Corrigendum-III

RFP for Procurement of IT Infrastructure Equipments for Seamless Integration between IT Centre & Government of Odisha (GoO) Cloud Set-up at Odisha State Data Centre (OSDC) Bhubaneswar.

RFP Enquiry No. : **OCAC-NeGP-INFRA-007-2020/20025**
Date : **31-08-2020**

Last date and time for Submission of Bid	20.10.2020 by 2:00 PM and the respective Corrigendum-III will be published soon

OCAC

**RFP for Procurement of IT Infrastructure Equipments
for Seamless Integration between IT Centre & Government of
Odisha (GoO) Cloud Set-up at Odisha State Data Centre (OSDC)
Bhubaneswar.**

RFP Enquiry No. : **OCAC-NeGP-INFRA-007-2020/20025**

Date   : **31-08-2020**

DISCLAIMER

The information contained in this Tender document or subsequently provided to **Bidder(s)**, whether verbally or in documentary or any other form by Odisha Computer Application Centre (OCAC) or any of their employees is provided to Bidder(s) on the terms and conditions set out in this Tender Document and such other terms and conditions subject to which such information is provided.

This Tender is not an agreement and is neither an offer nor invitation by the OCAC to the Bidders or any other person. The purpose of this Tender is to provide interested parties with information that may be useful to them in making their technical and financial offers pursuant to this Tender (the "**Bid**"). This Tender includes statements, which reflect various assumptions and assessments arrived at by the OCAC in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This Tender may not be appropriate for all persons, and it is not possible for the OCAC, to consider the technical capabilities, investment objectives, financial situation and particular needs of each party who reads or uses this Tender. The assumptions, assessments, statements and information contained in this Tender, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations, studies and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this Tender and obtain independent advice from appropriate sources.

Information provided in this Tender to the Bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. OCAC accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein. OCAC, makes no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Tender and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender or arising in any way in this Bid Stage. OCAC also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this Tender.

OCAC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Tender. The issue of this Tender does not imply that OCAC is bound to select a Bidder or to appoint the Preferred Bidder, as the case may be, for the Project and OCAC reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

OCAC reserves all the rights to cancel, terminate, change or modify this selection process and/or requirements of bidding stated in the Tender, at any time without assigning any reason or providing any notice and without accepting any liability for the same.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by OCAC or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and OCAC shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

RFP SCHEDULE

Sl. No.	Items	Date & Time
01	Commencement of the bid	31.08.2020
02	Last date for receiving queries through E-mail: osdc@ocac.in & sk.bhol@nic.in	07.09.2020 by 5:00 PM
03	Pre Bid Conference	09.09.2020, 3:00 PM
04	Issue of Corrigendum (if required)	14.09.2020
05	Last date and time for Submission of Bid	28.09.2020 by 2:00 PM
06	Opening of Pre-Qualification Bids (PQ)	28.09.2020, 4:00 PM
07	Opening of Technical Bids (TB)	To be Informed.
08	Opening of Commercial Bids (CB)	To be Informed.

Table of Contents

1. Fact Sheet:

This Fact Sheet comprising important factual data of the tender is for quick reference of the bidder.

Clause Reference	Topic
The Proposal	Odisha Computer Application Centre (OCAC) invites bid for Supply, Installation, & Warranty Support of IT infrastructure equipments for seamless integration between IT Centre & Government of Odisha (GoO) Cloud Set-up at Odisha State Data Centre (OSDC) Bhubaneswar.
Method of Selection	Least Cost Based Selection (L1) method shall be used to select the bidder for Supply, Installation & Warranty Support of IT infrastructure equipments for seamless integration between IT Centre & Government of Odisha (GoO) Cloud Set-up at Odisha State Data Centre (OSDC) Bhubaneswar. The bidder has to apply the bid in three envelop system i.e. General (Pre-qualification), Technical & Commercial bids. Technical bid of those bidders who qualify in General Bid/ Pre-qualification, shall be opened. Commercial bid of those bidders who qualify in Technical Bid shall be opened. The least value bid (i.e. the bidder quoting minimum amount) will be given preference in the order of selection.
RFP Document	RFP Document can be downloaded from **http://www.ocac.in** or **http://www.odisha.gov.in.** The bidders are required to submit the RFP document fee of ₹11,200/- (inclusive of 12% GST) in the form of a demand draft in favour of **"Odisha Computer Application Centre"**, payable at **Bhubaneswar** from any of the Scheduled Commercial Bank along with the Proposal.
Earnest Money Deposit (EMD)	₹20,00,000/- (Twenty lakh only) should be in shape of Account payee Demand Draft or Bank Guarantee, from any Nationalized Bank or Scheduled Commercial Bank, in favor of Odisha Computer Application Centre payable at Bhubaneswar.
Scope of Work	Selected agency is expected to deliver the services listed in Scope of Work as mentioned in this RFP.
Language	Bid must be prepared by the Bidder in English language only
Currency	The bidder should quote in Indian Rupees only. The Total Price inclusive of taxes and duties will be considered for evaluation. So, the bidder must mention the base price and the tax component separately.
Validity Period	Proposals/bid must remain valid minimum for 180 days from the last date of bid submission.
Bid to be	The proposal must be submitted to:

Clause Reference	Topic
submitted on or before last date of submission at:	The General Manager (Admn.) Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square, PO- RRL, Bhubaneswar-751013 (INDIA) Bidder must submit all the three sealed separate envelopes (PQ,TB & CB) shall be put in another separate envelope with superscription as " RFP for Procurement of IT Infrastucture Equipments for Seamless Integration between IT Centre & GoO Cloud at OSDC, Bhubaneswar and RFP Enquiry No. OCAC-NeGP-INFRA-0007-2020/20025 Date 31.08.2020".

2. Information

i.   Odisha Computer Application Centre (OCAC) invites responses ("Tenders") to this Request for Proposals ("RFP") from OEMs /authorized Partners ("Bidders") for the provision of items as described in this RFP towards Supply, Installation, & Warranty Support of IT infrastructure equipments for seamless integration between IT Centre & Government of Odisha (GoO) Cloud Set-up at Odisha State Data Centre (OSDC) Bhubaneswar. OCAC is the Nodal Agency for this Government procurement.

ii.   Proposals must be received not later than time, date and venue mentioned in the Fact Sheet. Proposals that are received after the dateline WILL NOT be considered in this procurement process.

3. Background

Odisha Computer Application Centre (OCAC), the Designated Technical Directorate of Electronics & Information Technology Department, Government of Odisha, intends to extend the State Data Centre (SDC) Compute & Storage Services to IT Centre, which is situated at Odisha Secretariat within a distance of 5 Km approximate with an objective to cater the required rack space to host servers with compute storage to facilitate the Government departments with their day to day upcoming requirement in order to hosting the department's application, due to rack space inside the State Data Centre (SDC) is fully utilized and there is no space to accommodate further rack space for Servers and Storage devices.

Subsequently with the increased demands from different Government Departments for hosting of Application/e-Governance Projects and other large-scale Projects the Compute, Storage and Network Connectivity requirements are growing exponentially. Therefore OCAC intend to set up a strategic infrastructure that facilitates quick scalability by extending the Compute & Storage devices physically to the State IT Centre which is nearly 5 Km from the existing State Data Centre through a dedicated robust Optical Fibre Connectivity through **RAILTEL DARK FIBER**.

To fulfil this requirement, OCAC intends to set-up the required IT Infrastructure Equipments both at IT Centre & SDC for the seamless integration between both the sides with an objective to manage the desired IT Infrastructure i.e. Compute & Storage devices which are physically located at IT Centre through existing Government of Odisha (GoO), Cloud Infrastructure set-up at State Data Centre (SDC) which is being running by Virtualization Cloud Management Software (i.e. VM Ware Stack) and provides a single point of control to manage and monitor the Cloud Infrastructure/Applications, from the central location at SDC with complete visual representation of how compute resources are connected to the Physical and Virtual Networks within the same Data Centre and helps SDC IT team to manage, monitoring & troubleshoot the entire VM Ware Cloud Solution more efficiently.

At present Government of Odisha (GoO), Cloud Infrastructure set-up at State Data Centre (SDC) is running with 24 Servers, out of which 4 Servers are being used for VM Ware Cloud Management i.e. all VMware Applications/VMs and remaining 20 servers are being used for Production (12 Nos) and Staging (8 Nos) Environment. Now OCAC intend to scale-up the GoO Cloud Infrastructure by increasing additional compute, storage & network devices to the existing VM Ware Solution which are mentioned below:-

1. Network Switch (Type – 1) : 04 Nos.
2. Network Switch (Type – 2) : 01 No
3. San Switch   : 02 Nos.
4. Storage   : 01 No
5. Rack Server (Type – 1 & 2) : 12 Nos (10 for GoO Cloud + 2 for Database)
6. Network Switch (Type – 1) : 02 Nos.
7. VM Ware Cloud Software   : vSphere ESXi, vRealize Automation, VRealize Network Insight ,vRealize Operations Manager, vRealize Loginsight and NSX.
8. Patch Cords   : As per the details mentioned in this RFP

4. Instructions to the Bidders

4.1. 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.

iv.   This RFP supersedes and replaces any previous public documentation & communications in this regard and Bidders should place no reliance on such communications.

4.2. 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.

4.3. Pre-Bid Meeting & Clarifications

4.3.1. Bidders Queries

i.   OCAC shall hold a pre-bid meeting with the prospective bidders on 09-09-2020 at 03:00 PM at OCAC premises.

ii.   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 only on or before 07-09-2020 by 05:00 PM. Queries submitted after the scheduled date and time, shall not be accepted.

iii.   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.			

iv.   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.

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

i.   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.

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

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

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

v. 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.

4.4. Key Requirements of the Bid
4.4.1. 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.

4.4.2. 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.

4.4.3. 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.

