

## PRE-BID COMPLIANCE SHEET

(Tender No: OCAC-TE-10/2021/ENQ/21062, Dated 23/12/2021)

**Subject: Selection of Supplier for Supply, Installation and Commissioning of IT Infrastructure required in IT Centre, Lokseva Bhawan for Enterprise e-Despatch Application**

SI#	Tender Document Reference(s) (Section & Page Number(s))	Content of Tender requiring Clarification(s)	Points of Clarification	Clarification from OCAC
1.	5.5 Specification of the hardware Items, Page 29	KVM Switch	Kindly revise the heading of the item as "SAN switch".	<b>Amended as:</b> Please read "Heading KVM Switch" as "SAN Switch" & in Commercial Bid- Please read "KVM Switch" as "SAN Switch"
2.	5.5.4 Storage, Page 30	No of Controllers: 2 or more in redundant controllers	Please revise as "2 or more redundant controllers configured as symmetric active-active mode so that a single logical unit (LUN) can be shared across all proposed controllers. Existing clause may pls be detailed for clarity.	<b>Amended as:</b> 2 or more redundant controllers configured as active-active mode so that a single logical unit (LUN) can be shared across all proposed controllers.
3.	5.5.4 Storage, Page 30	New Clause	Kindly include the below clause for future investment protection as well as technology readiness: "Offered Storage array shall be integrated with Red-hat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration : a) Shall support both Static and Dynamic provisioning b) Shall be able to expand, re-size the persistent volumes given to statefulset applications. c) Shall be able to create and delete the snapshots. d) Shall support CSI Raw block volume as well as CSI Volume cloning. e) Support for both Fiber channel as well as ISCSI.	<b>Addition of New Clauses:</b> Offered Storage array shall be integrated with Red-hat , Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration : a) Shall support both Static and Dynamic provisioning b) Shall be able to create and delete the snapshots. c) Support for both Fiber channel as well as ISCSI.
4.	5.5.4 Storage, Page 30	New Clause	Kindly include the below clause for future investment protection as well as technology readiness: "Offered Storage array shall support multi-tenancy"	<b>Addition of New Clauses:</b> Offered Storage array shall support multi-tenancy

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5.	5.5.1 Database Server, Page 26	New Clause	<p>To ensure that OCAC gets quality secure products that can tackle cyber attacks, request to add below security clauses in specs -</p> <ol style="list-style-type: none"> <li>1) UEFI Secure Boot and Secure Start support</li> <li>2) Security feature to ensure servers do not execute compromised firmware code</li> <li>3) FIPS 140-2 validation</li> <li>4) Support for Commercial National Security Algorithms (CNSA)</li> <li>5) Tamper-free updates - components digitally signed and verified</li> <li>6) Secure Recovery - recover critical firmware to known good state on detection of compromised firmware</li> <li>7) Ability to rollback firmware</li> <li>8) Secure erase of NAND/User data</li> <li>9) TPM (Trusted Platform Module) 2.0</li> </ol>	<p><b>Addition of New Clauses:</b>  Security Clauses:  1) UEFI Secure Boot and Secure Start support  2) Security feature to ensure servers do not execute compromised firmware code  3) Tamper-free updates - components digitally signed and verified  4) Secure Recovery - recover critical firmware to known good state on detection of compromised firmware  5) Ability to rollback firmware  6) TPM (Trusted Platform Module) 2.0</p>
6.	2.1 Pre-Qualification (PQ)-Cum-Technical Criteria SL#- 6	The bidder should have presence in Odisha with service support center at Bhubaneswar	Bidder will open office at odisha and service center at Bhubaneswar within 1 month of awarding of tender.It will allow national bidder to partipate to have fair competition and will encourage One India One Nation concept.	<p><b>Amended as:</b>  The bidder should have presence in Odisha with service support center at Bhubaneswar or Bidder will open office at odisha and service center at Bhubaneswar within 1 month of awarding of tender.</p>

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7.	Pg 26 & 28	MemoryD10:G11	<p>The memory should have native capability of identifying and reporting the genuiness of the memory installed in the server. Please amend to:</p> <p>The memory should have native capability of identifying and reporting the genuiness of the memory installed in the server.</p> <p>OR</p> <p>The server should be integrated in the factory, tested, certified, chassis intrusion switch enabled, packed in carton &amp; carton should be sealed before transit. Genuinity of any sub-component inside a server gets compromised during transit from factory to a customer location and not in customer's data center. We focus on securing the system during transit by factory integration of the complete system &amp; with secured transit.</p>	<p><b>Amended as:</b></p> <p>The memory should have native capability of identifying and reporting the genuiness of the memory installed in the server.</p> <p>OR</p> <p>The server should be integrated in the factory, tested, certified, chassis intrusion switch enabled, packed in carton &amp; carton should be sealed before transit.</p>
8.	Pg 26 & 28	Network Controller: Minimum 4 x 1 Gbps ports & 2 Nos of 10/25 Gbps Network Adapter with 10 Gbps transceiver.	<p>Network Controller: Minimum 2 x 1 Gbps ports &amp; 4 Nos of 10/25 Gbps Network Adapter with 10 Gbps transceiver. Please clarify if you need 4 nos. of 10/25Gbps network Adapter or Ports.</p> <p>Also consider 10/25Gbps auto-negotiating transceivers in place of 10Gbps transceivers</p> <p>Presently it is written as- four separate adapters have to be configured for 10/25Gbps Ethernet, not four ports. Need clarity on the need</p> <p>10/25Gbps auto-negotiating transceivers have been available for long</p>	<p><b>Amended as:</b> Network Controller: Minimum 4 x 1 Gbps ports &amp; 2 x 10/25 Gbps ports with 10 Gbps transceiver.</p>
9.	Page No-15,Clause No-2.1,Section-Pre-Qualification (PQ)-Cum-Technical Criteria	Annual average Turnover Minimum of Rs.10 Cr. generated from IT Networking supply and associated maintenance services during any last three Financial years i.e: FY 2020-21, 2019-20, and FY 2018-19	Annual average Turnover Minimum of Rs.5 Cr. generated from IT Networking supply and associated maintenance services during any last three Financial years i.e: FY 2020-21, 2019-20, and FY 2018-19. Less turn over will attract more Bidder ,Which will help to get more compitative BIDS	<p><b>Amended as :</b> Annual average Turnover Minimum of Rs.5 Cr. generated from IT Networking supply and associated maintenance services during any last three Financial years i.e: FY 2020-21, 2019-20, and FY 2018-19</p>

