**RFP for IT Infrastructure Equipments (Switches and Servers)
for
Odisha State Data Centre (OSDC) Bhubaneswar**

RFP Enquiry No.   : OCAC-NEGP-INFRA-0010-2022-22047

Date   : 29-Aug-2022

RFP SCHEDULE

Sl. No.	Items	Date & Time
01	Commencement of the bid	29 Aug 2022
02	Last date for receiving queries through E-mail: osdc@ocac.in, sk.bhol@nic.in	06 Sep 2022
03	Pre Bid Conference	08 Sep 2022 at 4:00 PM
04	Issue of Corrigendum (if required)	13 Sep 2022
05	Last date and time for Submission of Bid through GEM portal.	27 Sep 2022 by 02:00 PM
06	Opening of Pre-Qualification (PQ)	27 Sep 2022 by 04:00 PM
07	Opening of Commercial Bids (CB)	To be informed.

Table of Contents

1. Information & Background

Odisha Computer Application Centre (OCAC), the Designated Technical Directorate of Electronics & Information Technology Department, Government of Odisha, intends to expand the existing IT Infrastructure of State Data Centre (OSDC).

To scale-up the existing Compute Infrastructure below is list of devices to be procured through this RFP:-

1.	Network Switch (Type – 1)	: 06 Nos.
2.	Network Switch (Type – 2)	: 04 Nos.
3.	Management Switch	: 05 Nos.
4.	Servers (Type – 1)	: 02 Nos.
5.	Servers (Type – 2)	: 04 Nos.
6.	Servers (Type – 3)	: 34 Nos.
7.	MS Windows Server Lic.	: As per RFP & BoQ.
8.	Patch Cord (Fibre)	: As per RFP & BoQ.
9.	Patch Cord (Copper)	: As Per RFP & BoQ.
10.	External SSD Storage	: As per RFP & BoQ.

2. Instructions to the Bidders

2.1. General

i.   While every effort has been made to provide comprehensive and accurate background information, requirements, and specifications, Bidders must form their own conclusions about the requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.

ii.   All information to be supplied by Bidders will be treated as contractually binding on the Bidders, on successful award of the assignment by OCAC on the basis of this RFP.

iii. No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of OCAC with the bidder. OCAC may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of OCAC.

2.2. Compliant Tenders / Completeness of Response

i.   Bidders are advised to study all instructions, forms, requirements, appendices and other information in the RFP documents carefully. Submission of the bid / proposal shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

ii.   Failure to comply with the requirements of this paragraph may render the Proposal non- compliant and the Proposal will be rejected. Bidders must:
   a. Comply with all requirements as set out within this RFP.
   b. Submit the forms as specified in this RFP and respond to each element in the order as set out in this RFP.

c. Include all supporting documentations specified in this RFP.

2.3. Pre-Bid Meeting & Clarifications

2.3.1. Bidders Queries

a. OCAC shall hold a pre-bid meeting with the prospective bidders on scheduled date at OCAC premises or through Video Web Conference.

b. The Bidders will have to ensure that their queries for Pre-Bid meeting should reach in e-mail id – osdc@ocac.in, sk.bhol@nic.in. Queries submitted after the scheduled date and time, shall not be accepted.

c. The queries should necessarily be submitted in the following format:

Sl. No.	RFP Document Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of Clarification
1.			
2.			

d. OCAC shall not be responsible for ensuring that the bidder's queries have been received by them. Any requests for clarifications after the indicated date and time shall not be entertained by OCAC.

2.3.2. Responses to Pre-Bid Queries and Issue of Corrigendum

a. OCAC will endeavor to provide timely response to all valid queries. However, OCAC makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does OCAC undertake to answer all the queries that have been posed by the bidders.

b. At any time prior to the last date for receipt of bids, OCAC may, for any reason, modify the RFP Document by a corrigendum.

c. The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the websites www.ocac.in, www.odisha.gov.in and at GEM Portal

d. Any such corrigendum shall be deemed to be incorporated into this RFP.

e. In order to provide prospective Bidders reasonable time for taking the corrigendum into account, OCAC may, at its discretion, extend the last date for the receipt of Proposals.

2.4. Key Requirements of the Bid

2.4.1. Right to Terminate the Process

i) OCAC may terminate the RFP process at any time and without assigning any reason. OCAC makes no commitments, express or implied, that this process will result in a business transaction with anyone.

ii) This RFP does not constitute an offer by OCAC. The bidder's participation in this process may result OCAC selecting the bidder to engage towards execution of the contract.

2.4.2. Right to alter Quantities

OCAC reserves the right to reduce the quantity or give repeat order to the **L1 bidder as per requirement**, within the tender validity period of **180 days** from the last date of submission of bid under same terms and conditions with same Specifications and Rate. Any decision of OCAC in this regard shall be final, conclusive and binding on the bidder. If OCAC does not purchase any of the tendered articles or purchases less than the quantity indicated in the bidding document, the bidder(s) shall not be entitled to claim any compensation.

2.4.3. Confidential Information

OCAC and Selected bidder shall keep confidential and not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract.

2.4.4. Bid Security

Bid Security Declaration needs to be submitted along with this bid as per the prescribed format attached in this RFP.

2.4.5. Performance Bank Guarantee (PBG)

i. OCAC will require the selected bidder to provide a Performance Bank Guarantee (PBG) within 15 days from the Notification of award, for a value equivalent to **3%** of the total order value.

i. The Performance Bank Guarantee needs to be valid till Entire Project Period of 5 Years. The Performance Bank Guarantee shall contain a claim period of three months from the last date of validity. The selected bidder shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the project and Warranty period.

ii. In case the selected bidder fails to submit performance Bank guarantee within the time stipulated, OCAC at its discretion may cancel the order placed on the selected bidder without giving any notice and barred the bidder in all the future procurement process as per the Bid Security Declaration.

iii. In that event OCAC may award the Contract, at (L1) rate, to the next best value bidder (L2), whose offer is valid and substantially responsive and determined by OCAC.

iv. OCAC shall invoke the performance Bank Guarantee in case the selected bidder fails to discharge their contractual obligations during the period or OCAC incurs any loss due to Vendor's negligence in carrying out the project implementation as per the agreed terms & conditions.

v. Performance Bank Guarantee shall be refunded within three months of the successful completion of the contract period i.e., expiry of "Warranty and Support Services" of individual package.

vi. No interest will be paid by OCAC on the amount of performance Bank Guarantee

2.4.6. Deadline for Submission of proposals
Proposals, in its complete form in all respects as specified in the RFP, must be submitted through online at the GEM portal on or before the due date as per the RFP.

2.4.7. Late Bids
i. Bids received after the due date and the specified time for any reason whatsoever, shall not be entertained and shall be returned unopened.

ii. The bids submitted by telex/telegram/ fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.

iii. OCAC reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities and need.

2.5. Offer Validity
Offers should be valid for minimum One hundred eighty (180) Days from the date of opening the Technical Bid. A bid, valid for a shorter period, is liable to be rejected. OCAC, Bhubaneswar may ask the bidders to extend the period of validity, if required.

2.6. Delivery
The delivery of infrastructure items to be completed within 12 (Twelve) Weeks from the date of issue of Purchase Order/ Work Order.
Delivery Location: **Odisha State Data Centre (OSDC), Bhubaneswar**

2.7. Product Specifications & Compliance Statement:
The bidder should quote the products strictly as per the tender specifications and only of technically reputed and globally acclaimed brands / makes. Complete technical details along with brand, specification, technical literature etc. highlighting the specifications must be supplied along with the technical bid. A Statement of Compliance shall be given against each item in the prescribed format given in Technical specifications. The compliance statements should be supported by authentic documents. Each page of the bid and cuttings / corrections shall be duly signed and stamped by the authorized signatory. Failure to comply with this requirement may result in the bid being rejected.