4.4.4. RFP Document Fees

RFP document can be downloaded from the website www.ocac.in, www.odisha.gov.in.The bidders are required to submit the RFP document Fee of ₹11,200/- (inclusive of 12% GST) by Demand Draft in favour of "Odisha Computer Application Centre" and payable at Bhubaneswar from any of the Scheduled Commercial Bank along with the Proposal. Proposals received without or with inadequate RFP Document fees shall be rejected.

4.4.5. Earnest Money Deposit (EMD)

i. Bidders shall submit along with the EMD of ₹20,00,000/- (Twenty lakh only) in form of a Demand Draft OR Bank Guarantee (in the format specified in Clause 6.1.3) issued by any Nationalized Bank or Scheduled Commercial Bank in favour of "Odisha

Computer Application Centre", payable at Bhubaneswar, and should be valid for 180 days from the last date of submission of the RFP.

ii. EMD of all unsuccessful bidders would be refunded by OCAC within 90 days of the bidder being notified as being unsuccessful. The EMD, for the amount mentioned above, of successful bidder would be returned upon submission of Performance Bank Guarantee as per the format provided in Clause 8.

iii. The EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.

iv. The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.

v. The EMD may be forfeited:

- If a bidder withdraws its bid during the period of bid validity.
- In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP.

4.4.6. 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 10% of the total order value.

ii. The Performance Bank Guarantee needs to be valid till Entire Project Period. 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.

iii. 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 forfeit the EMD.

iv. 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.

v. OCAC shall invoke the performance Bank Guarantee in case the selected Vendor 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.

vi. 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.

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

4.4.7. Venue & Deadline for Submission of proposals

Proposals, in its complete form in all respects as specified in the RFP, must be submitted to OCAC at the address specified below:

Addressed To	General Manager (Admn.)
Name	Odisha Computer Application Centre (OCAC)
Address	Plot No.- N- 1/7-D,PO-RRL,Acharya Vihar, Bhubaneswar-751013
Telephone	0674-2567280,2567064,2567295
Fax Nos.	0674-2567842
Last Date & Time of Submission	28-09-2020 by 2:00 PM

4.4.8. 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 shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained.

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

4.5. 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.

4.6. Delivery

The delivery of entire IT infrastructure equipments (i.e. hardware & software) for both the location, to be completed within 8 (Eight) Weeks from the date of issue of Purchase Order.

a) Delivery Location: **IT Centre**

i.	Network Switch (Type – 1)	: 02 Nos.
ii.	Network Switch (Type – 2)	: 01 No.
iii.	San Switch	: 02 Nos.
iv.	Storage	: 01 No.
v.	Rack Server (Type – 1 & 2)	: 12 Nos.

b) Delivery Location: **OSDC**

i.	Network Switch (Type – 1)	: 02 Nos.
ii.	VM Ware (Software)	: As per BoQ.
iii.	Patch Cords	: As Per BoQ.

4.7. 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.

4.8. 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.

4.9. Insurance of Equipments
Materials must be properly packed against any damage and insured up to the destination. The material should directly be supplied to OSDC, Bhubaneswar. All the expenses involved in shipping the equipment to OSDC, shall be borne by the Bidder. All aspects of safe delivery shall be the exclusive responsibility of the Bidder. OCAC, will have the right to reject the component / equipments supplied, if it does not comply with the specifications at any point of installation / inspection.

If any equipment or part thereof is lost or rendered defective during transit, the supplier shall immediately arrange for the supply of the equipment or part thereof, as the case may be, at no extra cost.

4.10. 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.

4.11. 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 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.

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

4.12. 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

4.13. 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.

4.14. 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.

4.15. Declaration:

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

"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."

Scope of Work :

Supply, Installation, Configuration of entire IT infrastructure equipments (i.e. Both hardware & software) for seamless integration between IT Centre & Government of Odisha (GoO) Cloud at SDC, as per the bill of quantity (BOQ) & technical specification mentioned for each location including comprehensive onsite warranty support for the entire contract period.

4.16. Network Switch (Type – 1)
4.16.1.   Total Quantity = 04 Nos (48 Ports)
4.16.2.   Technical Specification (Make and Model)

Sl. No.	Specifications	Compliance (Yes/No)
	OEM Eligibility Criteria	
1	Switch OEM shall be in the leader's quadrant as per latest published Gartner's MQ report for Data Centre Netork Infrastructure.	
	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	
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.	
8	At least 8Nos of Switch port should downgrade to 1Gb copper RJ45 Ethernet ports and required transceivers to be supplied.	
09	Switch should supplied with Indian standard 3pin power cord	
10	Switch should be supplied with necessary pathcord 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	Switch should have the following interfaces: i. 36 x 10G Fiber ports with SR modules Loaded ii. 12 x 10G Fibre ports with LR modules loaded iii. 6 x 40GbE ports with Long Range Module Loaded for 40G operations with patch cord **Note: Long range module must work at least upto 10 KM over dark fibre for connection between IT Centre and OSDC.**	

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	
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 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 loadbalancing at wire speed using LACP and multi chassis etherchannel/LAG	
26	Switch should support minimum 1.4 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) and support 96 port channels or more per switch	
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. ISIS using MD5 Authentication 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 support multi instance MPLS routing using VRF, VRF Edge routing and should support VRF Route leaking functionality	
45	Switch should be capable to work as DHCP server and relay	
Availability		
46	Switch should have provisioning for connecting to 1:1/N+1 power supply for usage and redundancy	
47	Switch should provide gateway level of redundancy in IpV4 and IPV6 using HSRP/VRRP	
48	Switch should support for BFD For Fast Failure Detection as per RFC 5880	
Quality of Service		
49	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	
50	Switch should support methods for identifying different types of traffic for better management and resilience	
51	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.	
52	Switch should support to trust the QoS marking/priority settings of the end points as per the defined policy	

53	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		
54	Switch should support for deploying different security for each logicaland 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	
55	Switch should support control plane i.e. processor and memory Protection from unnecessary or DoS traffic by control plane protection policy	
56	Time based ACL	
57	Switch should support for external database for AAA using: a. TACACS+ b. RADIUS	
58	Switch should support MAC Address Notification on host join into the network for Audit trails and logging	
59	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	
60	Switch should support DHCP Snooping	
61	Switch should support Dynamic ARP Inspection to ensure host integrity by preventing malicious users from exploiting the insecure nature of the ARP protocol	
62	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	
63	Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined	
64	Switch should support Spanning tree BPDU protection	
65	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	
66	Switch should support Spanning tree BPDU protection	
67	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		
68	Switch should support for embedded RMON/RMON-II for central NMS management and monitoring	
69	Switch should support for sending logs to multiple centralised syslog server for monitoring and audit trail	
70	Switch should provide remote login for administration using: a. Telnet b. SSH V.2	
71	Switch should support for capturing packets for identifying application performance using local and remote port mirroring for packet captures	

72	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	
73	Switch should support for basic administrative tools like: a. Ping b. Tracerout	
74	Switch should support central time server synchronization using Network Time Protocol NTP V.4	
75	Switch should support for providing granular MIB support for different statistics of the physical and logical interfaces	
76	Switch should support scripting/API for device manage for automatic and scheduled system status update formonitoring and management	
77	Switch should provide different privilege for login in to the system for monitoring and management	
78	Switch should support Real time Packet Capture using Wireshark in real time for traffic analysis and fault finding	
IPv6 features		
79	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	
80	Should support route redistribution between these protocols	
81	Switch should support multicast routing in IP V.6 network using PIMv2 Sparse Mode	
82	Switch should support for QoS in IP V.6 network connectivity	
83	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	
84	Switch should support syslog for sending system log messages to centralized log server in IP V.6 environment	
85	Switch should support NTP to provide an accurate and consistent timestamp over IPv6 to synchronize log collection and events	
88	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	

4.17. Network Switch (Type – 2)
4.17.1.　　　Quantity = 01 No (48 Ports)
4.17.2.　　　Technical Specification (Make and Model)

Sl.No.	Tecnical Specification	Compliance (Yes/No)
OEM Eligibility Criteria		
1	Switch OEM shall be in the leader's quadrant as per latest published Gartner's MQ report for Data Centre Netork Infrastructure.	
Architecture		
2	19" rack mountable configuration. Rack mounting kit must be provided.	
3	Shall have routing/switching capacity minimum of 560 Gbps of forwarding performance	
4	Shall be based on modular operating system to support enhanced serviceability along with independent process monitoring.	
5	Shall deliver a maximum of 6micro second latency with consistent performance across a broad range of applications with typical mixed loads of real-time, multicast and storage traffic.	
6	32K MAC entries or more	
Resiliency		
7	Shall have the capability to extend the control plane across multiple active switches making it a virtual switching fabric, enabling interconnected switches to aggregate the links	
8	Shall have redundant hot swap power supplies (1+1) from Day 1.	
9	IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol	
10	IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
Layer 2 Features		
11	Shall support up to 3950 port or IEEE 802.1Q-based VLANs	
12	Shall support Jumbo frames of 9K bytes	
13	Internet Group Management Protocol (IGMP)	
14	Multicast Listener Discovery (MLD) or IGMP snooping	
15	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
16	IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
Layer 3 Features (any additional licenses required shall be included)		
17	Static Routing for IPv4 and IPv6	
18	Dynamic Host Configuration Protocol (DHCP) client/ Relay and server	
QoS and Security Features		
19	Access Control Lists for both IPv4 and IPv6 for filtering traffic to prevent unauthorized users from accessing the network	
20	Port-based rate limiting and access control list (ACL) based rate limiting	
21	Shall create traffic classes based on access control lists (ACLs), IEEE 802.1p precedence, IP, and DSCP or Type of Service (ToS) precedence	
22	Shall support Strict Priority Queuing (SP)/Weighted Fair Queuing (WFQ)/Weighted Deficit Round Robin (WDRR)configurable buffers and Explicit Congestion Notification (ECN)	

