supply, Installation & Integration of work shall be completed within **3 Weeks** from the date of issue of Purchase Order.

Place: Date:

Signature & Seal of the Bidder

5. Earnest Money Deposit:

a) EMD is to be furnished by the bidder as mentioned below along with the tender.

Sl.No.	Category Description	EMD Amount
1	Supply, Installation, Commissioning & Maintenance of Networking Equipments.	Rs. 100000/-

- b) The EMD shall be only in the form of Demand Draft in favour of **Odisha Computer Application Centre**, payable at **Bhubaneswar** drawn in any schedule bank. The validity of DD should be at least three months from the date of floating of tender.
- c) Vender should write the organization name at the back side of the DD.
- d) The demand draft shall be submitted along with General bid envelope. Bids without EMD shall be rejected.
- e) The EMD shall be forfeited if a bidder withdraws its bid during the period of bid validity.
- f) The EMD of unsuccessful bidders will be returned to them within a month of selection of vendors.
- g) In case of a successful bidder the EMD may be forfeited if the bidder fails to accept the Purchase Order.

6. Performance Bank Guarantee (PBG)

The bidder shall furnish a Performance Bank Guarantee (PBG) for 10% (ten percent) of the contract price while submission of bill for payment. The PBG must be from the nationalized bank only in India.

7. Payment Term

- 1. 90% of payment will be made after successful completion of the work and Final Acceptance Test (FAT).
- 2. Balance 10% will be released after 30 days of successful operation of the equipments.

8. Offer Validity Period

The tender offer must be valid for **180 days**. Any offer falling short of the validity period is liable for rejection.

9. Service Level Standards & Support

Place: Date:

Signature & Seal of the Bidder

The prime objective of the service levels is to ensure high quality of services from the selected bidder. The service levels defined below indicate the target level of services required, measurements parameter with penalties.

Sl. No.	Measurement Parameter	Service Level	Penalty	
		Within next 48 hours of lodging the complaint	No Penalty	
1	Time to resolve complaints after lodging the complaint	> 48 Hours of lodging the complaint	A penalty of Rs. 200 for every day, subject to maximum 10% of the cost of the equipment.	

Note: -

- a) If the call is not resolved and the value of penalty for any supplied item reaches value of the item, a NOTICE shall be issued. If two such notices are issued during a year for any item or if tendering authority feels that Selected Bidder is not performing as per requirement, then tendering authority may terminate the contract and forfeit the remaining payable amount along with the Performance security deposit.
- b) Maximum applicable penalty shall not exceed 10% of the total contract value. If the penalty exceeds maximum applicable penalty, OCAC at its discretion may terminate the contract and forfeit the remaining payable amount along with the Performance security deposit.

10. Rejection

Before acceptance of the items if the equipment supplied by the bidder is found defective in materials or workmanship or otherwise not in conformity with the requirements of the contract, the purchaser shall have the right to either reject or to request in writing for rectification of the defects. Then the vendor shall with utmost diligence, at his own expense, make good the defects so specified or replace the defective equipment if the vendor fails to do so, the purchaser either.

h) May at its option to replace or rectify such defective equipment and charge to the vendor the excess cost incurred by the purchaser plus 15% (Fifteen percent) extra as administrative charges.

OR

ii) Terminate the contract for default. Further, in the event, the vendor is not able to rectify or replace the faulty equipment within reasonable time, the decision of the Odisha Computer Application Centre, Bhubaneswar shall be final.

Place: Date:

Signature & Seal of the Bidder

11. Delay in completion of the Project

The time schedule for completion of the project as mentioned in Clause 5 above is very important and the bidder must take utmost care to complete the delivery and installation within scheduled time. If the work is delayed for any reason for which Odisha Computer Application Centre is not responsible, a penalty @0.5% of the cost of the purchase order will be charged to the supplier for a delay of one week or part thereof, subject to maximum 5% of the cost of the purchase order.