2.8. Price
The prices are to be quoted in INR in figure only. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.

2.9. Unsatisfactory Performance
The Parties herein agree that OCAC shall have the sole and discretionary right to assess the performance(s) of the Bidder components(s), either primary and or final, and OCAC, without any liability whatsoever, either direct or indirect, may reject the system(s) component(s) provided by the Bidder, in part or in its entirety, without any explanation to the Bidder, either during the pre and or post test period should the same be

unsatisfactory and not to the acceptance of OCAC. The Bidder covenants to be bound by the decision of OCAC without any demur in such an eventuality.

2.10. Dispute Resolution

i. 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 endeavors. 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.

ii. On non-settlement of the dispute, same shall be referred to the commissioner-cum-secretary 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.

iii. 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

2.11. Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or OCAC as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

i. Natural phenomenon, including but not limited to floods, droughts, earthquakes and epidemics.

ii. Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos.

iii. Terrorist attack, public unrest in work area provided either party shall within 10 days from occurrence of such a cause, notifies the other in writing of such causes.

In case of a Force Majeure, all Parties will endeavor to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure

2.12. Disclaimer

This Tender / Request for Proposal (RFP) is not an offer by OCAC, but an invitation for bidder's response. No contractual obligation whatsoever shall arise from the RFP process.

2.13. IT Act

Besides the terms and conditions stated in this document, the contract shall also be governed by the overall acts and guidelines as mentioned in IT Act 2000 and subsequent amendments, and any other guideline issued by State from time to time.

2.14. Declaration

The bidder would be required to give a certificate as below in his commercial bid.

A) *"I/ WE UNDERSTAND THAT THE QUANTITY PROVIDED ABOVE IS SUBJECT TO CHANGE. I/WE AGREE THAT IN CASE OF ANY CHANGE IN THE QUANTITIES REQUIRED, I/ WE WOULD BE SUPPLYING THE SAME AT THE RATES AS SPECIFIED IN THIS COMMERCIAL BID. I /WE AGREE TO ADHERE TO THE PRICES GIVEN IN THE FINANCIAL BID OF THIS RFP EVEN IF THE QUANTITIES UNDERGO A CHANGE. I/WE FURTHER UNDERTAKE THAT IN CASE OCAC REQUIRES, WE WILL DEMONSTRATE THE QUOTED PRODUCTS WITH 7 DAYS NOTICE FROM OCAC."*

B) *The OEM/ PRODUCT MANUFACTURED IN A COUNTRY SHARING A LAND BORDER WITH INDIA CANNOT PARTICIPATE IN THIS BID.*

3. Scope of Work

Supply, Installation, Configuration & Comprehensive Onsite Warranty support of supplied IT Hardware's and Operating Systems as per the technical specification.

3.1. Network Switch (Type – 1)
3.1.1. Total Quantity = 06 Nos (48 Ports)
3.1.2. Technical Specification (Make and Model)

Sl. No.	Specifications	Compliance (Yes/No)
	OEM Eligibility Criteria	
1	OEM shall be in the leader's quadrant as per the latest published Gartner's MQ report on DCNI. OEM must have India presence for last 5 years on both Sales and Support operation.	
	Solution Requirement	
2	The Switch should support non-blocking Layer 2 switching and Layer 3 routing	
3	There switch should not have any single point of failure like power supplies and fans etc. should have 1:1/N+1 level of redundancy. 19" rack mountable design. Must be offered with rack mounting kit.	
4	Switch support in-line hot insertion and removal of different parts like modules/power supplies/fan tray etc. should not require switch reboot and disrupt the functionality of the system	
5	IPV6 Compliant: • Solution should be IPV6 ready from day1. No extra cost will be borne for IPV6 implementation • Switch should support the complete STACK of IP V4 and IP V6 services	
6	The Switch and different modules used should function in line rate and should not have any port with oversubscription ratio applied	
7	Switch port should well-matched and linked with firewall, IPS, Blade and Rack servers 10Gb/40Gb ports of OEM like HP, IBM, DELL etc.	
9	Switch should supplied with Indian standard compatible IEC C13/C14 3pin power cord suitable for PDU.	
10	Switch should be supplied with necessary patch cord for HA	
11	Proposed solution should not declared with eol, eos or end of support by OEM in the day of production.	
	Hardware and Interface Requirement	
12	Minimum 48 ports support 1/10/25 Gbps SFP+ ports for host connectivity and 6*40/100G QSFP+ ports for uplink connectivity Switch should have the following interfaces: i. 48x10/25G SFP+ Fibre ports with SFP28 SR modules Loaded. ii. 6 x 40/100 GbE QSFP+ fibre ports with 40G QSFP+ SR modules loaded.	

	Transceiver modules shall be suitable for MMF cabling inside the DC (preferably with LC interface). All the transceivers should be from the same OEM as the switch.	
13	Switch should be rack mountable and support side rails if required	
14	Switch should have adequate power supply for the complete system usage with all slots populated and used and provide N+1 redundant hot swappable.	
15	Switch should have hardware health monitoring capabilities and should provide different parameters through SNMP	
16	Switch should support VLAN tagging (IEEE 802.1q)	
17	Switch should support IEEE Link Aggregation and Ethernet Bonding functionality to group multiple ports for redundancy	
18	Switch should support Configuration roll-back and check point	
19	Switch should support for different logical interface types like loopback, VLAN, SVI/RVI, Port Channel, multi chassis port channel/LAG etc.	
20	Switch should have console port	
Performance Requirement		
21	The switch should support 12,000 IPv4 and IPv6 routes entries in the routing table including multicast routes	
22	Switch should support Graceful Restart for OSPF, BGP etc.	
23	Switch should support minimum 500 VRF/VNI instances	
24	The switch should support uninterrupted forwarding operation for OSPF, BGP etc. routing protocol to ensure high-availability.	
25	The switch should support hardware based load balancing at wire speed using LACP and multi chassis ether channel/LAG	
26	Switch should support minimum 3.6 Tbps of switching capacity (or as per specifications of the switch if quantity of switches are more, but should be non-blocking capacity) including the services: a. Switching b. IP Routing (Static/Dynamic) c. IP Forwarding d. Policy Based Routing e. QoS f. ACL and Other IP Services g. IP V.6 host and IP V.6 routing	
Advance Features		
27	Switch should support Data Center Bridging	
28	Switch should support common configuration like mirroring, trunking, port violation, port restriction, inter VLAN routing, STP, BPDU, etc.	
29	Switch should support multi OEM hypervisor environment and should support features for programmable configuration change	
Layer2 Features		
30	Spanning Tree Protocol (IEEE 8201.D, 802.1W, 802.1S)	
31	Switch should support VLAN Trunking (802.1q) and should support 3900 VLAN	
32	Switch should support basic Multicast IGMP v1, v2, v3	
33	Switch should support minimum 90,000 no. of MAC addresses	
34	Switch should support 8 Nos. of link or more per port channel (using LACP).	