Sl.No.	Tecnical Specification	Compliance (Yes/No)
23	Shall support Weighted Random Early Detection (RED) /Random Early Detection (RED) for congestion avoidance	
24	DHCP protection/snooping to block DHCP packets from unauthorized DHCP servers	
25	ARP attack protection to protect against attacks that use a large number of ARP requests	
26	Port security to allow access only to specified MAC addresses	
27	Shall support Packet storm protection to protect against unknown broadcast, unknown multicast, or unicast storms with user-defined thresholds	
	Management Features	
28	Configuration through the CLI, console, Telnet, and SSH	
29	SNMPv1, v2, and v3 and Remote monitoring (RMON) support	
30	NetFlow/sFlow or equivalent for traffic analysis	
31	Port mirroring to duplicate port traffic (ingress and egress) to a local or remote monitoring port.	
32	RADIUS/TACACS+ for switch security access administration	
33	Network Time Protocol (NTP) or equivalent support	
	Required Interfaces	
34	48 ports of 1G/10G BaseT and 4 ports of 40G QSFP+	
35	Transceiver modules shall be suitable for MMF cabling inside the DC (preferably with LC interface)	

4.18. SAN Switch

4.18.1. Quantity = 02 Nos. (48 Ports)
4.18.2. Technical Specification (Make and Model)

Sl.No.	Minimum Requirement Specification	Compliance (Yes/No)
1	Each fibre switch should be quoted with minimum 48 FC ports modules of 32Gbps speed each with necessary Licenses. 12 FC ports of each SAN switch needs to be configured and supplied with long range transreciever modules which atleast work upto 10 KM distance over dark fibre between IT Centre and OSDC. Additional 12 nos. of long range transreceiver modules along with licenses for each existing Brocade SAN Switch (Qty – 02 Nos.) (Model - HPSN6500B) needs to be supplied and configured at OSDC end to work over the dark fibre (at least 10 KM) laid between the IT Centre and OSDC.	
2	The switch should have support for 4/8/16/32 Gbps HBA	
3	The switch should have auto sensing, Zoning, Ethernet and Serial Port for communication.	
4	Switch should be rack mountable 1U size and should be supplied with mounting kit.	

Sl.No.	Minimum Requirement Specification	Compliance (Yes/No)
5	The switch should be equipped with redundant hot swap power supply and allow hot swap ability without resetting the switch, or affecting the operations of the switch	
6	The switch should be backward compatible	
7	The switch should be capable for Non-disruptive firmware update.	
8	The switch should be capable of End to end performance monitoring	
9	The switch should have Support for POST & online diagnostics	
10	The switch should be capable to interface with host based adapters (HBA) of multiple OEM, supporting multiple Operating Systems	
11	The switch must support hardware ACL-based Port Security, Virtual SANs (VSANs)/Virtual Fabric, Port Zoning and LUN Zoning	
12	The switch should support IPv6 from day one.	
13	Switch must support out-band management protocols like SNMP v3, SMI-S, Telnet,FTP & TFTP/SFTP	
14	The switch should have following Zoning and security features:	
	a. Support for hardware -enforced zoning.	
	b. Policy based security and centralized fabric management.	
	c. Support for secure access.	
	d. Support for FC based authentication.	
	e. Support for TACACS+ or RADIUS, SSH, SNMP	
	f. Support for port binding.	
	g. Support for port masking.	
	h. Support for Hardware based Inter Switch linking / trunking.	
	i. Support for dynamic Load balancing of links with no overhead.	
15	All relevant licenses for above features should be quoted along with switch	
16	OEM must have India presence for last 5years on both Sales and Support operation.	

4.19. Storage
4.19.1.   Quantity = 01 No. (500 TB)
4.19.2.   Technical Specification

Sl.No.	Parameter	Functionality	Compliance (Yes/No)
1	OEM eligibility criteria	The proposed solution must be rated as Leader's in the latest magic quadrants for General Purpose Disk Arrays by Gartner.	
2	Capacity	The proposed solution must support mix drives. The solution must be proposed with 100 TB using SSD in RAID 6 and 400 TB using SAS in RAID 6. Additional global hot spare drive of same capacity for every thirty drives should be configured on RAID 6. The disk size of SSD should not be less than 1 TB & the disk size of SAS should not be less than 1.8 TB (10k or higher RPM).	
3	Expandability	It should be scalable up to 1 PB or higher using 1.8 TB or higher SAS Disk drives (10K or higher RPM) within same storage system without compromising performance of the system.	

4	Controller & RAID	Minimum Dual Storage controllers/Nodes configured in Active-Active mode, should support RAID 1, RAID 5, RAID 6, RAID 10 or equivalent with automatic failover. Failure of any controller should not affect the path availabilty and working connectivity between storage system and devices. Once restored the system should auto restore to its original way of functioning.	
5	Disks Supported	Controller/Node should support SSD, SAS & SATA/NL-SAS HDD with provision for intermixing of these drives on the same controller/Node	

6	Host Ports	Storage should be supplied with minimum
		 A. FC Ports
		       8 x 32 Gbps
		       8 x 16 Gbps/32 Gbps
		B. iSCSI ports
		    4 x 10Gbps ports for SAN connectivity
		    4x10Gbps ethernet ports for NAS connectivity.	

8	Back End (For Disk Array connectivity)	Minimum 32 x SAS Links of 12 Gbps or higher across controllers	
10	Cache/ Memory	Minimum 384 GB across controllers with battery backup for 72Hrs OR equivalent mechanism, to protect data in Cache in case of power failure. (Cache of 384 GB means sum of the Cache memory supported by all the Storage Controllers in the Storage. Cache memory of NAS header and/or any other device will not be considered to calculate cache of the Storage)	
11	Protocols support	The storage system should support FC and iSCSI for Block and CIFS, NFS for NAS File Serving	
12	Chassis	Rack Mountable with Hot Swap Redundant Power Supply & Cooling Fans; All necessary cables and accessories to connect Storage System to Servers / SAN Switch	
13	Multipath	Should support Multipath from SAN to Server or vice versa. Any software required should be supplied	
14	High Availability	No single point of failure (NSPOF); Online firmware upgrades; Remote diagnostic support.	
15	Data Efficiency	The Storage array should support data efficiency features like compression or deduplication	
16	DR support	The Storage Array should support three way replication in native fashion without using any additional replication appliance. Replication shall support incremental replication after resumption from link failure or failback situations.	
17	Replication	Proposed storage should support for replication of volume to existing HPE 3PAR storage at OCAC SDC in syncronous fashion from day-1 without using any additional software or hardware appliance for Near-DR compliance	
18	Virtual storage support	The storage may optionally support heterogeneous storage array virtualization for all leading OEMs like, but not limited to DELL, EMC, HP, IBM, HITACHI, NETAPP etc.	

19	Thin Provisioning and Space Reclaim	For effective cloud deployment offered storage should be supplied with thin provisioning and auto thin reclaim to make the volume thin for an extended period of time for complete array supported raw capacity. It should support automated thin reclaim else additional controller and cache must be offered to handle the overload.	
20	Snapshot / Point in time copy / Clone	a. Offered Storage shall support to make the snapshot and full copy (Clone) of thin / thick volumes as thin volume. b. The Storage Array should have support for controller-based snapshots functionality (At-least 256 copies for a given volume). c. Storage Array shall have functionality to re-claim the space from thin provisioned deleted snapshot automatically. d. Storage shall have application consistent integration with VMWare, Hyper-V, MS SQL, Oracle, Exchange etc .	
21	Storage Tiering	a. Offered storage shall provide dynamic migration of volume from one Raid set to another set while keeping the application online. b. For effective data tiering, Storage subsystem shall provide support for automatic policy based Sub-Lun Data Migration from one Set of drive Tier to another set of drive tier c. Storage management software should be able to configure and manage tiering and auto-tiering	
22	Performance monitoring	Storage management software should provide real time monitoring and historical analysis of storage performance data such as total IOPS, read%, write %, cache-hit %, throughput, etc. for analyzing performance of the systems	
23	Software features and Licenses to be supplied for full Capacity	Point-in Time Copy; Cloning; Thin Provisioning; Block based Remote replication in both SYNC and ASYNC modes, File based Asynchronous replication, Online Volume Migration, LUN masking.	
24	Management Software and Licenses to be supplied for full capacity	Single GUI & WEB based remote management; Should be capable to create, expand & move volumes dynamically; Support for dynamic LUN expansion and file system NAS operation	
25	VAAI Integration	Storage must be complied to VMware API for Array Integration and it should support following functionalities :- 1. Offered storage array shall be tightly integrated with VMware and shall be certified for VVOL. 2. Offered Storage array VASA provider shall be certified by VMware for VVOL - Storage based replication. 3. Offered storage array shall be tightly integrated with VMware so that Eager zero disks layout can be used with thin provisioning and thin re-claim.	
26	OS Support	LINUX, WINDOW, UNIX, Solaris etc.	
27	NAS controller	NAS controllers should be configured in high available mode with automatic controller failover.	

4.20. Rack Server
    4.20.1.   Quantity = (i) Type – 1 = 02 Nos & (ii) Type – 2 = 10 Nos.
    4.20.2.   Technical Specification (Make and Model)

Sl.No.		Minimum Requirement Specification
1	Processor	The server should have 2 nos. of Intel Xeon latest Generation Processor: Server Type 1: - 02 servers with 2 x 16 cores, minimum 2.9 GHz clock rate. Server Type 2: - 10 servers with 2 x 28 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	2 TB latest DDR memory using 64 GB DIMM's. 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.
3	HDD Controller	12 Gbps SAS RAID Controller supporting RAID 0, 1, 5 and 6 with 2GB battery backed up Cache
4	HDD	Type 1 – 4 x 600 GB SAS Hot Swap HDD (15Krpm or higher) Type 2 – 4 x 300 GB SAS Hot Swap HDD (15Krpm or higher)
5	Video Controller	Integrated Graphics Controller
6	Network Controller	Server Type 1 :- Minimum 2 x 1 Gbps ports & Four no's Dual 10 Gbps SFP28 (10G-SR populated). Server Type 2:- Minimum 2 x 1 Gbps ports & Four no's Dual 10 Gbps SFP28 (10G-SR populated)
7	Fiber Channel HBA	Two no's Dual FC Port 32 Gbps
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	Optical Drive	DVD ROM Internal/External (If required)
12	System Chassis	Rack Mount, 2U (max), Redundant Hot Swappable Power Supply with platinum efficiency
13	OS Certification	Certification for latest Server version of Windows and minimum two Linux flavours
14	Drive / Software Utilities	All required device drivers for OS installation /System Configuration and Server Management
15	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 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(minimum 4 Gb storage), Syslog (local & remote). • Management software should support integration with popular virtualization platform management software like VCentre, SCVMM and Red Hat RHEV.