The purchaser reserves the right to cancel the order if it is not executed within the prescribed completion time and forfeit the entire **EMD** amount. Delay in supply / installation / Commissioning in the part of the supplier for materials/equipments shall be treated as delay in the delivery/ installation of the goods. The purchaser reserves the right to cancel the order in full or in part. In the event of such cancellation, the purchaser shall have the right to **collect penalty from the performance bank guarantee**. However, for valid reasons (like any unavoidable situation at the client site) duly notified in advance and considered by the purchaser, revised delivery schedule may be accepted at the sole discretion of the purchaser.

12. Force Majeure Condition

If the execution of the contract/supply order is delayed beyond the period stipulated in the supply order as result of outbreak of hostilities, declaration of an embargo or blockade of fire, flood, acts of God, then OCAC may allow such additional time by extending the project execution timeframe as considered to be justified by the circumstances of the case and its decision will be final. If additional time is granted by the OCAC, the supply order shall be read and understood as if it had contained from its inception the execution date as extended.

13. Insurance of Equipments

The materials to be supplied should be **insured** by the vendor on behalf of the purchaser from his warehouse to the installation site. The insurance coverage should cover the transport of materials by Rail/Road to the destination and till handing over the same to the client after successful installation. The materials/equipment found lost or damaged in transit or during installation and commissioning should be immediately replaced to avoid delay in commissioning the equipments.

14. Installation Supervision and Services

The supplier shall depute experienced persons for installation and testing of equipment supplied.

15. Replacement

If the material/ equipment or any portion thereof gets damaged or lost during the transit and installation, the vendor shall effect the replacement of such materials/ equipment

Place: Date:

Signature & Seal of the Bidder

within a reasonable agreed time or **15 days whichever is earlier** to avoid delay in commissioning the equipment.

16. Purchaser's Procurement Rights

Without incurring any liability, whatsoever to the affected bidder or bidders, the Purchaser reserves the right to:

- i) Amend, modify, or cancel this tender and to reject any or all proposals without assigning any reason.
- ii) Change any of the scheduled dates stated in this tender.
- iii) Reject proposals that fail to meet the tender requirements.
- iv) Should the Purchaser be unsuccessful in negotiating a contract if required with the selected bidder, the Purchaser will begin contract negotiations with the next best value bidder in order to serve the best interest.
- v) Make typographical correction or correct computational errors to proposals
- vi) Request bidders to clarify their proposal.

17. Inspections

- i) The representatives of Odisha Computer Application Centre shall have the right to make inspection during the execution of work at the site.
- ii) The items of supply/installation shall be verified by the authorized representatives of OCAC during final inspection and the bills shall be submitted by the party after such inspection.

18. Other Instructions

- a) The bidder must organize the bid in accordance with the format specified in the tender document.
- b) The tenders not submitted in the prescribed format or incomplete after due date in any sense are liable to be rejected.
- c) OCAC is not responsible for non-receipt of tenders within the specified date and time due to any reason including postal delay or holidays.
- d) The rates should be valid for a minimum period of 180 days.
- e) OCAC reserves the right to accept or reject any bid without assigning any reason thereof and OCAC's decision in this regard will be treated as final.
- f) OCAC reserves right to cancel the Purchase Order in the event of one or more of the following situations:
 - a. Delay in delivery and installation beyond the specified period for delivery.

Place: Date:

- b. Major discrepancy in hardware & other components noticed during any stage of the project
- g) OCAC reserves the right to ask for any type technical clarification and make technical presentation before the technical committee members failing which it may leads to CANCEL the bid.
- h) OCAC reserves the right to verify the equipments as per the specifications asked in the RFP.
- i) Un-signed & un-stamped bid shall not be accepted.
- j) Undertaking for subsequent submission of any of the document asked in the tender will not be entertained under any circumstances. However, OCAC reserves the right to seek fresh set of documents or seek clarifications on the already /submitted documents.
- k) Upon verification, evaluation / assessment, if in case any information furnished by the vendor is found to be false/incorrect, their total bid shall be summarily rejected and no correspondence on the same, shall be entertained.
- I) No deviations from tender terms and conditions will be accepted. Any violation thereof will lead to the rejection of the bid.
- m) OCAC will not be responsible for any misinterpretation or wrong assumption by the vendor.
- n) OCAC reserves the right to alter / increase / decrease the quantity of items, as the case may be, to meet the requirements at any point of time.
- o) OCAC is not responsible for non-receipt of tenders within the specified date and time due to any reason including postal delay or holidays.
- p) Over-writing/over-typing or erasing of the figures are not allowed and shall render the tender invalid.