35	Switch should support Industry Standard Port/Link Aggregation for All Ports across any module or any port.
36	Switch should support multi chassis Link Aggregation for All Ports across any module or any port of the switch and Link aggregation should support 802.3ad LACP protocol for communication with downlink/uplink any third party switch or server
37	Switch should support Jumbo Frames up to 9K Bytes on Ports
38	Support for broadcast, multicast and unknown unicast storm control to prevent degradation of switch performance from storm due to network attacks and vulnerabilities
39	Switch should support Link Layer Discovery Protocol as per IEEE 802.1AB for finding media level failures
Layer3 Features	
40	Switch should support all physical ports to use either in Layer2 or Layer 3 mode and also should support layer 3 VLAN Interface and Loopback port Interface
41	Switch should support basic routing feature i.e. IP Classless, default routing and Inter VLAN routing
42	Switch should support static and dynamic routing using: a. Static routing b. OSPF V.2 using MD5 Authentication c. IS-IS using MD5 authentication or equivalent policy based routing d. BGP V.4 using MD5 Authentication e. Should support route redistribution between these protocols f. Should be compliant to RFC 4760 Multiprotocol Extensions for BGP-4 (Desirable)
43	Switch should re-converge all dynamic routing protocol at the time of routing update changes i.e. Non-Stop forwarding for fast re-convergence of routing protocols
44	Switch should be capable to work as DHCP server or relay
Availability	
45	Switch should have provisioning for connecting to 1:1/N+1 power supply for usage and redundancy
46	Switch should provide gateway level of redundancy in IpV4 and IPV6 using HSRP/VRRP
47	Switch should support for BFD For Fast Failure Detection as per RFC 5880
Quality of Service	
48	Switch system should support 802.1P classification and marking of packet using: a. CoS (Class of Service) b. DSCP (Differentiated Services Code Point) c. Source physical interfaces d. Source/destination IP subnet e. Protocol types (IP/TCP/UDP) f. Source/destination TCP/UDP ports

49	Switch should support methods for identifying different types of traffic for better management and resilience	
50	Switch should support for different type of QoS features for ream time traffic differential treatment using a. Weighted Random Early Detection. b. Strict Priority Queuing.	
51	Switch should support to trust the QoS marking/priority settings of the end points as per the defined policy	
52	Switch should support Flow control of Ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x	
Security		
53	Switch should support for deploying different security for each logical and physical interface using Port Based access control lists of Layer-2 to Layer-4 in IP V.4 and IP V.6 and logging for fault finding and audit trail	
54	Switch should support control plane i.e. processor and memory Protection from unnecessary or DoS traffic by control plane protection policy	
55	Time based ACL/Equivalent.	
56	Switch should support for external database for AAA using: a. TACACS+ b. RADIUS	
57	Switch should support MAC Address Notification on host join into the network for Audit trails and logging	
58	Switch should support to restrict end hosts in the network. Secures the access to an access or trunk port based on MAC address. It limits the number of learned MAC addresses to deny MAC address flooding	
59	Switch should support DHCP Snooping	
60	Switch should support Dynamic ARP/ equivalent Inspection to ensure host integrity by preventing malicious users from exploiting the insecure nature of the ARP protocol	
61	Switch should support IP Source Guard to prevents a malicious hosts from spoofing or taking over another host's IP address by creating a binding table between the client's IP and MAC address, port, and VLAN	
62	Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined	
63	Switch should support Spanning tree BPDU protection	
64	Switch should support unicast and/or multicast blocking on a switch port to suppress the flooding of frames destined for an unknown unicast or multicast MAC address out of that port	
65	Switch should support Spanning tree BPDU protection	
66	Switch should support for MOTD banner displayed on all connected terminals at login and security discrimination messages can be flashed as per banks ISD rules	
Manageability		
67	Switch should support for embedded RMON/RMON-II for central NMS management and monitoring	

68	Switch should support for sending logs to multiple centralized syslog server for monitoring and audit trail	
69	Switch should provide remote login for administration using: a. Telnet b. SSH V.2	
70	Switch should support for capturing packets for identifying application performance using local and remote port mirroring for packet captures	
71	Switch should support for management and monitoring status using different type of Industry standard NMS using: a. SNMP V1 and V.2 b. SNMP V.3 with encryption c. Filtration of SNMP using Access list d. SNMP MIB support for QoS	
72	Switch should support for basic administrative tools like: a. Ping b. Tracerout	
73	Switch should support central time server synchronization using Network Time Protocol NTPv4/SNTPv4.	
74	Switch should support for providing granular MIB support for different statistics of the physical and logical interfaces	
75	Switch should support scripting/API for device manage for automatic and scheduled system status update formonitoring and management	
76	Switch should provide different privilege for login in to the system for monitoring and management	
77	Switch should support Real time Packet Capture using Wireshark in real time for traffic analysis and fault finding	
IPv6 features		
78	Switch should support for IP V.6 connectivity and routing required for network reachability using different routing protocols such a. OSPF V.3 b. BGP with IP V.6 c. IP V.6 Policy based routing d. IP V.6 Dual Stack etc. e. IP V.6 Static Route f. IP V.6 Default route	
79	Should support route redistribution between these protocols	
80	Switch should support multicast routing in IP V.6 network using PIMv2 Sparse Mode/ PIM SSM	
81	Switch should support for QoS in IP V.6 network connectivity	
82	Switch should support for monitoring and management using different versions of SNMP in IP V.6 environment such as: a. SNMPv1, SNMPv2c, SNMPv3 b. SNMP over IP V.6 with encryption support for SNMP Version 3	
83	Switch should support syslog for sending system log messages to centralized log server in IP V.6 environment	
84	Switch should support NTP/SNTP to provide an accurate and consistent timestamp over IPv6 to synchronize log collection and events	

Sl. No.	Specifications	Compliance (Yes/No)
85	Switch should support for IP V.6 different types of tools for administration and management such as: a. Ping b. Traceroute c. VTY d. SSH e. TFTP f. DNS lookup	

3.2. Network Switch (Type – 2)
3.2.1. Total Quantity = 04 Nos (24 Ports)
3.2.2. Technical Specification (Make and Model)

Sl. No.	Specifications	Compliance (Yes/No)
	OEM Eligibility Criteria	
1	OEM shall be in the leader's quadrant as per the latest published Gartner's MQ report on DCNI. OEM must have India presence for last 5 years on both Sales and Support operation.	
	Solution Requirement	
2	The Switch should support non-blocking Layer 2 switching and Layer 3 routing	
3	There switch should not have any single point of failure like power supplies and fans etc. should have 1:1/N+1 level of redundancy. 19" rack mountable design. Must be offered with rack mounting kit.	
4	Switch support in-line hot insertion and removal of different parts like modules/power supplies/fan tray etc. should not require switch reboot and disrupt the functionality of the system	
5	IPV6 Compliant: • Solution should be IPV6 ready from day1. No extra cost will be borne for IPV6 implementation • Switch should support the complete STACK of IP V4 and IP V6 services	
6	The Switch and different modules used should function in line rate and should not have any port with oversubscription ratio applied	
7	Switch port should well-matched and linked with firewall, IPS, Blade and Rack servers 10Gb/40Gb ports of OEM like HP, IBM, DELL etc.	
9	Switch should supplied with Indian standard compatible IEC C13/C14 3pin power cord suitable for PDU.	
10	Switch should be supplied with necessary patch cord for HA	
11	Proposed solution should not declared with eol, eos or end of support by OEM in the day of production.	
	Hardware and Interface Requirement	
12	Minimum 24 ports support 1/10/25 Gbps SFP+ ports for host connectivity and 6*40/100G QSFP+ ports for uplink connectivity	