Sl.No.		Minimum Requirement Specification
		• Offered Server platform must be ready for container workload deployment
16	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.
17	Virtualization	Should support Industry Standard Virtualization Software
18	IDC Ranking	OEM should be ranked within Top 3 as per IDC report for Server in India for any quarter of 2019, Letter/Report from IDC should be attached along with the bid
19	Warranty	Five years on-site comprehensive OEM Warranty Support with 24X7 coverage and access to OEM TAC/support
20	IPv6 Support	All devices should be IPv6 implementation ready from day 1. No extra cost will be borne by OCAC for IPv6 implementation.

4.21. Microsoft windows server standard edition 2019 - Paper License
4.21.1. Technical Specification Microsoft windows server standard edition 2019

Sl. No.	Parameter	Functionality
1.	Windows Server OS	Microsoft windows server standard edition 2019 (16 Core) Paper License – (Qty – 48 Nos.)

4.22. Patch Cord Details (Make - AMP/Rosenberg/ CommScope/Molex)
4.22.1. UTP Patch Cord (Copper - CAT 6A)
(i) Quantity (02 Mtrs.) = 40
(ii) Quantity (05 Mtrs.) = 20
(iii)Quantity (10 Mtrs.) = 10

4.22.2. Fibre Patch Cord (Fibre - OM4/ OM5 or latest)
(i) Quantity (02 Mtrs. LC-LC) = 40
(ii) Quantity (05 Mtrs. LC-LC) = 60
(iii) Quantity (10 Mtrs. LC-LC) = 30
(iv) Quantity (15 Mtrs. LC-LC) = 30

        (v)   Quantity (25 Mtrs. LC-LC) = 10
        (vi) Quantity (02 Mtrs. SC-LC) = 10
        (vii)   Quantity (15 Mtrs. SC-LC) = 40
        (viii) Quantity (25 Mtrs. SC-LC) = 40

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 a undertaking mentioning that, the support including spares, patches, upgrades for the quoted products shall be available for the period of 5 years from the date of acceptance.*

Scope of Work for (VMWARE) Solution :-

1. Detaild design document should be provided before installation.
2. ESXi (vSphere) installation in ten hosts.
3. NTP , active directory server integration and domain integration.
4. Hyper converged blueprints with security policies, security groups & network profiles
5. Business group users can create logical networks, routers, switches, load balancers & firewalls.
6. Design, customize & deploy the work flows as per requirement through VRO.
7. Work load segregation through NSX (e.g. production, staging)
8. Integration of VMware stack at OSDC with IT Centre VM stack as a single entity for over all management of VMware Cloud Suite from a single console.
9. Customization need to be done for flexibility of deployment can be choose at the time of provisioning a VM between two sites.
10. Smooth migration of VM's between both the sites witout any disturbance and downtime.
11. Configure vSphere replication for 5 VMs
12. Self service provisioning
13. Automation, orchestration & Monitoring
14. Iaas, PaaS & all other setup of existing SDC cloud should be available for this new cluster.
15. Container as a service -
      1. Integration of vRA to VIC
      2. Deploying containers on VIC
          a. Native Docker on VIC
          b. 2XConfig admiral host on VIC
      3. Minimum 3 Blue prints for deployment of services
16. Configuration of vROPs and vRLI, limited upto below:
    1.   Minimum 3 Dashboards
    2.   Minimum 3 Management packs for storage and management devices
17. Configuration of vRB and vRLI
    3.   Minimum 3 reports (Role based access control, Budget configuration visibilitye..)
18. Configuration of vRNI

a. Minimum 3 Dashboards
19. Testing of Deployed solution
20. Post implementation support for eight weeks for additional handholding
21. Knowledge Transfer specific to Vmware deployment
22. The OEM has to ensure on-site support as and when required for resolving all OS (Operating Systems) & Private Cloud solution related issues, including re-installation of OS or re-clustering or re-configuration and other required software procured in this RFP, during support period without any extra cost to the OCAC.
23. Bidder should upgrade the private cloud solution supplied under this RFP and other related software whenever there is new version released for such upgrade without any cost to the OCAC during the contract period including ATS etc.
24. Bidder should provide VMware Private Cloud suites & its related other software licenses which will be as expansion of existing On-Premise Private Cloud setup with comprehensive support of 5 year without any extra cost.
25. Bidder has to carryout hardening of OS (Operating System), patch management activity and other configuration on OS, private cloud and its related software, etc., (which is provided under this RFP) as per the requirement of OSDC.
26. Technical and functional documentation of the entire project should be submitted to OSDC in Printed Book Format.
27. The bidder shall provide perpetual licenses for all software components proposed in the solution and should be in name of OSDC. The Software licenses proposed for all the components – vsphere, vRealize, NSX, network realize should be independent of hardware.
28. The bidder shall propose Support & Subscription services from the OEM with unlimited number of support requests, remote support, access to product updates/upgrades and 24x7 supports.
29. The bidder shall propose Plan & Design/Architecture services from the OEM. The OEM shall conduct a health-check of the deployed solution and submit a report indicating compliance to reference architecture and best practices. The entire software supplied under this RFP must be installed and configured by OEM only. The bidder to make necessary arrangement for the same and OCAC will not pay any additional cost for implementation by OEM.
30. Detailed process documentation, SOP's and management of solution should be created and submitted before project signoff.
31. Design, deployment, implementation and validation has to be done by OEM professional services team.

4.23. Training

The Bidder will be responsible for training the OSDC Team in the areas of parameterization, implementation, migration, operations, management, error handling, system administration, etc. The training should at least cover the following areas:
i.   Functionality available in the solution
ii.   New functionality customized (if any)
iii. Parameterization

       iv.   Impact Analysis

       v.   Generating various MIS/EIS reports from the solution provided

       vi.   System and Application administration

       vii.   Log analysis and monitoring

All the trainings would be held at the OCAC sites and the Bidder has to organize the trainer from OEM.

4.24. Technical Specification (VMWARE)

VMware vCloud suite enterprise should have vSphere, vRealize & vROPS.

Sl.No	Technical Specification VMware vSphere 6 Enterprise Plus is a part of vCloud Suite Enterprise	
	Specifications	**Compliance (Yes/No)**
1	Virtualization software shall provide a Virtualization layer that sits directly on the bare metal server hardware with no dependence on a general purpose OS for greater reliability and security	
2	Virtualization software shall be in Leaders Quadrant of 2015 Gartner Magic Quadrant for x86 Server Virtualization Infrastructure for continuous last 5 years	
3	Virtualization software shall allow heterogeneous support for guest Operating systems like Windows client, Windows Server, Linux (at least Red Hat, SUSE, Ubuntu, CentOS and Solaris x86)	
4	Virtualization software should be able to boot from iSCSI, FCoE, and Fibre Channel SAN	
5	Virtualization software shall integrate with NAS, FC, FCoE and iSCSI SAN and infrastructure from leading vendors leveraging high performance shared storage to centralize virtual machine file storage for greater manageability, flexibility and availability	
6	Virtualization software shall have the capability for creating virtual machine templates to provision new servers	
7	Virtualization software shall allow taking point-in-time snapshots of the virtual machines to be able to revert back to an older state if required	
8	Virtualization software should have the ability to thin provision disks to avoid allocating all storage space upfront. Full monitoring capabilities and alerts to prevent from accidentally running out of physical storage space should be there.	
9	Virtualization software should support connecting smart card readers to multiple virtual machines, which can then be used for smart card authentication to virtual Machines.	
10	Virtualization software should support live Virtual Machine migration with enhanced CPU compatibility and without the need for shared storage option.	
11	Virtualization software should have the ability to live migrate VM files from one storage array to another without any VM downtime. Support this migration from one storage protocol to another (ex. FC, iSCSI, DAS)	
12	The solution should provide special integration with Storage API's providing integration with supported third-party data protection, multi-pathing and disk array solutions.	

13	Virtualization software shall have High Availability capabilities for the virtual machines in the sense if in case one server fails all the Virtual machines running on that server shall be able to migrate to another physical server running same virtualization software. The feature should be independent of Operating System Clustering and should work with FC/ iSCSI SAN and NAS shared storage. This high availability feature should also be extended to and aware of the applications running inside of the virtual machines.	
14	Virtualization software should have fault tolerance feature to provide zero downtime, zero data loss and continuous availability for the applications running in virtual machines in the event of physical host failure, without the cost and complexity of traditional hardware or software clustering solutions. This option should be supported for upto 4 virtual CPU per virtual machine.	
15	The solution should manage anti-virus and anti-malware policies for virtualized environments with the same management interfaces used to secure physical infrastructure and should provide agentless intergration with anti-virus and anti malware solutions.	
16	Virtualization software should provide secure boot for protection for both the hypervisor and guest operating system by ensuring images have not been tampered with and preventing loading of unauthorized components	
17	Virtualization software should provide software FCoE adaptor that can work with a network adaptor that support partial FCoE offload capabilities.	
18	Virtualization software should allow configuring each virtual machine with one or more virtual NICs. Each of those network interfaces can have its own IP address and even its own MAC address, must support NIC teaming for load sharing and redundancy.	
19	Virtualization software shall allow creating virtual switches that connect virtual Machines	
20	Virtualization software shall support configurations of 802.1q VLANs which are compatible with standard VLAN implementations from other vendors	
21	Virtualization software should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical network adapters	
22	Virtualization software shall allow RAM over-commitment that allows configuring virtual machine memory in such a way that safely exceeds physical server memory.	
23	Virtualization software should provide solution to automate and simplify the task of managing hypervisor installation, configuration and upgrade on multiple physical servers.	
24	The virtualization software should provide in-built Replication capability which will enable efficient array-agnostic replication of virtual machine data over the LAN or WAN. This Replication should simplify management enabling replication at the virtual machine level and enabling RPOs as low as 15 minutes.	
25	The virtualization software should have the in-built capability to be able to deliver a proven endpoint security solution to any workload with an approach that is simplified, efficient, and cloud-aware. This security solution should enable 3rd party endpoint security solutions to eliminate the agent footprint from the virtual machines, offload intelligence to a security virtual appliance, and run scans with minimal impact.	