19. Detailed Evaluation

- i) Only the bids considered to be substantially responsive shall be considered for detailed evaluation.
- ii) The evaluation of the tender will be made on the basis of least cost for the entire range of product (sum of all quoted prices inclusive of taxes). In case there is any discrepancy between unit price & total price, the unit price will prevail.
- iii) The purchaser shall evaluate each bid in detail in respect of Technical specifications; Price quoted and compares them with other bids in the above mentioned aspects.
- iv) The purchaser reserves the right to evaluate each item either by basic configuration or by combining with one or more of the options asked. Purchaser's decision in this matter shall be final and binding.
- v) The purchaser reserves the right to negotiate specifications, prices during evaluation if found necessary.

Place:

20. Jurisdiction Of High Court Of Odisha

Suites, if any arising out of the contract shall be filed by either party in a court of Law to which the jurisdiction of the High Court of Odisha extends.

21. Right To Reject/Accept The Tender

The purchaser reserves the right either to reject or accept any or all tenders. The purchaser has exclusive right to alter the quantities of materials at the time of placing the final purchase order. After placing the purchase order, the purchaser may order to defer the delivery of the material. It may be clearly understood by the tenderer that the purchaser need not assign any reason for the above action.

22. Final Authority

The final authority for payments will be the consignee except otherwise specifically stated and if the vendor/supplier desires to appeal against any matter he shall appeal to Odisha Computer Application Centre, N-1/7-D, Nayapalli, near Planetarium, Acharya Vihar square, Bhubaneswar-751013 whose decision on such matters shall be final and conclusive.

24. Dispute Resolution

Any dispute or difference, whatsoever, arising between the parties to this agreement arising out of or in relation to this agreement shall be amicably resolved by the Parties through mutual consultation, in good faith and using their best endeavours. Parties, on mutual consent, may refer a dispute to a competent individual or body or institution or a committee of experts appointed By OCAC (Nodal Authority) for such purpose and abide by the decisions thereon.

On non settlement of the dispute, same shall be referred to the commissioner-cumsecretary to Government, IT department, and Government of Odisha for his decision and the same shall be binding on all parties, unless either party makes a reference to arbitration proceedings, within sixty days of such decision.

Such arbitration shall be governed in all respects by the provision of the Arbitration and Conciliation Act, 1996 or later and the rules framed there under and any statutory modification or re-enactment thereof. The arbitration proceeding shall be held in Bhubaneswar, Odisha.

Place:

Accepting all above terms and conditions.

Annexure: G-1

(To be in Company letter head)

General Information

Company Name		
Registered Office Address		
City	Pin	
State	URL	
Telephone	Cell	
Fax	E-mail	
Office Address (in Odisha)		
City	Pin	
State	URL	
Telephone	Cell	
Fax	E-mail	

Place: Date:

Annexure: G-2

(To be in Company letter head)

Self Declaration

Date :	
Ref :	
То,	
ODISHA COMPUTER APPLICATION CENTER	
OCAC BUILDING, PLOT NO. N1/7-D,	
RRL POST OFFICE, BHUBANESWAR-751 013	
In response to the invitation No. ENQUIRY No OCAC-SEGP-I	NFRA-0022-2019-19043 Ms. /Mr.
, as a, l	/ We hereby declare that our
companyis having unblemi	shed past record and was not
declare ineligible for corrupt & fraudulent practices either indefi	nitely or for a particular period of
time.	
Signature of the witness Date: Place:	Signature of the Tenderer Date: Place:

Place:

Signature & Seal of the Bidder

Annexure: G-3 (To be in Company letter head)

Self Declaration

Date :	
Ref :	
To,	
ODISHA COMPUTER APPLICATION CENTER OCAC BUILDING, PLOT NO. N1/7-D,	
RRL POST OFFICE, BHUBANESWAR-751 013	
	' NO OCAC-SEGP-INFRA-0022-2019-19043, Ms. / Mr. , I / We hereby declare that our
	is having unblemished past record and have not
	overnment institution and there has been no pending
	nt on account of similar services. I/We further declare
that our company has not defaulted in exec	
Signature of witness	Signature of the Tenderer
Date:	Date:
Place:	Place:
Place:	Signature & Seal of the Bidder

Annexure: G-4 (To be in Company letter head)

Representative Authorization Letter

Authorized Signatory Representative Signature	
	Thanking you,
company in dealing with in 19043. He is also authorise	is hereby authorised to sign relevant documents on behalf of the nvitation reference No. ENQUIRY NO OCAC-SEGP-INFRA-0022-2019 ed to attend meetings & submit technical & commercial information as the course of processing above said application.
ODISHA COMPUTER APPLI OCAC BUILDING, PLOT NO. RRL POST OFFICE, BHUBAN	N1/7-D,
To,	CATION CENTRE
Nei	
Ref :	

Date:

Annexure: G-5 (To be in Company letter head)

Acceptance of terms & conditions contained in the tender documents

Tο

The General Manager (Admin.)
Odisha Computer Application Centre
OCAC Building, Plot No. N-1/7-D
Acharya Vihar Square
RRL Post Office, Bhubaneswar
Odisha - 751013

Sir,

I have carefully gone through the terms & conditions contained in the tender document - OCAC-SEGP-INFRA-0022-2019-19043, — regarding "Supply, Installation, Implementation and Maintenance of Networking Equipments for setting up LAN and WiFi at Odisha Public Service Commission (OPSC), Cuttack".

I declare that all the provisions of this Tender Document are acceptable to my company. I further certify that I am an authorised signatory of my company and am, therefore, competent to make this declaration.

Signature of witness

Date:

Place:

Signature of the Tenderer

Date:

Place:

Place:

Signature & Seal of the Bidder

Annexure: G-6

List of Enclosures

SI. No.	Enclosure description	Enclosed (Yes / No)	Annexure / Attachment / Page No. / Envelop No. of the enclosure
1	Annexure-G1 General Information		
2	Copy of Registration Certificate of the firm		
3	Organization Profile		
4	Documentary proof of an authorized partner of manufactures of items quoted.		
5	Declaration of ineligibility for corrupt and fraudulent practice (Annexure-G2)		
6	Self Declaration that the bidder hasn't been black listed by any Govt./PSU (Annexure-G3)		
7	Representative Authorization Letter (Annexure-G4)		
8	Acceptance of terms and Condition (Annexure-G5)		
9	Copy of PAN no allotted by Income Tax Department		
10	Copy of GST Registration Certificate		
11	Experience / Work completion certificates from the client.		
12	Tender document fee in a sealed envelope (Super scribe Tender document fee on the top of the sealed envelope) with General Bid	DD No : Amount : Bank:	
13	EMD amount in a sealed envelope (Super scribe EMD amount on the top of the sealed envelope) with General Bid	DD No : Amount : Bank:	
14	General bid duly signed (sealed envelope)		
15	Technical specification with printed technical brochure duly signed (sealed envelope)		
16	Commercial bid duly signed (sealed envelope)		

Place: Date: RFP REF NO - OCAC-SEGP-INFRA-0022-2019-19043

SECTION-IV TECNICAL SPECIFICATION

Place: Date:

Technical Specification for Networking Equipments (Passive & Active)

Technical Specification Passive Components

- 1. All Passive materials i.e. (Cat6 UTP Cable, Fiber Cables/Components and Racks) should be from the same OEM.
- 2. OEM of passive products must be present in Odisha during last five years. Documentary evidence like landline Contact number, GST/Trade License registration etc should be submitted along with the bid document.