	Switch should have the following interfaces: i. 24 x 10/25G SFP+ Fibre ports with SFP28 SR modules Loaded ii. 4 x 40/100 GbE QSFP+ fibre ports with 40G QSFP+ SR modules loaded Transceiver modules shall be suitable for MMF cabling inside the DC (preferably with LC interface). All the transceivers should be from the same OEM as the switch.	
13	Switch should be rack mountable and support side rails if required	
14	Switch should have adequate power supply for the complete system usage with all slots populated and used and provide N+1 redundant hot swappable.	
15	Switch should have hardware health monitoring capabilities and should provide different parameters through SNMP	
16	Switch should support VLAN tagging (IEEE 802.1q)	
17	Switch should support IEEE Link Aggregation and Ethernet Bonding functionality to group multiple ports for redundancy	
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19	Switch should support for different logical interface types like loopback, VLAN, SVI/RVI, Port Channel, multi chassis port channel/LAG etc.	
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Performance Requirement		
21	The switch should support 12,000 IPv4 and IPv6 routes entries in the routing table including multicast routes	
22	Switch should support Graceful Restart for OSPF, BGP etc.	
23	Switch should support minimum 500 VRF/VNI instances	
24	The switch should support uninterrupted forwarding operation for OSPF, BGP etc. routing protocol to ensure high-availability.	
25	The switch should support hardware based load balancing at wire speed using LACP and multi chassis ether channel/LAG	
26	Switch should support minimum 1.8 Tbps of switching capacity (or as per specifications of the switch if quantity of switches are more, but should be non-blocking capacity) including the services: a. Switching b. IP Routing (Static/Dynamic) c. IP Forwarding d. Policy Based Routing e. QoS f. ACL and Other IP Services g. IP V.6 host and IP V.6 routing	
Advance Features		
27	Switch should support Data Center Bridging	
28	Switch should support common configuration like mirroring, trunking, port violation, port restriction, inter VLAN routing, STP, BPDU, etc.	
29	Switch should support multi OEM hypervisor environment and should support features for programmable configuration change	
Layer2 Features		
30	Spanning Tree Protocol (IEEE 8201.D, 802.1W, 802.1S)	
31	Switch should support VLAN Trunking (802.1q) and should support 3900 VLAN	
32	Switch should support basic Multicast IGMP v1, v2, v3	

33	Switch should support minimum 90,000 no. of MAC addresses	
34	Switch should support 8 Nos. of link or more per port channel (using LACP).	
35	Switch should support Industry Standard Port/Link Aggregation for All Ports across any module or any port.	
36	Switch should support multi chassis Link Aggregation for All Ports across any module or any port of the switch and Link aggregation should support 802.3ad LACP protocol for communication with downlink/uplink any third party switch or server	
37	Switch should support Jumbo Frames up to 9K Bytes on Ports	
38	Support for broadcast, multicast and unknown unicast storm control to prevent degradation of switch performance from storm due to network attacks and vulnerabilities	
39	Switch should support Link Layer Discovery Protocol as per IEEE 802.1AB for finding media level failures	
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47	Switch should support for BFD For Fast Failure Detection as per RFC 5880	
Quality of Service		
48	Switch system should support 802.1P classification and marking of packet using: a. CoS (Class of Service) b. DSCP (Differentiated Services Code Point) c. Source physical interfaces d. Source/destination IP subnet	

	e. Protocol types (IP/TCP/UDP) f. Source/destination TCP/UDP ports	
49	Switch should support methods for identifying different types of traffic for better management and resilience	
50	Switch should support for different type of QoS features for ream time traffic differential treatment using a. Weighted Random Early Detection. b. Strict Priority Queuing.	
51	Switch should support to trust the QoS marking/priority settings of the end points as per the defined policy	
52	Switch should support Flow control of Ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x	
Security		
53	Switch should support for deploying different security for each logical and physical interface using Port Based access control lists of Layer-2 to Layer-4 in IP V.4 and IP V.6 and logging for fault finding and audit trail	
54	Switch should support control plane i.e. processor and memory Protection from unnecessary or DoS traffic by control plane protection policy	
55	Time based ACL/Equivalent.	
56	Switch should support for external database for AAA using: a. TACACS+ b. RADIUS	
57	Switch should support MAC Address Notification on host join into the network for Audit trails and logging	
58	Switch should support to restrict end hosts in the network. Secures the access to an access or trunk port based on MAC address. It limits the number of learned MAC addresses to deny MAC address flooding	
59	Switch should support DHCP Snooping	
60	Switch should support Dynamic ARP/ equivalent Inspection to ensure host integrity by preventing malicious users from exploiting the insecure nature of the ARP protocol	
61	Switch should support IP Source Guard to prevents a malicious hosts from spoofing or taking over another host's IP address by creating a binding table between the client's IP and MAC address, port, and VLAN	
62	Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined	
63	Switch should support Spanning tree BPDU protection	
64	Switch should support unicast and/or multicast blocking on a switch port to suppress the flooding of frames destined for an unknown unicast or multicast MAC address out of that port	
65	Switch should support Spanning tree BPDU protection	
66	Switch should support for MOTD banner displayed on all connected terminals at login and security discrimination messages can be flashed as per banks ISD rules	
Manageability		

67	Switch should support for embedded RMON/RMON-II for central NMS management and monitoring	
68	Switch should support for sending logs to multiple centralized syslog server for monitoring and audit trail	
69	Switch should provide remote login for administration using: a. Telnet b. SSH V.2	
70	Switch should support for capturing packets for identifying application performance using local and remote port mirroring for packet captures	
71	Switch should support for management and monitoring status using different type of Industry standard NMS using: a. SNMP V1 and V.2 b. SNMP V.3 with encryption c. Filtration of SNMP using Access list d. SNMP MIB support for QoS	
72	Switch should support for basic administrative tools like: a. Ping b. Tracerout	
73	Switch should support central time server synchronization using Network Time Protocol NTPv4/SNTPv4.	
74	Switch should support for providing granular MIB support for different statistics of the physical and logical interfaces	
75	Switch should support scripting/API for device manage for automatic and scheduled system status update formonitoring and management	
76	Switch should provide different privilege for login in to the system for monitoring and management	
77	Switch should support Real time Packet Capture using Wireshark in real time for traffic analysis and fault finding	
IPv6 features		
78	Switch should support for IP V.6 connectivity and routing required for network reachability using different routing protocols such a. OSPF V.3 b. BGP with IP V.6 c. IP V.6 Policy based routing d. IP V.6 Dual Stack etc. e. IP V.6 Static Route f. IP V.6 Default route	
79	Should support route redistribution between these protocols	
80	Switch should support multicast routing in IP V.6 network using PIMv2 Sparse Mode/ PIM SSM	
81	Switch should support for QoS in IP V.6 network connectivity	
82	Switch should support for monitoring and management using different versions of SNMP in IP V.6 environment such as: a. SNMPv1, SNMPv2c, SNMPv3 b. SNMP over IP V.6 with encryption support for SNMP Version 3	
83	Switch should support syslog for sending system log messages to centralized log server in IP V.6 environment	

| 84 | Switch should support NTP/SNTP to provide an accurate and consistent timestamp over IPv6 to synchronize log collection and events | |
| 85 | Switch should support for IP V.6 different types of tools for administration and management such as:
a. Ping
b. Traceroute
c. VTY
d. SSH
e. TFTP
f. DNS lookup | |

3.3. Management Switch
3.3.1. Quantity = 05 Nos (24 Ports)
3.3.2. Technical Specification (Make and Model)

Sl.No.	Technical Specification	Compliance (Yes/No)
	OEM Eligibility Criteria	
1	OEM shall be in the leader's quadrant as per the latest published Gartner's MQ report on DCNI. OEM must have India presence for last 5 years on both Sales and Support operation.	
	Architecture	
2	19" rack mountable configuration. Rack mounting kit must be provided.	
3	Shall have routing/switching capacity minimum of 176 Gbps of forwarding performance	
4	Shall be based on modular operating system to support enhanced serviceability along with independent process monitoring.	
5	32K MAC entries or more	
	Resiliency	
6	Shall have redundant hot swap power supplies (1+1) from Day 1.	
7	Switch should supplied with compatible IEC C13/C14 3pin power cord suitable for PDU.	
8	IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol	
9	IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
	Layer 2 Features	
10	Shall support up to 3950 port or IEEE 802.1Q-based VLANs	
11	Shall support Jumbo frames of 9K bytes	
12	Internet Group Management Protocol (IGMP)	
13	Multicast Listener Discovery (MLD) or IGMP snooping	
14	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
15	IEEE 802.3ad Link Aggregation Control Protocol (LACP)	