26	It should provide the ability to set constraints that restrict placement of a virtual machine to a subset of hosts in a cluster and to keep virtual machines paired or separated.	
27	The solution should support enforcing security for virtual machines at the Ethernet layer. Disallow promiscuous mode, sniffing of network traffic, MAC address changes, and forged source MAC transmits.	
28	The solution should provide link aggregation feature in the virtual switch which will provide choice in hashing algorithms on which link aggregation in decided and this should also provide multiple link aggregation groups to be provided in a single host (64 groups per physical host)	
29	It should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical adapters on a Virtual Switch	
30	Hypervisor should have capability similar of Virtual Volumes which enables abstraction for external storage (SAN and NAS) devices making them Virtualization aware.	
31	Virtualization software shall continuously monitor utilization across virtual machines and should intelligently allocate available resources among virtual machines	
32	Virtualization software should provide enhanced visibility into storage throughput and latency of hosts and virtual machines that can help in troubleshooting storage performance issues.	
33	Virtualization software shall be able to dynamically allocate and balance computing capacity across collections of hardware resources aggregated into one unified resource pool with optional control over movement of virtual machines like restricting VMs to run on selected physical hosts.	
34	Virtualization software should provide dynamic power management such that in case of during off peak hours not all servers are required to be powered on due to less load it should place few servers in G2/S5 (Soft Off) power state as per the Industry Standard Advanced Configuration and Power Interface (ACPI) specifications to save power in an automated or manual or scheduled manner.	
35	Virtualization software should provide proactive High availability capability that utilizes server health information and migrates VMs from degraded hosts before problem occurs	
36	Virtualization software should provide abilities to offload specific storage operations to compliant storage hardware thereby performing these operations faster and consuming less CPU, memory, and storage fabric bandwidth	
37	Virtulization software should provide VM-level encryption protects unauthorized data access both at-rest and in-motion	
38	Virtualization software should provide abilities to offload specific storage operations to compliant storage hardware thereby performing these operations faster and consuming less CPU, memory, and storage fabric bandwidth	
39	It should support hardware as well as non-hardware accelerated 3D graphics to run Basic 3D applications in virtual machines.	
40	The solution should provide in-built enhanced host-level packet capture tool which will provide functionalities like SPAN, RSPAN, ERSPAN and will capture traffic at uplink, virtual switch port and virtual NIC level. It should also be able to capture dropped packets and trace the path of a packet with time stamp details	

Sl.No.	Specifications	Compliance
41	The solution should provide a "Latency Sensitivity" setting in a VM that can be tuned to help reduce virtual machine latency. When the Latency sensitivity is set to high the hypervisor will try to reduce latency in the virtual machine by reserving memory, dedicating CPU cores and disabling network features that are prone to high latency.	
42	The solution should provide an option to easily deploy and manage big data solutions like Hadoop on the virtualization platform	
43	Virtualization software shall also natively have feature to enable live migration of virtual machines between servers in a cluster, across clusters as well as as long distances from one site to another (up to 100 milliseconds round trip time) with no disruption to users or loss of services, eliminating the need to schedule application downtime or business downtime.	
44	Hypervisor should have inbuilt Distributed Switch to centralize network provisioning, administration and monitoring using data center-wide network aggregation, should provide Network QoS to define priority access to network resources.	
45	Virtualization software should provide secure boot for protection for both the hypervisor and guest operating system by ensuring images have not been tampered with and preventing loading of unauthorized components	
46	Virtualization software should provide proactive High availability capability that utilizes server health information and migrates VMs from degraded hosts before problem occurs	
47	Hypervisor solution should provide platform for supporting 4K Native storage high capacity drives	
48	Hypervisor solution must skips hardware initialization steps and dramatically reduces time required for patching and upgrades.	
49	Hypervisor must be cabable of Skiping a host reboot step and dramatically reduce time required for major version upgrades.	
50	Hypervisor solution must have in builtSupports TPM 2.0 hardware modules and adds a virtual TPM device to shield guest OS from Operator or in-guest attacks.	
51	In order to provide enhanced security hypervisor solution must be FIPS 140-2 Compliance & TLS 1.2 Support as Default	
52	Hypervisor solution must have in builtSupports TPM 2.0 hardware modules and adds a virtual TPM device to shield guest OS from Operator or in-guest attacks.	
53	Hypervisor solution must allow seamless migration across different CPUs across the hybrid cloud by persisting the EVC mode per-VM during migrations across clusters and during power cycles.	
54	Hypervisor solution must intellegently learns the environment behavior; based on usage patterns, preemptively rebalances workloads before demand spikes.	
55	The proposed hypervisor and management solution must support existing OCAC VMware vCenter Server and vSphere Hypervisor	

vRealize suite Enterprise is a part of vCloud Suite Enterprise		
Sl.No.	Specifications	Compliance (Yes/No)

	IT Infrastucture Procurement for Seamless Integration between IT Centre & GoO Cloud	
1	The Monitoring Solution should be based on scale-out architecture to provide the scalability and resiliency with capabilities for automated failover and replication to support highly complex Datacenter environments	
2	The solution should be able to understand availability, performance, utilization, events, logs, and changes across every layer of your virtualized and physical infrastructure—from hypervisor to guest operating systems, middleware and applications.	
3	The solution should provide capacity analytics which can identify over-provisioned resources so they can be right-sized for most efficient use of virtualized resources.	
4	The solution capacity analytics should provide "What If" scenarios to eliminate the need for spreadsheets, scripts and rules of thumb.	
5	The solution should simplify problem remediation and enforcement of configuration standards to reduce operational effort and cost. It should provide out of the-box actions that can be triggered in the context of an alert or at any time.	
6	The solution should provide flexible group policies which would let admin to define specific health, risk and capacity thresholds, alert types and notifications, business hours and many other configuration settings at a group level to prioritize operational activities for business critical applications, production workloads or business units	
7	The solution should be able to provide role based access control to give authorization based on personas , controlling access to objects, features, actions and reports at the individual level.	
8	The Solution should be able to create custom views and reports for single pane of glass access to the data required for informed, intelligent operational decisions and capacity management.	
9	The solution should provide advanced capacity analytics by automatically right sizing VMs to reclaim idle resources to allow administrators to optimize VM density and identify capacity shortfalls before they affect end users.	
10	The solution should provide real-time, integrated dashboards of performance and capacity to enable a proactive management approach and help ensure SLAs are met.	
11	The solution should provide out of the box templates to ensure Hypervisor hardening	
12	The solutions should provide Monitoring of OS level resources (CPU, disk, memory, network) for Windows and Linux OS and physical hardware resources of Hypervisors	
13	The solution should be able to map services running in virtual environment, examine the application discovery status, view and analyze the dependency.	
14	The solution should be able to add structure to all types of unstructured log data, enabling administrators to troubleshoot quickly, without needing to know the data beforehand	

15	The cloud management solution provide automated self-service with unified service catalog and API functions	
16	The Cloud Management solution must be multi-vendor hypervisor,physical endpoint and public cloud support	
17	The private cloud management solution shall provide Frictionless governance and complaiance policies	
18	The cloud management solution is built on top of resource life cycle management including resource right-sizing and reclamation techniques	
19	The Cloud management platform leverages its own extensibility options for ecosystem parter tools integration	
20	The Cloud management solution should support marketplace of vendor and partner provided blueprints,plug-ins and other contents for day to day operations.	
21	The cloud management should provide automatic service catalog pricing	
22	The cloud management solution must provide Infrastructure as a Service (Iaas) and Anything as a Service (Xaas) ,Application stack provisioning and management, Out-of- the-box integration with Configuration Management tools and also Container management	
23	The Proposed Cloud Management solution must support existing OCAC VMware Cloud Management solution	

Technical Specification of NSX Advanced		
Sl.No.	**Specifications**	**Compliance (Yes/No)**
1	The solution should enable scaling and moving of virtual workloads without physical network or security constraints or the need for specialized appliances	
2	The solution should provide stateful inspection firewall that can be applied either at the perimeter of the virtual datacenter or at the virtual network interface card level directly in front of specific workloads.	
3	The distributed firewall should be embedded in-kernel and should provide line rate performance.	
4	The solution should provide a virtual load balancer to scale application delivery without the need for dedicated hardware. The load balancer should support Web, SSL and TCP-based scale-out for high-volume applications.	
5	The solution should enable technology for network virtualization, providing network abstraction, elasticity and scale across the datacenter. It should provide technology to scale applications across clusters and pods without any physical network reconfiguration.	
6	The solution should provide distributed and dynamic routing (OSPF, BGP) capabilities.	