Component	Description	Complianc e (Y/N)
Cat 6 UTP Cable	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-C.2 channel performance. Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP. Mechanical Characteristics Conductor dia: 23 AWG, Insulation: polyethylene, UL Listed, ETL verified, Temperature Rating: (-20 to +60 C), Packing: 305 Mtrs.	
CAT6 Information Outlet with Face Plate and Back Box (IO Box)	Cat6 Information Outlets Jack CAT-6,Single square face platehave integrated Spring loaded shutter for protection against dust.All information outlets support 22-26 AWG copper cable shall:Use insulation displacement connectors (IDC),Insertion force: 20N max (IEC 60603-7-4),IDC : Housing PC + glass fiber , UL 94 V-2,Contact Plating: 50 µinches gold on plug contact area,Plastic Housing: Polycarbonate + glass fiber UL94V-2 rated	
CAT6 24 Port Jack Panel	Cat6 Jack Panel should Be Powder coated steel 24 port UTP patch panel. Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limit. IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch down tools, Plastic Housing: ABS, UL94V-0 rated, Operating Life: Minimum 750 insertion cycles, Contact Force: 20N max (IEC 60603-7-4), The Cat-6 transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard.	
CAT6 UTP Patch Cords (1,2 & 3 Meters)	Cable 4 Pairs 24 AWG copper with RJ45 Clear Polycarbonate Plug. at a minimum comply with proposed ANSI/TIA/EIA-568-C.2-1 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair 100W Category 6 Cabling.Conductor size: 24 AWG stranded bare copper Temperature range: -10 to +80 C, Operating life: Minimum 750 insertion cycles	
OFC Cable 6 Core Single Mode	6 Core Single Mode Outdoor CSTA Armored Fiber Optic Cable. Central loose tube with jelly compound, The fiber should fulfill the requirement of IEC 793-2:1992, EN 188101, ITU-T Recommendation G.652,Outer Diameter: 9 + 0.3,Thickness of HDPE Jacket: 1.8±0.2mm,Pulling Tension: Short Term (1000N),Crush Load: 2000N/100mm,Bend Radius: Short	

Place: Date:

Signature & Seal of the Bidder

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	Term (20D),Cladding Diameter: 125 µm.	
12 & 24 Port Rack Mount Fiber Panel (LIU)	19" rack mounted with 1U height, 24/12-Port Rack Mount LIU Fully Loaded with Single Mode SC Adapters. should have 6 fiber magic sticker provision inside for 900um tight buffered fiber storing, Should have plastic Splice Tray capable of atleast 24 fibers, Removable Top & Front cover for better access to interior of LIU,	
SINGLE MODE PIGTAIL	Single Mode SC Pigtail - 1Mtr,Provide a field installable Single mode SC pigtails, Meet TIA/EIA 568.C.3 standards for repeatability, Insertion Loss (Max): <0.3 db Max, Mating Cycle: 1000 Times, Loss: >/= 50 db for UPC.	
SC-LC SINGLE MODE DUPLEX PATCH CORD - 3Mtr	Single Mode SC-LC Duplex Patch Cord - 3Mtr, Optical fiber patch leads shall comprise of Single mode 9/125µm fiber with SC-LC fiber connectors terminated at each end. The optical fiber patch leads shall comply with the following specifications: Optical Fiber – Single mode - OS1,Insertion Loss :<0.3 db,Cable: 9/125, SM, Durability: 1000 mating cycle	
15U Loaded Rack	Height:15U Floor Standing Rack, Size: Width 550 mm x Depth 450 mm, Industrial Standard :Conforms to DIN 41494 OR equivalent ISO Standards, Construction: Welded Frame, Standard Finish: Powder Coated finish with pretreatment process meeting all industrial standard, Roof Mounted Fan Unit / 90 CFM,230V AC,6 Way 5 Amp Power Distribution Unit	
27 U Rack	Height 27U Floor Standing Rack, Size Width 800 mm x Depth 1000 mm, Industrial Standard Conforms to DIN 41494 OR equivalent ISO Standards,Front Door Lockable Toughened Glass Door, Steel Single, Steel Dual , 2 FAN 180CFM,Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin,230 Volts AC, 32 Amp with Plug	