Sl.No.	Technical Specification	Compliance (Yes/No)
Layer 3 Features (any additional licenses required shall be included)		
16	Static Routing for IPv4 and IPv6	
17	Dynamic Host Configuration Protocol (DHCP) Client/ Relay or Server.	
QoS and Security Features		
18	Access Control Lists for both IPv4 and IPv6 for filtering traffic to prevent unauthorized users from accessing the network	
19	Port-based rate limiting and access control list (ACL) based rate limiting	
20	Shall create traffic classes based on access control lists (ACLs), IEEE 802.1p precedence, IP, and DSCP or Type of Service (ToS) precedence	
21	Shall support Strict Priority Queuing (SP)/Weighted Fair Queuing (WFQ)/Weighted Deficit Round Robin (WDRR)configurable buffers and Explicit Congestion Notification (ECN)	
22	Shall support Weighted Random Early Detection (RED) /Random Early Detection (RED) for congestion avoidance	
23	DHCP protection/snooping to block DHCP packets from unauthorized DHCP servers	
24	ARP attack protection to protect against attacks that use a large number of ARP requests	
25	Port security to allow access only to specified MAC addresses	
25	Shall support Packet storm protection to protect against unknown broadcast, unknown multicast, or unicast storms with user-defined thresholds	
Management Features		
26	Configuration through the CLI, console, Telnet, and SSH	
27	SNMPv1, v2, and v3 and Remote monitoring (RMON) support	
28	NetFlow/sFlow or equivalent for traffic analysis	
29	Port mirroring to duplicate port traffic (ingress and egress) to a local or remote monitoring port.	
30	RADIUS/TACACS+ for switch security access administration	
31	Network Time Protocol (NTP) or equivalent support	
Required Interfaces		
32	24 ports of 1G BaseT and 4 ports of 10G SFP+ with 10G SFP+ transreciever modules	
33	Transceiver modules shall be suitable for MMF cabling inside the DC (preferably with LC interface). All the transceivers should be from the same OEM as the switch.	

3.4. Rack Server
3.4.1. Quantity = Server Type 1 = 02, Server Type 2 = 04 & Server Type 3 = 34 Nos.
3.4.2. Technical Specification (Make and Model)

Sl.No.	Minimum Requirement Specification	
1	Processor	The server should have 2 nos. of Intel Xeon/AMD EPYC latest Generation Processor: Server Type 1: 02 servers with 2 x 16 cores, minimum 2.9 GHz clock rate. Server Type 2: 04 servers with 2 x 16 cores, minimum 2.2 GHz clock rate. Server Type 3: 34 servers with 2 x 32 cores, minimum 2.2 GHz clock rate. 64-bit x86 processor fully binary compatible to 64/32-bit applications. Number of cores on a single die/socket will be treated as a single processor.
2	Memory	Minimum 1 TB latest DDR memory using 64 GB DIMMs or higher. Advanced ECC with multi-bit error protection. The memory should have native capability of identifying and reporting the genuiness of the memory installed in the server. OR The server should be integrated in the factory, tested, certified, chassis intrusion switch enabled.
3	HDD Controller	12 Gbps SAS/ NVMe RAID Controller supporting RAID 0, 1, 5 and 6 with 4GB battery backed up Cache
4	HDD	Server Type 1 : 4 x 3.8 TB SSD or Higher Server Type 2 : 4 x 960 GB SSD or Higher Server Type 3 : 4 x 480 GB SSD Hot Swap HDD or Higher
5	Video Controller	Integrated Graphics Controller
6	Network Controller	Server Type 1, 2 & 3:- Minimum 2 x 1 Gbps ports and 4 No's (2 x 2 on each network adapter card) of 10/25 Gbps SFP+ ports with 25 Gbps SFP28 LC transreciever SR Type.
7	Fiber Channel HBA	Two no's Dual FC Port 32 Gbps (i.e. 4 Nos. of 32 Gbps.) with LC fibre transceiver SR Type.
8	Slots	Minimum one free PCI/PCI-x/PCI-Express
9	Ports	2* USB; 1* Keyboard Port & 1 * Mouse Port (on board/dongle), One dedicated Ethernet Port for OS independent out-of-band hardware management.
10	Bays	Minimum 8 Hot Swap drive bays
11	System Chassis	Rack Mount, 2U (max) chassis with security bezel, Redundant Hot Swappable Power Supply with Platinum efficiency
12	OS Certification	Certification for latest Server version of Windows and minimum two Linux flavours
13	Drive / Software Utilities	All required device drivers for OS installation /System Configuration and Server Management
14	System Management	• Monitoring ongoing management, service alerting, reporting and remote management with embedded dedicated Gigabit out of band management port. Remote Management of Server over LAN & WAN

Sl.No.	Minimum Requirement Specification	
		with SSL encryption, Virtual Media and virtual folder with required advanced license, Remote KVM, Server Health logging, Directory Services compliance (AD or LDAP), REST/XML API, dynamic/group management of power, licenses including firmware or self-updating firmware system, Configuration backup, zero touch repository manager, Syslog (local / remote).
		• Management software should support integration with popular virtualization platform management software like VCentre, SCVMM, Redhat OpenStack and Red Hat RHEV.
		• Offered Server platform must be ready for container workload deployment
		• Server's integrated remote managegement subsystem shall have EAL2+ or higher common criteria certification (Certificate copy from Common Criteria Portal to be submitted).
15	Serviceability	• System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone support. The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur. Should provide remote firmware update functionality. • Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. • Solution should be provided for monitoring & analysis feature to predict, prevent and auto-resolve problems and by providing automating case creation and log file submission for the problems that can't be auto-resolved or should have recommendation engine for IT operations management. Should provide silicon based hardware root of trust, automatic secure BIOS recovery, cryptographically signed firmware updates. • OEM of the server should have its own GST registered warehouse in Odisha for spare (GST details in the name of OEM to be submitted).
16	Virtualization	Should support Industry Standard Virtualization Software
17	IDC Ranking	OEM should be ranked within top 3 as per IDC report for any one of the previous four quarter in India for server.
18	Warranty	Five years on-site comprehensive OEM Warranty Support with 24X7 coverage and access to OEM TAC/support
19	IPv6 Support	All devices should be IPv6 implementation ready from day 1. No extra cost will be borne by OCAC for IPv6 implementation.
20	Power Cord	Server should supplied with compatible IEC C13/C14 3pin power cord suitable for PDU.

3.5. Microsoft Windows Server Standard Edition Latest Version – Volume License (Downloadable Software Volume Licence from Microsoft)

3.5.1. Technical Specification Microsoft Windows Server Standard Edition

Sl. No.	Parameter	Functionality
1	Windows Server OS	Microsoft windows server standard edition 2019 or Higher (License Type - 2 Core) Qty – 100 Nos

3.6. Passive Cabling (Fibre)
3.6.1. Technical Specification

Required Specification	Compliance (Yes/No)
General Architecture	
The system shall utilize MPO-compatible 12-fiber male and female connector plugs that are compatible with MPO adapters as per IEC 61754-7 and TIA 604-5.	
The system shall utilize "aligned key" adapters for every MPO mated connection, per TIA 604-5, K=2.	
The system shall guarantee correct Transmit/ Receive polarity in any configuration or combination of system components.	
The system shall allow for the use of TIA compliant patch cords and trunk cables on both ends of every link, for both duplex and full-parallel applications. All the fibres are to be Bend-insensitive in nature.	
MPO system and cables shall support 4 connections in a single channel and meet the following application loss and length limits for network-server connectivity. The proposed cabling system should be of low loss and support all 10G, 25G, 40G, and 100G on multi-mode fibre for network and application connectivity upto at least 90 (850nm) meters as per the standard IEEE guidelines.	
MPO system and cables shall support 4 connections in a single channel and meet the following application loss and length limits for SAN application connectivity. Should support all 8G, 16G, and 32G on fibre upto at least 100 meters (850nm) on multi-mode fibre as per the standard guidelines.	
The fibre cabling should be modular (plug-n-play) in nature using MPO trunks and connectors.	
The proposed system and solution should work together when connected without any issue and additional requirement.	
Cabling OEM shall have ISO 9001 & 14001 Certified. All the supplied cables and solution are to be of either of OM4 or OM5.	
The system should support Fibre Performance calculators available at OEM website for verification of the designed fibre links against a given set of applications.	
The system should support Fibre Performance calculators available at OEM website for verification of the designed fibre links against a given set of applications.	
All the losses to within the limit as per the prescribed guidelines and standard of TIA/ EIA or equivalent.	