7	The solution should provide Integration management with virtualization and cloud management layers providing separation of duties with role based access control (RBAC) while providing a central point of configuration and control of network and security services.	
8	The solution should be able to span across multiple datacenters.	
9	The solution should provide L2 gateway for seamless connection to physical workloads	
10	The solution should provide software defined logical VPN by providing Site- to-Site & Remote Access VPN in software	
11	Th proposed Network Virtualization solution must support existing OCAC VMware Network Virtualization solution	

Technical Specification of vRealize Network Insight Advance		
Sl.No.	**Specifications**	**Compliance (Yes/No)**
1	The solution should help in planning zero-trust security and accelerate deployment with firewall rules recommendations.	
2	The solution should scale across multiple NSX Managers with powerful visualizations for topology and health.	
3	The solution should assist in avoiding configuration issues through an in-product best practices checklist.	
4	The solution should unify troubleshooting experience across the virtual and physical infrastructure.	
5	The solution should optimize network performance by identifying topology bottlenecks such as hair pining.	

4.25. 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 Technical Evaluation.

4.25.1.   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.

Sl. No.	Clause	Documents Required
2.	The Bidder should have positive net worth during last three financial years, ending 31.03.2020.	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) 30 cores in last three financial years and profitable during each of the previous three financial years ending on 31.03.2020. 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, 2020. (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 exceeding five years as on 31.03.2020.	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 OEM of the products quoted by the bidder should have valid ISO 14000 certification	Copy of the valid certificate.
7.	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 i.e. From FY 2015-16 to FY 2019-20 : ➢ One project of similar nature not less than the amount Rs. 8 Crore. 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. 6 Crore. OR ➢ Three projects of similar nature each of which is not less than the amount Rs. 4 Crore. **'Similar Nature' is defined as:-** Supply & Installation of Server, Storage, Network Devices and COTS like Database/ Software/Operating System/Virtualisation Software, etc. and their associated maintenance support services for any Government/Public Sector Enterprises/BFSI in India.	
8.	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
9.	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 10 IT Service Engineer/Professionals available in Bhubaneswar (Odisha), out of which minimum one professional should be certified in any of the virtualization technology.	A self certified letter by an authorized signatory mentioning the list of IT service engineer/professionals along with their EPF and valid virtualization certificate of the person.
10.	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 not end of life at the time of Bid Submission. • Confirm that the products would be	a) MAF b) Undertaking from OEM

Sl. No.	Clause	Documents Required
	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.	
11.	EMD ₹20,00,000/- (Twenty lakh only)	
12.	RFP document fee of ₹11,200/- (inclusive of 12% GST)	

4.26. Bid Evaluation

4.26.1.   Pre-Qualification

i.   Bidder shall comply the Pre-Qualification Criteria metioned in Clause 4.25.1.
ii.   Bidders only Qualified in the Pre-Qualification Criteria are eligible for Techinical bid Evaluation.

4.26.2.   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.

4.26.3.   Commercial Bid

i.   Commercial Bid should be submitted in a sealed envelope as per the format specified in Financial Proposal of respective package.

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.

4.26.4.   Commercial Bid Evaluation

i.   The financial bids/ cover of bidders who qualify in 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.

4.26.5.   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.

5. Other Terms & Conditions of RFP
5.1. Bid Submission

i.   The bid must be submitted in three separate envelopes as

   a. Pre-qualification Bid(As mentioned in eligibility conditions format)
   b. Technical Bid
   c. Commercial Bid

ii.   The Response to Pre-Qualification, Technical and Commercial Proposal to be covered in separate sealed envelopes super-scribing "Pre-Qualification Proposal" "Technical Proposal" and "Commercial Proposal" respectively.

iii. Please Note that Prices should not be indicated in the Pre – Qualification or Technical Proposal but should only be indicated in the Commercial Proposal.

iv.   The three envelopes containing copies of Pre-Qualification, Technical and Commercial Proposal must be put in another separate single sealed envelope clearly marked "Response to RFP for < Name of the assignment > - < RFP Reference Number > and the wordings "DO NOT OPEN BEFORE < Date and Time of opening of tender as mentioned in RFP>".

v.   The outer envelope thus prepared should also indicate clearly the name, address, telephone number, E-mail ID and fax number of the bidder to enable the Bid to be returned unopened in case it is declared "Late".

vi.   All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Page references should be identified easily. If required, All the relevant parts should be highlighted in the bid documents. Any deficiency in the documentation may result in the rejection of the Bid.

vii. The original proposal/bid shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the bidder itself. Any such corrections must be initialed by the person (or persons) who sign(s) the proposals.

viii. All pages of the bid including the duplicate copies, shall be initialed and stamped by the person or persons who sign the bid.

ix.   In case of any discrepancy observed by OCAC in the contents of the submitted original paper bid documents with respective copies, the information furnished on original paper bid document will prevail over others.

x. Bidder must ensure that the information furnished by him in respective CDs is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by OCAC in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.

xi. The Bidder(s) must submit the Compliance Sheet for Technical Proposal in their official letterhead along with the Datasheet of the item quoted.

5.2. Authentication of Bids

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

5.3. Special Conditions of Contract
5.3.1. 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

5.3.2. Billing
Billing is to be done in the name of Odisha Computer Application Centre, Plot No.-N-1/7-D, 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.

5.4. Payment
90% of the invoice value will be paid to the successful bidder, after delivery of respective package equipments with complete installation, commission & final acceptance test, with submission of Performance Bank Guarantee issued from a nationalized / scheduled bank, equivalent to 10% of the amount of Respective Package 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.

Remaining 10% of the invoice value for each package will be paid after satisfactory performance of the respective package for a period of three months from the date of Final Acceptance Test.

5.4.1. Warranty:
All the items covered in the schedule of the requirements /Bill of Material (BOM), shall carry 24 x 7 Comprehensive Onsite Response Warranty support from OEM .

6. Appendix I: Pre-Qualification & Technical Bid Templates

6.1. General

The bidders are expected to respond to the RFP using the forms given in this section and all documents supporting Pre-Qualification / Technical Evaluation Criteria.

Pre-Qualification Bid & Technical Proposal shall comprise of following forms :

Forms to be used in Pre-Qualification Proposal

Form 1: Compliance Sheet for Pre-qualification Proposal

Form 2: Particulars of the Bidders

Form 4: Manufacturers /Producers Authorization Form

Forms to be used in Technical Proposal

Form 5: Letter of Proposal

- Compliance Sheet for Technical Proposal

- Escalation matrix should also be provided along with the technical bid.

6.1.1. Form 1: Compliance Sheet for Pre-qualification Proposal

(The pre-qualification proposal should comprise of the following basic requirements. The documents mentioned in this compliance sheet along with this form, needs to be a part of the Pre-Qualification proposal)

Sl. No.	Basic Requirement	Documents Required	Provided	Reference & Page Number
1.	Document Fee	Demand Draft	Yes / No	
2	Power of Attorney	Copy of Power of Attorney in the name of the Authorized signatory	Yes / No	
3	Particulars of the Bidders	As per **Form 2**	Yes / No	
4	Earnest Money Deposit	Demand Draft /Bank Guarantee **Form 3**	Yes / No	
5	Average Sales Turnover in Hardware & Maintenance services	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor	Yes / No	
6	Letter of authorization from OEM	Letter of authorization; as per template provided **(Form 4)**	Yes / No	
8	Technical Capability	Copy of work order	Yes / No	
9	Local Service Centres	A Self Certified letter by an authorized signatory	Yes / No	
10	Quality Certifications	ISO 9001, 20000 & 27000 Certification. ISO 14000 certification of the OEM	Yes / No	
11	Legal Entity	Copy of Certificate of Incorporation; GST, PAN, IT return, Up to Date GST Return	Yes / No	
12	Blacklisting & Performance	A self certified letter	Yes / No	

6.1.2. Form 2: Particulars of the Bidders

Sl. No.	Information Sought	Details to be Furnished
A	Name ,address and URL of the bidding Company	
B	Incorporation status of the firm (public limited / private limited, etc.)	
C	Year of Establishment	
D	Date of registration	
E	RoC Reference No.	
F	Details of company registration	
G	Name, Address, e-mail ID, Phone nos. and Mobile Number of Contact Person	

6.1.3. Form 3: Bank Guarantee for Earnest Money Deposit (EMD)

< Location, Date >

To,

The General Manager (Admn)
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 bidder >> (hereinafter called the Bidder) has submitted the bid for Submission of RFP # << RFP Number >> dated << insert date >> for << name of the assignment >>(hereinafter called "the Bid") to Odisha Computer Application Centre

Know all Men by these presents that we <<>> having our office at << Address >> (hereinafter called "the Bank") are bound unto the << Nodal Agency >> (hereinafter called "the Purchaser") in the sum of Rs. << Amount in figures >> (Rupees << Amount in words >> only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this << insert date >>

The conditions of this obligation are:

1. If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of validity of bid

a. Withdraws his participation from the bid during the period of validity of bid document; or
b. Fails or refuses to participate for failure to respond in the subsequent Tender process after having been short listed;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to << insert date >> and including << extra time over and above mandated in the RFP >> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

NOTHWITHSTANDING ANYTHING CONTAINED HEREIN:

I.   Our liability under this Bank Guarantee shall not exceed Rs. << Amount in figures >> (Rupees << Amount in words >> only)

II.   This Bank Guarantee shall be valid upto *<< insert 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 date >>*) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

6.1.4. Form 4: Manufacturers /Producers Authorization Form (MAF)

Letter No._____   Date:_____

To

     The General Manager(Admn)
     Odisha Computer Application Centre
     Bhubaneswar

Sub : OEM Authorization Letter

Dear Sir:

Ref: Your RFP Ref: OCAC-NeGP-INFRA-0007-2020/20025

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.

6.1.5. Form 5: Letter of Proposal

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

Subject: Submission of the Technical bid for Procurement of IT Infrastucture Equipments for Seamless Integration between IT Centre & GoO Cloud at OSDC, Bhubaneswar.

Dear Sir/Madam,

We, the undersigned, offer to provide Supply, Installation & Warranty support of IT Infrastructure for Odisha State Data Center, OCAC on with your RFP Ref No : _____ and our Proposal. We are hereby submitting our Proposal, which includes this Technical bid and the Financial Bid sealed in a separate envelope.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for 180 days as stipulated in the RFP document.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature [*In full and initials*]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

Location: _____

Date: _____

7. Appendix II : Commercial Proposal Templates

The bidders are expected to respond to the RFP using the forms given in this section for Commercial Proposal.