Technical Specification Active Components

- 1 All Active materials i.e. (Switches, Wireless and Transceivers Modules etc.) should be from the same OEM.
- 2. OEM of active products must be present in Odisha during last five years. Documentary evidence like Contact number, GST/Trade License registration etc should be submitted along with the
- 3. OEM should be present in Gartner Magic Quadrant for Wired and Wireless LAN in last 3 years.

Component Description		Compliance
Component	Description	(Y/N)
Core 4SFP+ Switch (24 Port)	Proposed Switch should have 24 x 10/100/1000BASE-T ports and 2 x 10GBASE-T ports, and 4 x 10G SFP+ ports, Switch should Support internal/External Redundant Power Supply. Switch should have minimum 168 Gbps Switching capacity and 125 Mbps packet forwarding rate. proposed switch should have Ethernet Ring Protection Switching (ERPS) for single ring topologies, switch should have Embedded 6 kV surge protection on all Gigabit Ethernet ports, Switch should support 4K VLAN groups,802.1Q Tagged VLAN,GVRP, Portbased VLAN, Voice VLAN,ISM VLAN, Asymmetric VLAN & Private VLAN, Switch should support ACL based on 802.1p priority, VLAN ID,MAC addres,IPv4 address, DSCP& Timebased ACL, Switch Should support 16 IP interfaces, Static Route of 512 IPv4/IPv6 entries & RIPv1/v2/ng, Switch should support Cable diagnostics, 802.3ah Ethernet Link OAM, Switch Should support SSL v1/v2/v3, Port Security, IP-MAC Port Binding, DHCP Snooping, DHCP Server Screening ,BPDU Attack Protection & DoS Attack Prevention, Switch shoud have certificate of CB, cUL, BSMI, CCC,FCC Class A, CE Class A, VCCI Class A, IC.	
Edge Switch 2SFP PoE Switch (24 Port)	Proposed Edge Layer-2 Managed Switch having 24x10/100/1000BaseT PoE ports & 4x SFP slots, Switching Capacity should be at least 56Gbps&Packet Forwarding Rate should be aleast 41Mpps,The switch should support both IEEE 802.3af & IEEE 802.3at standards. It should have PoE power budget of at least 193Watt, IEEE802.1D STP, 802.1w RSTP, 802.1s MSTP with atleast 32 MSTP instances support, Root guard or equivalent feature. IEEE 802.1Q VLAN, atleast 256 Static VLANs, auto Voice-VLAN, asymmetric VLAN, auto surveillance VLAN, Switch should have Atleast 4 IP interfaces (IPv4 & IPv6), Atleast 124 IPv4 static route entries & atleast 50 IPv6 static route entries, The switch should be RoHS compliant & should have following certifications: FCC Class A, CE Class A, VCCI Class A, UL.	
Dual Radio 2x2 802.11ac access point with	Access point have IEEE 802.11ac Wave 2 wireless Up to 1300 Mbps speed, should have one Gigabit LAN port, Access point should have 2 nos of internal dual-band 3 dBi omni antennas, Maximum Output Power 23 dBm for 2.4 GHz & 5 GHz, Data Signal Rate 2.4 GHz-400 Mbps & 5 GHz-Up to 867 Mbps, Security feature - WPA-Personal, WPA-Enterprise, WPA2-Personal, WPA2-Enterprise, WEP 64/128-bit encryption, SSID	

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	broadcast disable, MAC address access control, Network Access Protection (NAP), Internal RADIUS server, should come with software controller software bundled. Certifications: FCC, IC, CE 4, UL, Wi-Fi® Certified	
1G SFP Module SM	1000BASE-LX Single Mode SFP Transceiver with Duplex LC Connector, Support IEEE 802.3z standard, Atleast 10Km distance support on single mode fiber interface, Transceiver module should be hot pluggable, Operating wavelength: 1310 nm.	