Pre Terminated MPO Modules – LC Cassette	
LC Modules – 24- fibre, shall be available in 50 micron laser optimized OM4 and latest OM5 versions.	
The 24-fiber module shall have pre-installed duplex LC adapters at the front routed to 2x12f -fibre Low loss MPO adapters with "aligned-key" adapter at the back.	
All MPO modules must support 'Method B Enhanced' wiring pattern for ease of scalability. Same cassette should be used in both end of the link, without need of flipped or straight wiring management.	
Cassettes shall have wiring pattern to enable use of same cassette on either end of link, for easy management and scalability or The cassettes (modules) should be one end polarity A and other end polarity B, for matching of link.	
Dust caps on each port must be provided.	
The offered MPO modules must support the given list of applications and SAN links as per RFP performance specifications.	
Modular Fibre Panels and Shelves	
Modular type 1U sliding fibre panel, shall accept minimum 4 no's of MPO modules, for upto minimum 48 duplex LC ports.	
The 1U Panel shall be equipped with a rear cable tray with management rings for securing and arranging trunk cable entry. Required rack mounting kit to be supplied with the product.	
Fibre panel shall have integrated front patch cord management trough and port labelling. Trough door should have clear view of the ports and labels inside.	
Shall store the trunk cable slack. Shelf shall support both side and rear entry of cables / trunk cords.	
Pre-terminated MPO Fibre Trunk Cable assemblies	
The trunk cables shall be available in 12 fibres with MPO male/female connectors on either end. The trunk cable should be either OM4 or OM5	
The offered MPO solution must support the given list of applications and SAN links as per RFP performance specifications. MPO should be Method B enhanced.	
All cables should be Bend insensitive multimode OM4 or OM5.	
The Trunk cable shall have Method B enhanced construction and Colour of the jacket to be as per TIA standards.	
Trunk Cables shall have Flame Test Listing of NEC OFNR-LS (ETL) and C (ETL) or equivalent certified.	
Tensile strength shall be upto 700N.	
Patch Cords	
LC-LC OM4 / OM5 Patch cords shall be with Uni-boot construction for ease of access in high density panel ports. Uni-boot patch cords shall support field adjustable polarity reversal, without cord damage. The fibre patch cords are to be bend insensitive.	
Low Smoke Zero Halogen (LSZH) compliant to IEC/ UL certification.	

3.6.2. Quantity – As defined below

Sl. No.	Item Descriptions	Qty
	MPO Fibre Systems	
1	High Density type of 1U modular cassette sliding Panel (closed enclosure), accepts minimum (4) MPO modules, providing up to 48 duplex LC ports, with front patch cord management.	12
2	MPO-12 Ultra Low Loss distribution module, 24LC to 2x12f MPOs unpinned, Method B, with dust cap	40
	Rack Connectivity through above MPO Fibre Systems	
1	Ultra Low Loss (ULL) MPO12 to MPO12 , Fibre Trunk Cable Assembly, 24-Fiber, Method B, LSZH, 12m	4
2	Ultra Low Loss (ULL) MPO12 to MPO12 , Fibre Trunk Cable Assembly, 24-Fiber, Method B, LSZH, 15m	16
3	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 0.5 mtr	20
4	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 1 mtr	70
5	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 2 mtr	70
6	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 3 mtr	70

3.7. Passive Cabling (Copper)
3.7.1. Technical Specification (Copper - CAT 6A)

Required Specification	Compliance (Yes/No)
General Architecture	
CAT6A Patch Cords shall constructed of 23/24 AWG solid core copper and equipped with 8-Pin modular plugs on each end.	
All cords shall be round, and consist of copper conductors, tightly twisted into individual pairs.	
Plugs shall be designed with an anti-snag latch to facilitate easy removal during move, add and change processes.	
LSZH jacket must comply with the following Fire Safety standards: ISO/IEC 60332-3-22: Vertical Flame Spread ISO/IEC 60754-2: Acidity ISO/IEC 61034-2: Smoke Density	
The cordage shall be UTP / FTP or STP components that do not include internal or external shields, screened components or drain wires.	
The patch cords will have insertion life of 750 cycles minimum.	

3.7.2. Quantity – As defined below

(i)   Quantity (01 Mtrs.) = 40
(ii)   Quantity (02 Mtrs.) = 40

(iii)   Quantity (05 Mtrs.) = 40

3.8.   External USB SSD Hard Drive (Make - Dell/ HP/ Seagate/ Transcend/ WD/ Toshiba)

(i)   Quantity = 02
         Minimum Specification: 1TB, with USB 3.0 or higher supported (with cable), type C cable and convertible to use as USB, Form Factor 2.5 inch or lower, minimum IP 55 rated, with hard case cover, Drop resistance, 5 Years of Warranty Support from OEM, support major OS of OEM.

(ii)   Quantity = 01
         Minimum Specification: 2TB, with USB 3.0 or higher supported, type C cable and with convertible to use as USB, Form Factor 2.5 inch or lower, minimum IP 55 rated, with hard case cover, Drop resistance, 5 Years of Warranty Support from OEM, support major Operating System of OEM.

Note: - 1. *The products quoted are not "end of life or end of sale products" as on Bid Submission date. If in case the support for the product quoted has been stopped/ withdrawn till the time of delivery of equipment, the same will be changed with the superior product at no extra cost.*

2. *Bidder has to submit an undertaking mentioning that, the support including spares, patches, and upgrades for the quoted products shall be available for the period of 5 years from the date of acceptance.*

4. Eligibility Criteria

Following table mentions the pre-qualification criteria. A bidder participating in the procurement process shall possess the following minimum pre-qualification/ eligibility criteria. Any bid failing to meet the stated criteria shall be summarily rejected and will not be considered for Commercial Evaluation.