Form 6: Covering Letter with Commercial

7.1.1. Form 6: Covering Letter

< Location, 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

Subject: Submission of the financial bid for the Procurement of IT Infrastucture Equipments for Seamless Integration between IT Centre & GoO Cloud at OSDC, Bhubaneswar.

Ref: Your RFP Ref: OCAC-NeGP-INFRA-0007-2020/20025

Dear Sir/Madam,

We, the undersigned, offer to provide the Implementation services for IT infrastructure supply & related services in accordance with your Request for Proposal cited above and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of [*Amount in words and figures*]. This amount is exclusive of the local taxes.

Our Financial Proposal shall be binding upon us, up to expiration of the validity period of the Proposal, i.e., [*Date*].

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of Firm:

Address:

7.1.2. Form 7: Financial Proposal

Ref: Your RFP Ref: OCAC-NeGP-INFRA-0007-2020/20025

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)	4				
2.	Network Switch (Type – 2)	1				
3.	SAN Switch	2				
4.	Storage	1				
5.	Rack Server (Type – 1)	2				
6.	Rack Server (Type – 2)	10				
7.	Microsoft Windows Servr OS	48				
8.	Copper - CAT 6A, Patch Cord 2 Meter	40				
9.	Copper - CAT 6A, Patch Cord 5 Meter	20				
10.	Copper - CAT 6A, Patch Cord 10 Meter	10				
11.	Fibre - OM4/ OM5 or Latest Patch Cord 2 Meter LC-LC	40				
12.	Fibre - OM4/ OM5 or Latest Patch Cord 5 Meter LC-LC	60				
13.	Fibre - OM4/ OM5 or Latest Patch Cord 10 Meter LC-LC	30				
14.	Fibre - OM4/ OM5 or Latest Patch Cord 15 Meter LC-LC	30				
15.	Fibre - OM4/ OM5 or Latest Patch Cord 25 Meter LC-LC	10				
16.	Fibre - OM4/ OM5 or Latest Patch Cord 2 Meter SC-LC	10				
17.	Fibre - OM4/ OM5 or Latest Patch Cord 15 Meter SC-LC	40				
18.	Fibre - OM4/ OM5 or Latest Patch Cord 25 Meter SC-LC	40				
19.	Standard Compatible PDUs for the Quoted Server & Storage Devices. (Minimum 12 Nos of Sockets in a single PDU)	04				

20.	VMware vcloud suite enterprise (vSphere, VRealize suite with vROPS)	20				
21.	VMware NSX (Advanced)	20				
22.	VMware vRealize Network Insight Advanced	20				
23.	One time Installation & Implementation by OEM Proffectional Services for Seamless Integration between IT Centre & GoO Cloud at Odisha State Data Centre (OSDC)	LS				
24.	Certified IT Proffectional for VMWare Operation & Support Services Payable Quarterly, for the entire Contract Period. (i.e. 4 Qtr @ 1 Year x 5 Years=20 Qtrs)	20				
	Grand Total Incuding 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".

8. 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:

ANNEXURE - II

Corrigendum

RFP Enquiry No. :OCAC-NeGP-INFRA-007-2020/20025

Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
1	Page 12 and Page 42/ Clause 4.4.6 (Performance Bank Guarantee (PBG)) & 5.4 (Payment)	The Performance Bank Guarantee shall contain a claim period of three months from the last date of validity. Also it is written in the payment terms portion -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.	The clause modified as: - "The Performance Bank Guarantee needs to be valid till Entire Project Period of 5 Years. However the Bidder may submit PBG for a period of 3 Years & subsequently renewed for another 2 Years before expiry else the PBG will be forfeited. 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".
2	Page 13/ Clause 4.6 (Delivery)	The delivery of entire IT infrastructure equipment's (i.e. hardware & software) for both the location, to be completed within 8 (Eight) Weeks from the date of issue of Purchase Order.	The clause modified as: - " The delivery & installation of entire IT infrastructure equipment's (i.e. hardware & software) for both the location, to be completed within 12 (Twelve) weeks from the date of issue of Purchase Order."
3	Page 16/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 1	Switch OEM shall be in the leader's quadrant as per latest published Gartner's MQ report for Data Centre Network Infrastructure.	The clause modified as: - "Switch OEM shall be in the leader's quadrant as per latest published Gartner's MQ report for Data Centre Network Infrastructure." Or "The Network OEM should be in Top-5 OEM of IDC report published for Asia Pacific region for last three consecutive quarter (i.e. 2nd,3rd , 4th quarter of 2019 & 1st quarter of 2020)"
4	Page 16/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 12	6 x 40GbE ports with Long Range Module Loaded for 40G operations with patch cord	Switch should have the following interfaces: i. 36 x 10G Fibre ports with SR modules Loaded ii. 12 x 10G Fibre ports with LR modules loaded Iii. 6 x 40/100 GbE ports with long range module loaded for 40G operations with patch cord Note: Long range module must work at least upto 10 KM over dark fibre for connection between IT Centre and OSDC.
5	Page 17/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 23	Switch should support minimum 500 VRF instances	The clause modified as: - "Switch should support minimum 500 VRF/VNI instances."
6	Page 17/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 34	Switch should support 8 Nos. of link or more per Port channel (using LACP) and support 96 port channels or more per switch	The clause modified as: - "Switch should support 8 Nos. of link or more per port channel (using LACP)".

Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
7	Page 18/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 42 (c)	42. Switch should support static and dynamic routing using: a. Static routing b. OSPF V.2 using MD5 Authentication c. ISIS using MD5 Authentication 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)	The Clause (C) modified as: - "IS-IS using MD5 authentication or equivalent policy based routing".
8	Page 18/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 44	44. Switch should support multi instance MPLS routing using VRF, VRF Edge routing and should support VRF Route leaking functionality	The clause stands deleted.
9	Page 19/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 56	56. Time based ACL	The clause modified as: - "Time based ACL/Equivalent."
10	Page 20/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 74	Switch should support central time server synchronization using Network Time Protocol NTP V.4	Switch should support central time server synchronization using Network Time Protocol NTPv4/SNTPv4.
11	Page 20/ Clause 4.16 (Network Switch (Type – 1))/ Sl. No - 85	Switch should support NTP to provide an accurate and consistent timestamp over IPv6 to synchronize log collection and events	Switch should support NTP/SNTP to provide an accurate and consistent timestamp over IPv6 to synchronize log collection and events
12	Page 21/ Clause 4.17 (Network Switch (Type – 2))/ Sl. No - 1	Switch OEM shall be in the leader's quadrant as per latest published Gartner's MQ report for Data Centre Network Infrastructure.	The clause modified as: - "Switch OEM shall be in the leader's quadrant as per latest published Gartner's MQ report for Data Centre Network Infrastructure." **Or** "The Network OEM should be in Top-5 OEM of IDC report published for Asia Pacific region for last three consecutive quarter (i.e. 2nd, 3rd, 4th quarter of 2019 & 1st quarter of 2020)"
13	Page 21/ Clause 4.17 (Network Switch (Type – 2))/ Sl. No - 18	Dynamic Host Configuration Protocol (DHCP) client/ Relay and server	The clause modified as: - "Dynamic Host Configuration Protocol (DHCP) Client/ Relay or Server."
14	Page 22/ Clause 4.17 (Network Switch (Type – 2))/ Sl. No - 35	Transceiver modules shall be suitable for MMF cabling inside the DC (preferably with LC interface)	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.

Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
15	Page 22/ Clause 4.18 (SAN Switch)/ Sl. No - 1	Each fibre switch should be quoted with minimum 48 FC ports modules of 32Gbps speed each with necessary Licenses. 12 FC ports of each SAN switch needs to be configured and supplied with long range transreciever modules which at least work upto 10 KM distance over dark fibre between IT Centre and OSDC. Additional 12 nos. of long range transreciever modules along with licenses for each existing Brocade SAN Switch (Qty – 02 Nos.) (Model - HPSN6500B) needs to be supplied and configured at OSDC end to work over the dark fibre (at least 10 KM) laid between the IT Centre and OSDC.	Each fibre switch should be quoted with minimum 48 FC ports modules of 32Gbps speed each with necessary Licenses. 16 FC ports of each SAN switch needs to be configured and supplied with long range transreciever modules which at least works upto 10 KM distance over dark fibre between IT Centre and OSDC.
16	Page 22/ Clause 4.18 (SAN Switch)/ Sl. No - 2	The switch should have support for 4/8/16/32 Gbps HBA	The switch should support for 8/16/32 Gbps HBA.
17	Page 23/ Clause 4.18 (SAN Switch)/ Sl. No - 14 (g)	The Switch should have following zoning and security features: g Support for Port masking.	The clause stands deleted.
18	Page 24/ Clause 4.19 (Storage)/ Sl. No - 6	Storage should be supplied with minimum A. FC Ports 8 x 32 Gbps 8 x 16 Gbps/32 Gbps B. iSCSI ports 4 x 10Gbps ports for SAN connectivity 4x10Gbps ethernet ports for NAS connectivity.	The clause modified as :-" Storage should be supplied with minimum:- A. FC Ports: # 4 x 32 Gbps # 8 x 16 Gbps OR 32 Gbps B. iSCSI ports: # 4 x 10Gbps ports for SAN connectivity # 4 x 10Gbps ethernet ports for NAS Connectivity."
19	Page 24/ Clause 4.19 (Storage)/ Sl. No - 16	The Storage Array should support three way replication in native fashion without using any additional replication appliance. Replication shall support incremental replication after resumption from link failure or failback situations.	The clause modified as: - "The storage array should support three way replication in real time without using any additional replication appliance. Replication shall support incremental replication after resumption from link failure or failback situations".