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10.	Page No-26, Clause No-5.5.1, Section- Specification of the hardware Items(Database Server)	Minimum 256GB latest DDR memory using 32GB DIMMs or higher. Advanced ECC with multi-bit error protection. The memory should have native capability of identifying and reporting the genuineness of the memory installed in the server.	Genuinity of any sub-component inside a server gets compromised during transit from factory to a customer location and not in customer's data center. We focus on securing the system during transit by factory integration of the complete system & with secured transit.	No Change, As per Tender
11.	Page No-30, Clause No-5.5.4, Section- Specification of the hardware Items(Storage- memory)	Offered Storage array should have at-least 256GB protected DRAM cache.	Offered Storage array should have at-least 192GB protected DRAM cache. With 100 TB Capacity asked, 192 GB RAM is more than sufficient to handle the IO load. Kindly change this to help us propose slight size solution	No Change, As per Tender
12.	Page No-30, Clause No-5.5.4, Section- Specification of the hardware Items(Storage-memory)	Complete offered cache shall be both Global and coherent	Kindly remove this point for wider participation of OEMs	<b>Amended as:</b> Complete offered cache shall be on Global.
13.	Page No-30, Clause No-5.5.4, Section- Specification of the hardware Items(Storage-Standard features)	Controllers shall be true symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.	Controllers shall be true active-active so that a single logical unit accessible by all offered controllers, while supporting all the major functionalities like Thin Provisioning etc. Vendor specific point. Kindly change this for wider participation	<b>Amended as:</b> Controllers shall be true active-active so that a single logical unit accessible by all offered controllers, while supporting all the major functionalities like Thin Provisioning etc.
14.	Page No-30, Clause No-5.5.4, Section- Specification of the hardware Items(Storage-Availibility)	Offered storage shall be an enterprise storage array & 100% data availability guaranteed architecture. Shall be published as enterprise array on the vendor web site. If vendors are not supporting the 100% data availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations. There shall be no performance degradation during critical support activities like Firmware upgrade, patch upgrade etc	Offered storage shall be an enterprise storage array & 99.999% uptime guaranteed architecture. Shall be published as enterprise array on the vendor web site. There shall be no performance de-gradation during critical support activities like Firmware upgrade, patch upgrade etc Vendor specific point. Kindly change this for wider participation	<b>Amended as:</b> Offered storage shall be an enterprise storage array & 99.999% data availability guaranteed architecture. Shall be published as enterprise array on the vendor web site. If vendors are not supporting the 99.999% data availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations. There shall be no performance de-gradation during critical support activities like Firmware upgrade, patch upgrade etc

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15.	Pg -31, Cl.No. -5.5.4, Section- Specification of the hardware Items (Storage-Qos Support)	3. It shall be possible to change the quality of service Response time, IOPS, bandwidth specification at real time.	Kindly remove this point. This is vendor specific point. Kindly remove this for wider participation	No Change, As per Tender
16.	Pg No-31, Cl. No-5.5.4, Section- Specification of the hardware Items(Storage-Spare)	Offered Storage Array shall support distributed Global hot Spare for offered Disk drives.	Offered Storage Array shall support hot Spare for offered Disk drives. Kindly allow flexibility to vendors to work on storage and hot spare configuration. This will encourage wider and healthy participation	No Change, As per Tender
17.	Pg No-31, Cl. No-5.5.4, Section- Specification of the hardware Items(Storage-Spare)	Global hot spare shall be configured as per industry practice.	Hot spare shall be configured as per industry practice. Vendor specific point. Kindly change this for wider participation	No Change, As per Tender
18.	Pg No-30, Cl. No-5.5.4, Section- Specification of the hardware Items (Storage-Firmware upgrade)	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller.	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives. Vendor specific point. Kindly change this for wider participation	No Change, As per Tender
19.	5.5.4 Storage; Page 30	1. Offered Storage array should have at-least 256GB protected DRAM cache.	Offered Storage array should have at-least 192GB protected DRAM cache. Justification With 100 TB Capacity asked, 192 GB RAM is more than sufficient to handle the IO load. Kindly change this to help us propose right size solution	No Change, As per Tender

**Sd/-**  
**General Manager (Admn.)**