4.1. Pre-qualification Criteria

Sl. No.	Clause	Documents Required
1.	The bids should be submitted by only Prime Bidder, no consortium is allowed in this bid.	Declaration in this regard needs to be submitted.
2.	The Bidder should have positive net worth during last three financial years, ending 31.03.2021.	A certified document by the Chartered accountant stating the net worth and average annual turnover of the bidder
3.	The Bidder's average annual turnover should be more than (INR) 20 cores in last three financial years and profitable during each of the previous three financial years ending on 31.03.2021. Note: The turnover refers to the Bidder's firm and not the composite turnover of its subsidiaries/sister concerns etc.	Copy of audited profit and loss account/balance sheet/annual report of the last three financial years.
4.	(a) The bidder must be registered under the Companies Act 1956 or a Partnership firm registered under LLP Act, 2008 and must have in operation for a period of at least 5 (Five) years as of March 31, 2022. (b) The company must be registered with appropriate authorities for all applicable statutory duties/taxes	(a) Valid documentary proof for :- ✓ Certificate of incorporation (b) Valid documentary proof for: ✓ GST Identification number (GSTIN) ✓ Income Tax registration/PAN number ✓ Up to date GST Return ✓ Income Tax returns for last three financial years.
5.	Bidder should have experience of Supply, Installation and Warranty/Annual maintenance services for IT Infrastructure projects and should have been in the business for a period of five years as on 31.03.2022.	1. Work Orders confirming year and area of activity 2. Memorandum and Articles of Associations 3. Relevant legal documentation confirming the acquisition/merger, if any
6.	The bidder must have successfully undertaken at least the following numbers of systems implementation engagement(s) of value specified herein during the last Five Financial Years : ➢ One project of similar nature not less than the amount Rs. 200 Lakh. OR	Work order, Completion Certificate or phase completion certificate for ongoing project from the client

Sl. No.	Clause	Documents Required
	➢ Two projects of similar nature each of which not less than the amount Rs. 180 Lakh. OR ➢ Three projects of similar nature each of which is not less than the amount Rs. 160 Lakh. 'Similar Nature' is defined as:- Supply & Installation of Network, Server, Storage and their associated maintenance support services for any Government/Public Sector Enterprises/BFSI in India.	
7.	The Bidder shall not be under a Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government.	Declaration in this regard by the authorized signatory of the Bidder
8.	I. The Bidder must have a registered Branch office in Odisha or if not having office in Odisha should submit an undertaking to open office within one month after getting the Purchase Order. II. The Bidder must have 5 IT Service Engineer/ Professionals available in Bhubaneswar (Odisha).	Office Address or Undertaking A self-certified letter by an authorized signatory mentioning the list of IT service engineer/professionals.
9.	The bidder should submit the valid letter from the OEMs confirming the followings: • Authorization from OEM for the quoted product. • Confirm that the products quoted are neither declared End of Sale and End of Support or End of Life at the time of Bid Submission and during the completion of procurement phase. • Confirm that the products would be covered under comprehensive warranty for the contract period. • Undertake that the support including spares, patches for the quoted products shall be available for entire contract period.	a) MAF b) Undertaking from OEM
10.	Quality Certification	Valid ISO 9001of the bidder
11.	Bid Security	Bid Security Declaration

4.2. Bid Evaluation

4.2.1. Pre-Qualification

i. Bidder shall comply the Pre-Qualification Criteria mentioned in respective packages.

ii. Bidders only Qualified in the Pre-Qualification Criteria are eligible for Technical bid Evaluation.

4.2.2. Technical Bid Evaluation
The Technical Evaluation will be based on the following broad parameters:

i. Compliance to Technical Specifications as specified in the RFP.

ii. Review of written reply, if any, submitted in response to the clarification sought by OCAC/ OSDC, if any.

iii. The Compliance Statement by the bidder to the technical specifications of respective package along with relevant product brochure, technical documents etc. Bids without proper Compliance Statement will be rejected.

iv. To assist in the examination, evaluation and comparison of bids, OCAC may, at its discretion, ask any or all the Bidders for clarification and response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

v. OCAC may interact with the Customer references submitted by bidder, if required.

vi. OCAC reserves the right to shortlist bidders based on technical evaluation criteria.

vii. The onsite warranty services must be provided at OSDC, Bhubaneswar. The bidder must provide the plan / arrangement in escalation matrix, for warranty services to be provided at OSDC, Bhubaneswar

viii. Acceptance to the terms and conditions laid down in the tender document. A scanned copy of the bid document duly signed by the bidder's authorized representative is to be submitted in token of acceptance of the same. Any deviation in the general terms and condition may lead to the rejection of the bid.

4.2.3. Commercial Bid

i. Commercial Bid should be submitted online as per the given format.

ii. The PRICE PART shall contain only schedule of rates duly filled in. NO stipulation, deviation, terms & conditions, presumptions etc. is permissible in price part of the bid. OCAC shall not take any cognizance of any such conditions and may at its discretion reject such commercial bid.

iii. Prices should be given in INR in figures only.

iv. Bidders are advised strictly not to alter or change the BOQ format /contents. Bidders are also advised not to paste any image file with BOQ

v. Price offered by the bidder shall not appear anywhere in any manner in the technical bid.

4.2.4. Commercial Bid Evaluation

i. The financial bids of bidders who qualify in Pre-Qualification and Technical evaluation shall be opened at the notified time, date and place by OCAC in the presence of the bidders or their representatives who choose to be present.

ii. The process of opening of financial bids/ covers shall be similar to that of Pre-Qualification – cum – Technical bids

iii. The names of the firms, the rates given by them shall be read out and recorded in tender opening register.

   To evaluate a financial bid, the tendering authority shall consider the following: -

   - The bid price as quoted in accordance with bidding document.

   - Price adjustment for correction of arithmetic errors in accordance with bidding document.

iv. The evaluation shall include all costs and all taxes and duties applicable to the bidder as per law of the Central/ State Government/ Local Authorities. Treatment of GST etc.

v. The evaluation shall be made adding all schedules to arrive lowest quoted bid.

vi. All rates quoted must be FOR destination/on site and should include all taxes, levies and duties. In case of local supplies the rates should include all taxes, etc., and no cartage or transportation charges will be paid by the Government. And the delivery of the goods/services shall be given at the premises/onsite.

4.2.5. Correction of Arithmetic Errors

   Provided that the bid is substantially responsive, the competent Purchase Committee shall correct arithmetical errors on the following basis: -

i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.

ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and if there is a discrepancy between words and figures, the amount in words shall prevail.

4.3. Other Terms & Conditions of RFP
4.3.1. Bid Submission

i. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

ii. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by Department.

iii.   Bidder has to select the payment option as per the tender document.

iv.   Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

4.3.2. Authentication of Bids

A Proposal should be accompanied by a power-of-attorney/ authorization in the name of the signatory of the Proposal.

4.4. Special Conditions of Contract
4.4.1. Price Basis
Price basis should be for OCAC, Bhubaneswar in INR only. Price quoted should be in the prescribed format as per BOQ. The quoted price will be considered firm and no price escalation will be permitted

4.4.2. Billing
Billing is to be done in the name of Odisha Computer Application Centre, Plot No.-N1/ 7D, Acharya Vihar Square, RRL Post Office, Bhubaneswar -751013. The payment would be on the basis of the actual bill of material supplied, duly certified by our authorized representative at OSDC, Bhubaneswar.

4.5. Payment
100% of the invoice value will be paid to the successful bidder, after delivery of OEM Warranty Support Certificate & Final Acceptance Test (FAT), with submission of Performance Bank Guarantee issued from a nationalized / scheduled bank, equivalent to 3% of the amount of the Contract Value. This Bank Guarantee should remain valid for a period of 60 days beyond the warranty period, commencing from the date of satisfactory completion of entire job.

4.6. Penalty
Penalty for Delayed Services: Penalty will be charged @ 0.5% of the contract value per week subject to maximum of 10% of total order value, in case of delayed in supply of stipulated time period.

4.7. Warranty
All the items covered in the schedule of the requirements /Bill of Material (BOM), shall carry 24 x 7 Comprehensive Onsite Warranty support from OEM. All the items quoted should include 5 years of OEM onsite warranty.

5. Appendix I: Bid Templates

5.1. Bid Security Declaration

(In Original Letter Head)

< Location, Date >

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

Reference: (1) Enquiry No. _____.
              (2) Our Bid No. _____ date _____.

I/ We, _____ irrevocably declare as under:

I/ We understand that, as per Clause _____of Tender/ bid conditions, bids must be supported by a Bid Security Declaration in lieu of Earnest Money Deposit.