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Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
20	Page 24/ Clause 4.19 (Storage)/ Sl. No - 17	Proposed storage should support for replication of volume to existing HPE 3PAR storage at OCAC SDC in synchronous fashion from day-1 without using any additional software or hardware appliance for Near-DR compliance	The clause modified as:-"Proposed storage should support for replication with existing HPE 3PAR storage at OCAC SDC in synchronous fashion from day-1 without using any additional software or hardware appliance for Near-DR compliance".
21	Page 25/ Clause 4.19 (Storage)/ Sl. No - 19	For effective cloud deployment offered storage should be supplied with thin provisioning and auto thin reclaim to make the volume thin for an extended period of time for complete array supported raw capacity. It should support automated thin reclaim else additional controller and cache must be offered to handle the overload.	The clause modified as: - "For effective cloud deployment offered storage should be supplied with thin provisioning and auto thin reclaim to make the volume thin for an extended period of time for complete array supported raw capacity. It should support automated thin reclaim with or without additional controller and cache".
22	Page 26/ Clause 4.20 (Rack Server)/ Sl. No - 1	The server should have 2 nos. of Intel Xeon latest Generation Processor: Server Type 1: - 02 servers with 2 x 16 cores, minimum 2.9 GHz clock rate. Server Type 2: - 10 servers with 2 x 28 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	The clause modified as: - "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: - 10 servers with 2 x 28 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."
23	Page 26/ Clause 4.20 (Rack Server)/ Sl. No - 2	2 TB latest DDR memory using 64 GB DIMM's.	The clause modified as: -"1.5 TB latest DDR memory using 64 GB DIMMs".
24	Page 26/ Clause 4.20 (Rack Server)/ Sl. No - 4	Type 1 – 4 x 600 GB SAS Hot Swap HDD (15Krpm or higher) Type 2 – 4 x 300 GB SAS Hot Swap HDD (15Krpm or higher)	The specification modified as: - Type 1 &2 - 4 x 600 GB SAS (15Krpm) / SSD Hot Swap HDD or Higher.

Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
25	Page 26/ Clause 4.20 (Rack Server)/ Sl. No - 6	Server Type 1:- Minimum 2 x 1 Gbps ports & Four no's Dual 10 Gbps SFP28 (10G-SR populated). Server Type 2:- Minimum 2 x 1 Gbps ports & Four no's Dual 10 Gbps SFP28 (10G-SR populated)	The clause modified as: -"Server Type 1 &2:- Minimum 2 x 1 Gbps ports &4 Nos of 10/25 Gbps Network Adopter with 10 Gbps transceiver."
26	Page 26/ Clause 4.20 (Rack Server)/ Sl. No - 11	DVD ROM Internal/External (If required)	DVD ROM Internal/External to be provided.
27	Page 26/ Clause 4.20 (Rack Server)/ Sl. No - 15	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 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 (minimum 4 Gb storage), Syslog (local & remote).	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 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).
28	Page 27/ Clause 4.20 (Rack Server)/ Sl. No - 18	OEM should be ranked within Top 3 as per IDC report for Server in India for any quarter of 2019	OEM should be ranked within top 3 as per IDC report for any one of the previous four quarter in India for server.
29	Page 28/ (Scope of Work for (VMWARE) Solution)/ Sl. No - 15	Container as a service	Yes, container as a service to be included in the professional services scope.
30	Page 29/ (Scope of Work for (VMWARE) Solution)/ Sl. No - 20	Post implementation support for eight weeks for additional handholding	OEM's Professional service required for Post implementation support for eight weeks for additional handholding.

Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
31	Page 29/ (Scope of Work for (VMWARE) Solution)/ Sl. No - 22	The OEM has to ensure on-site support as and when required for resolving all OS (Operating Systems) & Private Cloud solution related issues, including re-installation of OS or re-clustering or re-configuration and other required software procured in this RFP, during support period without any extra cost to the OCAC.	24 x7 Onsite support for 5 Years required from OEM as and when required for resolving all OS (Operating Systems) & Private Cloud solution related issues, including re-installation of OS or re-clustering or re-configuration and other required software procured in this RFP, during support period without any extra cost to the OCAC.
32	Page 37/ Clause 4.25.1 (Pre-Qualification Criteria)/ Sl. No. 7	One project of similar nature not less than the amount Rs.8 Crore; OR Two projects of similar nature each of which not less than the amount Rs. 6 Crore ; OR Three projects of similar nature each of which is not less than the amount Rs. 4 Crore	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 i.e. From FY 2015-16 to FY 2019-20 : • One project of similar nature not less than the amount **Rs. 2.4 Crore.** OR • Two projects of similar nature each of which not less than the amount **Rs. 1.8 Crore.** OR • Three projects of similar nature each of which is not less than the amount **Rs. 1.2 Crore.** 'Similar Nature' is defined as:- Supply & Installation of Server, Storage, Network Devices and COTS like Database/ Software/Operating System/Virtualisation Software, etc. and their associated maintenance support services for any Government/Public Sector Enterprises/BFSI in India.
33	Page 40/ Clause 4.26.3 (Commercial Bid)	i) Commercial Bid should be submitted in a sealed envelope as per the format specified in Financial Proposal of respective package	This RFP is a single Package and bidder needs to submit the commercial as asked in COMMERCIAL BID FORMAT of the RFP (Form 7.1.2)
34	Page 42/ Clause 5.4.1 (Warranty)	All the items covered in the schedule of the requirements /Bill of Material (BOM), shall carry 24 x 7 Comprehensive Onsite Response Warranty support from OEM.	All the items quoted should include 5 years of OEM onsite warranty.

Sl.No.	RFP Page No/ Clause No	Existing Clause	Modified Clause
35	Page 52/ Clause 7.1.2 (Form 7 - Financial Proposal / Sl. No - 24	Certified IT Professional for VMWare Operation & Support Services Payable Quarterly, for the entire Contract Period. (i.e. 4 Qtr. @ 1 Year x 5 Years=20 Qtrs.)	OEM resident engineer to be provided for Operation & Support Services.
36	Additional Clause		New Clause: - "Additional 16 nos. of long range transceiver modules required for existing Brocade SAN Switch (Qty – 02 Nos.) (Model - HPSN6500B) needs to be supplied and configured at OSDC end to work over the dark fibre (at least 10 KM) laid between the IT Centre and OSDC." **Important:- Separate BoQ line item added in the commercial bid.**
37	Additional clause		The OEM/product manufactured in a country sharing a land border with India cannot participate in this bid.
38	Additional Form		Form 8

Form 7: Financial Proposal (Revised)

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)	4				
2.	Network Switch (Type – 2)	1				
3.	SAN Switch	2				
4.	Storage	1				
5.	Rack Server (Type – 1)	2				
6.	Rack Server (Type – 2)	10				
7.	Microsoft Windows Server OS	48				
8.	Copper - CAT 6A, Patch Cord 2 Meter	40				
9.	Copper - CAT 6A, Patch Cord 5 Meter	20				
10.	Copper - CAT 6A, Patch Cord 10 Meter	10				

11.	Fibre - OM4/ OM5 or Latest Patch Cord 2 Meter LC-LC	40				
12.	Fibre - OM4/ OM5 or Latest Patch Cord 5 Meter LC-LC	60				
13.	Fibre - OM4/ OM5 or Latest Patch Cord 10 Meter LC-LC	30				
14.	Fibre - OM4/ OM5 or Latest Patch Cord 15 Meter LC-LC	30				
15.	Fibre - OM4/ OM5 or Latest Patch Cord 25 Meter LC-LC	10				
16.	Fibre - OM4/ OM5 or Latest Patch Cord 2 Meter SC-LC	10				
17.	Fibre - OM4/ OM5 or Latest Patch Cord 15 Meter SC-LC	40				
18.	Fibre - OM4/ OM5 or Latest Patch Cord 25 Meter SC-LC	40				
19.	Standard Compatible PDUs for the Quoted Server & Storage Devices. (Minimum 12 Nos of Sockets in a single PDU)	4				
20.	VMware vcloud suite enterprise (vSphere, vRealize suite with vROPS)	20				
21.	VMware NSX (Advanced)	20				
22.	VMware vRealize Network Insight Advanced	20				
23.	One time Installation & Implementation by OEM Professional for Seamless Integration between IT Centre & GoO Cloud at Odisha State Data Centre (OSDC)	LS				
24.	Certified IT Professional for VMWare Operation & Support Services Payable Quarterly, for the entire Contract Period. (i.e. 4 Qtr. @ 1 Year x 5 Years=20 Qtrs.)	20				
25.	Additional long range transreciever modules	16				
	Grand Total Including GST					

Total Cost In Words

Form 8: Self Declaration against the rule 144 (xi) in GFRS 2017

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<To be in Company Letter Head>

< Location, 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

Subject: Submission of the financial bid for the Procurement of IT Infrastructure Equipment's for Seamless Integration between IT Centre & GoO Cloud at OSDC, Bhubaneswar.

RFP Reference No: OCAC-NeGP-INFRA-007-2020/20025

Dear Sir/Madam,

I/ We, represent that company is not a subsidiary/ affiliate/ attached office of any Border Companies as may be banned by Government of India for doing business in India as per revision of GFR rule 2020 or if from such a country, has been statutorily registered with the competent authority as per the procedure laid down in reference to Government Orders in this regards.

I/ We, hereby agree to provide copy of and/ or produced original of all such documents as may be necessarily required to be submitted evidence in this regard.

I/ We, hereby certified that this bidder fulfills all requirements in this regard and is eligible to be considered.

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of Firm:

Address:

RFP for Procurement of IT Infrastructure Equipments for Seamless Integration between IT Centre & Government of Odisha (GoO) Cloud Set-up at Odisha State Data Centre (OSDC) Bhubaneswar.
RFP Enquiry No. : OCAC-NeGP-INFRA-007-2020/20025

01.	Last date and time for Submission of Bid	12.10.2020 by 2:00 PM
02.	Opening of Pre-Qualification Bids (PQ)	12.10.2020, 4:00 PM
03.	Opening of Technical Bids (TB)	To be Informed.