SECTION-V COMMERCIAL OFFER

Place: Date: Signature & Seal of the Bidder

<u>Price Bid for Networking Equipments</u> (To be in Company letter head)

SI. No.	Description	Make & Model Name	UoM	[A] Quantity	[B] Unit Price for the Equipment (INR)	[C] Taxes as Applicable Per Unit (INR)	Total Unit Price Including Tax (B + C)	[D = A x (B+C)] Total Cost (INR)	
Active Component									
1	Core 4SFP+ Switch (24 Port)		Nos.	1					
2	Edge Switch 2SFP PPoE Switch (24 Port)		Nos.	12					
3	Dual Radio 2x2 802.11ac access point with		Nos.	12					
4	1G SFP Module SM		Nos.	8					
			Pa	ssive Com	ponents				
1	Cat6 UTP Cable 23 AWG CM Rated FR PVC		Mtr	27					
2	CAT6 INFORMATION OUTLET WITH FACE PLATE AND BACK BOX (IO Box)		Nos.	160					
3	CAT6 24 PORT JACK PANEL Loaded		Nos.	13					
4	CAT6 UTP PATCH CORDS (1Mtr)		Nos.	160					
5	CAT6 UTP PATCH CORDS (2Mtrs)		Nos.	160					
6	6 Core SM outdoor cable		Nos.	500					
7	24-Port Rack Mount sliding LIU		Nos.	1					
8	12-Port Rack Mount Sliding LIU		Nos.	4					
9	Pigtail SC SM OS2 1.5M LSZH		Nos.	84					
10	SC-LC SM OFC Patch Cord-3 mtr		Nos.	24					
11	Wall mount 15U 600D		Nos.	5					
12	27U Rack Aluminium Frame-800X1000 with Side Panels of 2nos and Heavy Duty Castors with break		Nos.	1					
	PVC Component								
1	40mm HDPE Pipe for Laying of Fiber underground or surface		Mtr	250					

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2	32mm PVC Conduit	Mtr	270						
3	25x25mm PVC Duct	Mtr	1000						
4	45x45mm PVC Duct	Mtr	400						
5	25mm Flexible Pipe for laying of Cat-6 / Fiber on surface	Mtr	20						
	Services								
1	Digging and refilling of Hard Soil / Concrete road- 1 mtr	Mtr	250						
2	Installation Of 40mm HDPE Pipe underground or on surface	Mtr	250						
3	Installation of 25mm Flexible Pipe	Mtr	20						
4	Installation of 32mm PVC Conduit	Mtr	270						
5	Installation of 25x25mm PVC Duct	Mtr	1000						
6	Installation of 45x45mm PVC Duct	Mtr	400						
7	Installation of Patch Panel	Nos	13						
8	Installation of 15 U Rack with all accessories	Nos	4						
9	Installation of 27 U Network Rack with all accessories	Nos	1						
10	Laying of Cat 6 cable	Mtr	8235						
11	Termination of cable both end	Nos	160						
12	Installation of Face plate	Nos	160						
13	Labelling & Dressing of Cat 6 Patch cords	Nos	340						
14	Installation of OFC LIU	Nos	6						
15	Labelling & Dressing Of OFC Patch Cords	Nos	400						
16	Fusion / Mechanical Splicing of OFC Cable	Nos	84						

- Prices shall be quoted inclusive of all taxes, duties, freight and forwarding and cost of labour for installation.
- Printed brochures of items quoted should be enclosed with make & model.

Place: Date: RFP REF NO - OCAC-SEGP-INFRA-0022-2019-19043 Signature & Seal of the Bidder