I/ We hereby accept that I/ We may be disqualified from bidding for any contract with you for a period of **Three Years** from the date of disqualification as may be notified by you (without prejudice to OCAC's rights to claim damages or any other legal recourse) if,

1) I am /We are in a breach of any of the obligations under the bid conditions,
2) I /We have withdrawn or unilaterally modified/ amended/ revised, my/our Bid during the bid validity period specified in the form of Bid or extended period, if any.
3) On acceptance of our bid by OCAC, I /we failed to deposit the prescribed Performance Bank Guarantee (PBG) or fails to execute the agreement or fails to commence the execution of the work in accordance with the terms and conditions and within the specified time.

Signature:

Name & designation of the authorized person signing the Bid-Securing Declaration Form:

Duly authorized to sign the bid for and on behalf of: _____ (complete name of Bidder)

Dated on _____ day of _____ month, _____ year.

(Note: In case of a Joint Venture, the Bid Security Declaration must be in the name of all partners to the Joint Venture that submits the bid).

5.2. Manufacturers /Producers Authorization Form (MAF)

(To be submitted Original on the OEM Letter Head)

Letter No._____   Date:_____

To

The General Manager(Admin)
Odisha Computer Application Centre
Bhubaneswar

Sub : OEM Authorization Letter

Dear Sir:

Ref: Your RFP Reference No: OCAC-NEGP-INFRA-0005-2021-22027

We, who are established and reputable manufacturers / producers of _____ having factories / development facilities at (*address of factory / facility)* do hereby authorize M/s _____ *(Name and address of Agent)* to submit a Bid, and sign the contract with you against the above Bid Invitation.

We hereby extend our full guarantee and warranty for the Solution, Products and services offered by the above firm against this Bid Invitation.

We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products manufactured or distributed by the Supplier :

a. Such Products as OCAC may opt to purchase from the Supplier, provided, that this option shall not relieve the Supplier of any warranty obligations under the Contract; and

b. in the event of termination of production of such Products:

  i. Advance notification to OCAC of the pending termination, in sufficient time to permit to procure needed requirements; and

  ii. Following such termination, furnishing at no cost to OCAC, the blueprints, design documents, operations manuals, standards, source codes and specifications of the Products, if requested.

We duly authorize the said firm to act on our behalf in fulfilling all installations, Technical support and maintenance obligations required by the contract.

Yours faithfully,

(Name)
(Name of Producers)

Note - 1: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. The Bidder in its Bid should include it.

5.3. Declaration and Undertaking from Original Equipment Manufacturer (OEM)

(To be submitted Original on the OEM Letter Head)

Date: _____

To
The General Manager (Admin)
Odisha Computer Application Centre
Plot No. - N-1/7-D, Acharya Vihar
P.O. - RRL, Bhubaneswar - 751013
EPBX: 0674-2567280/2567064/2567295
Fax: +91-0674-2567842

Sub: Undertaking by Original Equipment Manufacturer against tender No. _____ dated _____ for RFP for IT Equipment's Upgrade of Odisha State Data Centre (OSDC) Bhubaneswar.

Dear Sir/ Madam,

I/We, M/s _____(Name of the OEM) having registered office at _____(address of the manufacturer) by virtue of being original equipment manufacturer for the _____ (Name of the product/s).

We hereby confirm the following points.
1. Parts supplied by us are certified and compatible with the offered solution.
2. Parts supplied and available are not declared as End-Of-Life/ EOS for next Seven Years from the date of acceptance. After installation, if such parts are found End-Of-Life, then it will be our responsibility to replace with newer and higher compatible parts along with implementation at no cost to the OCAC.

The undersigned is authorised to issue such authorisation on behalf of M/s _____ (Name of the manufacturer).

For M/s _____(Name of the manufacturer)
Signature & company seal

Name
Designation
Email
Mobile No.

Note: Separate undertakings are essential from the each OEM, interconnects and software.

5.4. Financial Proposal

RFP Reference No: XXX-XXX-XXX

COMMERCIAL BID FORMAT

Sl. No.	Item	Bill of Quantity (A)	Unit Price (B)	GST Per Unit (C)	Total Unit Cost (D) (D=B+C)	Total (A x D)
1.	Network Switch (Type – 1)	6				
2.	Network Switch (Type – 2)	4				
3.	Management Switch	5				
4.	Server (Type – 1)	2				
5.	Server (Type – 2)	4				
6.	Server (Type – 3)	34				
7.	High Density type of 1U modular cassette sliding Panel (closed enclosure), accepts minimum (4) MPO modules, providing up to 48 duplex LC ports, with front patch cord management.	12				
8.	MPO-12 Ultra Low Loss distribution module, 24LC to 2x12f MPOs unpinned, Method B, with dust cap	40				
9.	Ultra Low Loss (ULL) MPO12 to MPO12 , Fibre Trunk Cable Assembly, 24-Fiber, Method B, LSZH, 12m	4				
10.	Ultra Low Loss (ULL) MPO12 to MPO12 , Fibre Trunk Cable Assembly, 24-Fiber, Method B, LSZH, 15m	16				
11.	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 0.5 mtr	20				
12.	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 1 mtr	70				
13.	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 2 mtr	70				
14.	Ultra Low Loss, LC Uniboot to LC Uniboot, Duplex Fibre Patch Cord, LSZH, 3 mtr	70				
15.	Patch Cord (Copper) (1 Mtr.)	40				

Sl. No.	Item	Bill of Quantity (A)	Unit Price (B)	GST Per Unit (C)	Total Unit Cost (D) (D=B+C)	Total (A x D)
16.	Patch Cord (Copper) (2 Mtr.)	40				
17.	Patch Cord (Copper) (5 Mtr.)	40				
18.	MS Windows Server License (2 Core)	100				
19.	External USB SSD Hard Disk (1 TB)	2				
20.	External USB SSD Hard Disk (2 TB)	1				
	Grand Total Including GST					
Total Cost In Words						

Seal of the Company   Authorised Signatory

"I/WE UNDERSTAND THAT THE QUANTITY PROVIDED ABOVE IS SUBJECT TO CHANGE. I/WE AGREE THAT IN CASE OF ANY CHANGE IN THE QUANTITIES REQUIRED, I/ WE WOULD BE SUPPLYING THE SAME AT THE RATES AS SPECIFIED IN THIS COMMERCIAL BID. I /WE AGREE TO ADHERE TO THE PRICES GIVEN ABOVE EVEN IF THE QUANTITIES UNDERGO A CHANGE".

5.5. Performance Bank Guarantee (PBG)

To

The General Manager (Admin)
Odisha Computer Application Centre
Plot No. - N-1/7-D, Acharya Vihar
P.O.- RRL, Bhubaneswar - 751013
EPBX: 0674-2567280/2567064/2567295
Fax: +91-0674-2567842

Whereas, < < name of the supplier and address > > (hereinafter called "the Bidder") has undertaken, in pursuance of contract no. < < insert contract no. > > dated. < < insert date > > to provide Implementation services for < < name of the assignment > > to OCAC (hereinafter called "the beneficiary")

And whereas it has been stipulated by in the said contract that the Bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, < < name of the bank > > a banking company incorporated and having its head /registered office at < < address of the registered office > > and having one of its office at < < address of the local office > > have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, upto a total of Rs.< < insert value > > (Rupees < < insert value in words > > only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs .< < insert value > > (Rupees < < insert value in words > > only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until < < *Insert Date* > >)

Notwithstanding anything contained herein:

  I.   Our liability under this bank guarantee shall not exceed Rs < < insert value > > (rupees < < insert value in words > > only).

II.   This bank guarantee shall be valid up to *< < insert expiry date > >*)

III.   It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before *< < insert expiry date > >*) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)
Seal:
Date: