

CORRIGENDUM

Annexure-B

Supply, Installation, Integration, Testing & Commissioning (SIITC) of IT Servers, HSMs, Network Switches and Firewalls with Support for 5 years

(Reference Bid No: GeM Ref. GEM/2025/B/6804656)

Sl. No.	Section / Page No.	Clause Reference	Changed To
1	Section II, Page no. 5	Section II/ 2. Execution and Delivery period All the scope of work defined in Section-IV should be completed in two stages within 30 days from order placement as given below: i) The delivery of all equipment should be completed within 15 days of award of contract. This includes both locations i.e. Pune and Chennai. ii) The next phase of installation, commissioning and acceptance of the equipment should be completed within next 15 days after delivery of components. This includes both locations i.e. Pune and Chennai.	All the scope of work defined in Section-IV should be completed in two stages within 60 days from order placement as given below: i) Milestone-1: The delivery of equipment from Sr. 1-4 of BoQ/BoM (i.e. Servers, HSM, Switch 1 & Switch 2) should be completed within 15 days of award of contract. This includes both locations i.e. Pune and Chennai. ii) Milestone-2: Installation & Commissioning of materiel delivered against Milestone-1 ii) Milestone-3: Delivery, Installation & Commissioning of equipment at Sr. 5 (i.e. Firewall) and integration with the already delivered equipment against Milestone-1 & 2. This includes both locations i.e. Pune and Chennai.
2	Section II, Page no.6	Section II/ 4. Eligibility Criteria/ J Vendor should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.	Server OEM / Bidder should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.

Sl. No.	Section / Page No.	Clause Reference	Changed To
3	Section III, Page no. 12	Section III / 6. Payment Terms (B) Payment will be released as per table given below:	Section III / 6. Payment Terms (B) Payment will be released as per details given below: i) Against Milestone-1 & Submission Performance Security: 80% of the cost of delivered equipment. Advance payment (if taken) shall be adjusted in this payment schedule. ii) Against Milestone-2: 20% of the cost of delivered equipment iii) Against Milestone-3: Remaining payment
4	Section IV, Page no.15	Section IV/A. Server/Sr. No. 1 - Rack Unit Max. up to 1U, Rack mountable	Max. up to 2U, Rack mountable
5	Section IV, Page no.15	Section IV/A. Server/Sr. No. 2 - CPU Dual CPUs populated, each CPU with minimum 32 cores / 64 threads. The processor's Base Clock frequency should be 2.7 GHz or above. It should support virtualization, Hyper Threading and Turbo Boost. The processor launch date should in the year 2023 or after.	Dual CPUs populated, each CPU with minimum 32 cores / 64 threads. The CPU should be 5th generation Intel /4th generation AMD, or latest x86_64-bit processor. The processor's Base Clock frequency should be 2.7 GHz or above. It should support virtualization, Hyper Threading and Turbo Boost.
6	Section IV, Page no.16	Section IV/A. Server/Sr. No. 6 - Hard Disk Drive 1. Populated with minimum 10 nos of 7.68 TB of SATA/SAS/NVMe SSDs. 12 Disks slots/bays with support for SATA/SAS/NVMe SSDs 2. All disks should be hot swappable. 3. Hard Disk should be covered under warranty on nonreturnable basis	Populated with minimum 10 nos of 7.68 TB of SATA/SAS/NVMe SSDs. Disks slots/bays with support for SATA, SAS, NVMe SSDs 2. All disks should be hot swappable. 3. Hard Disk should be covered under warranty on nonreturnable basis
7	Section IV, Page no.16	Section IV/A. Server/Sr. No. 10 - Expansion Slots 2 PCIe 5.0 x16 FH, 2 PCIe,5.0 x 8 and 2 M.2 Expansion Slots. All PCI-e slots must operate at Gen 5	2 PCIe 5.0 x16 FH, 1 5.0 x 8 and 2 M.2 Expansion Slots. All PCI-e slots must operate at Gen 5 speed when fully populated.

Sl. No.	Section / Page No.	Clause Reference	Changed To
		speed when fully populated.	
8	Section IV, Page no.16	Section IV/A. Server/Sr. No. 11 - Power Supply Redundant hot swappable Power Supplies having Titanium or better grade Power Supplies. 1200 Watt	Redundant hot swappable Power Supplies having Titanium or better grade Power Supplies.
9	C. Switch 1 (1 GbE) Sr.3	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 3 - Design & Performance Should have minimum 400 Gbps switching capacity <i>Should be equipped with minimum 16MB Flash and 2GB RAM</i> Should have LED indicator for per port status and redundant AC PSU 0°C to 40°C operating temperature and 10% to 90% relative Humidity Support for Ipv6 configuration from day one The switching system shall have a minimum 32K MAC Addresses and 4K VLAN IDs and 9K Jumbo Frames	Should be equipped with minimum 12MB Flash and 2GB RAM
10	C. Switch 1 (1 GbE) Sr.5	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 5 - Security Should support 802.1x authentication and accounting, ACLs and DoS Attack Protection IGMP(V1/V2) Snooping Should support ACLs using L2 L3 and L4 fields Protection from unnecessary or DoS traffic by using storm control functions for unicast/multicast/broadcast. Should support traffic flow analysis based on Netflow/sFlow/IPfix Switch should support Port Mirroring, Dynamic ARP Inspection or equivalent • Switch should support	Should support 802.1x authentication and accounting, ACLs and DoS Attack Protection IGMP(V1/V2) Snooping Should support ACLs using L2 L3 and L4 fields Protection from unnecessary or DoS traffic by using storm control functions for unicast/multicast/broadcast. Should support traffic flow analysis based on Netflow/sFlow/IPfix Switch should support Port Mirroring, Dynamic ARP Inspection or equivalent • Switch should support non-blocking architecture. • <i>Switch should support Stacking/VSS/VPC/MLAG/McLAG features allowing links that are physically connected to two</i>

Sl. No.	Section / Page No.	Clause Reference	Changed To
		non-blocking architecture. • Switch should support VSS/VPC/MLAG/McLAG features allowing links that are physically connected to two different switches to appear as a single port channel. Device should support MST, Per VLAN RSTP, BPDU Guard, Loop Guard, DHCP Snooping, Port Security	different switches to appear as a single port channel. Device should support MST, Per VLAN RSTP, BPDU Guard, Loop Guard, DHCP Snooping, Port Security
11	C. Switch 1 (1 GbE) Sr.10	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 10 - Cables 2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 10G SFP+ MLAG.	2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 10G SFP+ Stack/MLAG.
12	D. Switch 2 (10 GbE) Sr.1	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 1 - Ports 48 numbers of 10 Gbps SFP+ ports fully populated with multimode LC transceivers from day 1; 4x25/40G port for uplink with transceivers	48 numbers of 10 Gbps SFP+ ports fully populated with multimode LC transceivers from day 1; 4x25/40G port or better for uplink with transceivers
13	D. Switch 2 (10 GbE) Sr.23	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 23 - MLAG/VPC Support Device should support VSS/VPC/MLAG/McLAG for active-active layer- 2 and layer-3 forwarding while running in VXLAN+EVPN based fabric.	Device should support Stacking/VSS/VPC/MLAG/McLAG for active-active layer- 2 and layer-3 forwarding while running in VXLAN+EVPN based fabric.
14	D. Switch 2 (10 GbE) Sr.37	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 37 - Logging Device should support IEEE 1588 PTP boundary clock, SNMP v3, IPFIX/Netflow/SFlow and logging.	Device should support IEEE 1588 PTP boundary clock/ NTP / SNTP, SNMP v3, IPFIX/Netflow/SFlow and logging.

Sl. No.	Section / Page No.	Clause Reference	Changed To
15	D. Switch 2 (10 GbE) Sr.47	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 47 - Cables 2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 25/40G QSFP+ MLAG	2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 25/40/100G QSFP+ MLAG

REPLY TO QUERIES

Annexure-A

Supply, Installation, Integration, Testing & Commissioning (SIITC) of IT Servers, HSMs, Network Switches and Firewalls with Support for 5 years

(Reference Bid No: GeM Ref. GEM/2025/B/6804656)

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
1	Section II, Page no. 5	Section II/ 2. Execution and Delivery period All the scope of work defined in Section-IV should be completed in two stages within 30 days from order placement as given below: i) The delivery of all equipment should be completed within 15 days of award of contract. This includes both locations i.e. Pune and Chennai. ii) The next phase of installation, commissioning and acceptance of the equipment should be completed within next 15 days after delivery of components. This includes both locations i.e. Pune and Chennai.	Query1: We kindly request to extend the delivery period to 60 days from the date of Purchase Order. Query2: As 15 days is insufficient for supply and delivery, we kindly request a minimum of 60 days from the date of Purchase Order. Query3: Delivery period is expected to be within 8–10 weeks. Query4: Please allow Delivery of the products up to 45- 60 days Query5: Our request to CDAC, Please allow delivery period minimum 45 days or more instead of 15 days.	Refer Corrigenda
2	Section III, Page no. 12	Section III / 6. Payment Terms (B) Payment will be released as per table given below:	NA	Refer Corrigenda
3	Section II, Page no.6	Section II/ 4. Eligibility Criteria/ J Vendor should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.	Query1: To promote wider participation, including MSMEs and Startups, it is requested to relax the requirement of having 5 completed orders and instead allow bidders/OEMs with at least one successfully executed project of similar nature or experience through authorized partnerships or consortiums to participate. Query2: Kindly ammend the clause as "Server OEM /Bidder should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded	Refer Corrigenda

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
			along with the bid." Query3: Our request CDAC to please allow Server OEM Service centre, and change the clause as - Vendor/Server OEM should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid. Query4: Our request to CDAC to allow OEM Service centre in place of vendor, as Server is the Primary Product category of the bid, so revised clause should be " Vendor/Server OEM should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.	
4	Section II, Page no.6	Section II/ 4. Eligibility Criteria/ k) Past Performance of Similar supplies / work/ (i) The bidder/OEM must have successfully supplied, installed and commissioned servers, HSMs, switches and firewalls to at least 5 nos. of Central / State Govt Organization / PSU / Public Listed Company. Out of these 5 nos. orders, 1 no. of order must include successful supply installation testing and commissioning of HSM.	Query1: To promote wider participation, including MSMEs and Startups, it is requested to relax the requirement of having 5 completed orders and instead allow bidders/OEMs with at least one successfully executed project of similar nature or experience through authorized partnerships or consortiums to participate. This relaxation will encourage new and emerging firms with relevant technical capabilities to contribute innovative and cost-effective solutions. Query2: Kindly provide exemption in purchase order of all components. This clause is restricting the participation of Indian OEMs or MSME vendors to meet the clause to arrange 5 Nos. Past supplies of each items, so our request, to	No Change. As per RFP.

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
			5please allow any one type of Items supply as an past supply experience. Query3: Please revise the clause as -"(i) The bidder/OEM must have successfully supplied, installed and commissioned servers /HSMs /switches /firewalls to at least 5 nos. of Central / State Govt Organization / PSU / Public Listed Company. Out of these 5 nos. orders, 1 no. of order must include successful supply installation testing and commissioning of HSM. Query4: Our request CDAC to, please revise the clause as - "(i) The bidder/OEM must have successfully supplied, installed and commissioned servers /HSMs/ switches/ firewalls to at least 5 nos. of Central / State Govt Organization / PSU / Public Listed Company. Out of these 5 nos. orders, 1 no. of order must include successful supply installation testing and commissioning of HSM".	
5	Section IV, Page no.15	Section IV/A. Server/Sr. No. 1 - Rack Unit Max. up to 1U, Rack mountable	Query1: Please allow Rack unit Max. up to 2U, Rack mountable.	Refer Corrigenda
6	Section IV, Page no.15	Section IV/A. Server/Sr. No. 2 - CPU Dual CPUs populated, each CPU with minimum 32 cores / 64 threads. The processor's Base Clock frequency should be 2.7 GHz or above. It should support virtualization, Hyper Threading and Turbo Boost. The processor launch date should in the year 2023 or after.	Query1: Kindly remove the restriction of CPU launch date, and ammend the cause as - "Dual CPUs populated, each CPU with minimum 32 cores / 64 threads. The processor's Base Clock frequency should be 2.7 GHz or above. It should support virtualization, Hyper Threading and Turbo Boost." Qu	Refer Corrigenda
7	Section IV, Page no.16	Section IV/A. Server/Sr. No. 6 - Hard Disk Drive 1. Populated with minimum 10 nos of 7.68 TB of SATA/SAS/NVMe SSDs. 12 Disks slots/bays with support for SATA/SAS/NVMe SSDs 2. All disks should be hot	Query1: Kindly ammend the clause as "1.Populated with minimum 10 nos of 7.68 TB of SATA /SAS/NVMe SSDs. 12 Front Disks bays with support for SATA,SAS,NVMe SSDs and NL-SAS HDDs by having compatible backplane.	Refer Corrigenda

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
		swappable. 3. Hard Disk should be covered under warranty on nonreturnable basis	2. All disks should be in front and hot swappable. 3. Hard Disk should be covered under warranty on non-returnable basis	
8	Section IV, Page no.16	Section IV/A. Server/Sr. No. 10 - Expansion Slots 2 PCIe 5.0 x16 FH , 2 PCIe,5.0 x 8 and 2 M.2 Expansion Slots. All PCI-e slots must operate at Gen 5 speed when fully populated.	Query1: Please amend the same as " 10. Expansion slots : 2 nos PCIe 5.0 x16 FH , 1 nos PCIe,5.0 x8 and 2 Nos M.2 Expansion Slots. All PCI-e slots must operate at Gen 5 speed when fully populated. These slots should be excluding the standard OCP slots available onboard. Query2: Kindly ammend the clause as "2 PCIe 5.0 x16 , 2 PCIe 5.0 x 8 (all four slots must be FHFL form factor) and 2 M.2 Expansion Slots. All PCIe slots must operate at Gen 5 speed when fully populated." Justification: Necessary modification provisions required IO capability for Servers. Query3: The PCIe slots are always unique to the motherboard design of each OEM and hence the asked slots are advantageous to competition. CDAC should allow both Gen4 and Gen 5 as per Server OEM	Refer Corrigenda
9	SECTION IV - A. Server- Page No. 16	1. Onboard SAS/SATA/NVMe H/W Raid Controller with RAID 0/1/1+0/5/6 support. 2. The offered controller should have a minimum of 4GB Flash Backed Write Cache (FBWC) OR Equivalent 3.It should support RAID configuration through OS (Linux and windows) as well apart from through RAID controller UI. Utilities for the same to be provided. 4.Any additional licenses required for the same should also be supplied. The licenses should be perpetual to use.	Query1: CDAC to clarify what they intend to do with this feature: It should support RAID configuration through OS (Linux and windows) as well apart from through RAID controller UI. Utilities for the same to be provided.	No Change. As per RFP.
10	Section IV, Page no.16	Section IV/A. Server/Sr. No. 11 - Power Supply Redundant hot swappable Power Supplies having	Query1: Pls amend the same as " 11. Power Supplies : Redundant hot swappable Power Supplies having Titanium or better grade	Refer Corrigenda

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
		Titanium or better grade Power Supplies. 1200 Watt	Power Supplies, of required capacity for 100% utilisation of quoted server compute power + additional 10% capacity.	
11	SECTION IV - A. Server- Page No. 16	Section IV/ A. Server/ Sr. No. 14 - Operating Systems Certification Server model should be certified with Windows, Red Hat Enterprise Linux (RHEL), Ubuntu Operating System. Server model must be listed at OS vendor Hardware Compatibility List.	Query1: Our OEM does not have Server model listed at OS vendor Hardware Compatibility List. However they can give the declaration that their servers are certified with Windows, Red Hat Enterprise Linux (RHEL), Ubuntu Operating System	No Change. As per RFP.
12	SECTION IV - A. Server- Page No. 17	Section IV/ A. Server/ Sr. No. 19 - Performance Benchmark 1. SPEC fp_rate_base 2017 >600 2. SPEC int_rate_base 2017 >600 Server OEM must have listed SPEC benchmark score as mentioned above in www.spec.org with the same node model or a model from the similar series, with same CPU configuration as quoted in the bid.	Query1: SPEC fp are the HPC specific parameters and generally asked in the HPC based tenders. Since our OEM does not deal into HPC Servers, they do not have such listing in the www.spec.org. We kindly request you to please remove this clause.	No Change. As per RFP.
13	C. Switch 1 (1 GbE) Sr.3	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 3 - Design & Performance Should have minimum 400 Gbps switching capacity <i>Should be equipped with minimum 16MB Flash and 2GB RAM</i> Should have LED indicator for per port status and redundant AC PSU 0°C to 40°C operating temperature and 10% to 90% relative Humidity Support for Ipv6 configuration from day one The switching system shall have a minimum 32K MAC Addresses and 4K VLAN IDs and 9K Jumbo Frames	Query1: Should be equipped with minimum 12MB Flash and 2GB RAM	Refer Corrigenda

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
14	C. Switch 1 (1 GbE) Sr.4	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 4 - Switching / Routing Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w 802.1x 802.3ad 802.3x 802.1p 802.1Q Should have Port based VLAN, UDLD or equivalent Q-in-Q MAC based VLAN Shall have 802.1p class of service. Should support strict priority queuing and Eight priority queues per port. <i>Switch should support routing protocols like MP-BGP, OSPF (v2, v3), RIP, EVPN, PIM-SSM, BFD, ECMP, VRF, VXLAN overlay from day 1 on the same hardware.</i> Should support Link Layer Discovery Protocol Should support control Plane Policing & Statistics	Query1: Switch should support routing protocols like MP-BGP, OSPF(v2,v3), RIP, PIM-SSM, ECMP, VRF-Lite from day 1 on the same hardware.	No Change. As per RFP.
15	C. Switch 1 (1 GbE) Sr.5	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 5 - Security Should support 802.1x authentication and accounting, ACLs and DoS Attack Protection IGMP(V1/V2) Snooping Should support ACLs using L2 L3 and L4 fields Protection from unnecessary or DoS traffic by using storm control functions for unicast/multicast/broadcast. Should support traffic flow analysis based on Netflow/sFlow/IPfix Switch should support Port Mirroring, Dynamic ARP Inspection or equivalent • Switch should support non-blocking architecture. • <i>Switch should support VSS/VPC/MLAG/McLAG features allowing links that are physically connected to two different switches to appear as a single port</i>	Query1: Switch should support Stacking/VSS/VPC/MLAG/McLAG features allowing links that are physically connected to two different switches to appear as a single port channel.	Refer Corrigenda

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
		channel. Device should support MST, Per VLAN RSTP, BPDU Guard, Loop Guard, DHCP Snooping, Port Security		
16	C. Switch 1 (1 GbE) Sr.10	Section IV/ C. Switch 1 (1 GbE) / Sr. No. 10 - Cables 2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 10G SFP+ MLAG.	Query1: 2 nos. of 3/5Mts LC-LC OM3/OM4 fiber cable for 10G SFP+ Stack/MLAG.	Refer Corrigenda
17	D. Switch 2 (10 GbE) Sr.1	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 1 - Ports 48 numbers of 10 Gbps SFP+ ports fully populated with multimode LC transceivers from day 1; 4x25/40G port for uplink with transceivers	Query1: 48 numbers of 10/25 Gbps SFP ports fully populated with multimode LC transceivers from day 1; 6x40/100G port for uplink with transceivers	Refer Corrigenda
18	D. Switch 2 (10 GbE) Sr.7	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 7 - TCAM Profiling Device should support custom profiling/carving of TCAM hardware resource to support varying use cases.	Query1: Request to delete	No Change. As per RFP.
19	D. Switch 2 (10 GbE) Sr.8	Section IV/ C. Switch 2 (10 GbE) / Sr. No. 8 - Overlay Support Support open standard based protocol VXLAN + EVPN to build Leaf- Spine fabric	Query1: Request to delete	No Change. As per RFP.
20	D. Switch 2 (10 GbE) Sr.10	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 10 - Packet buffer Device should have deep packet buffers of 4GB or more to handle congestion scenarios arising out of TCP incast and varying in-out link speed.	Query1: Device should have deep packet buffers of 32 MB or more to handle congestion scenarios arising out of TCP incast and varying in-out link speed.	No Change. As per RFP.
21	D. Switch 2 (10 GbE) Sr.14	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 14 - Routing Support Switch should support routing protocols like MP-BGP, OSPF (v2, v3), RIP, EVPN, PIM-SSM, BFD, ECMP, VXLAN overlay from day 1 on the same hardware. Should support Link Layer Discovery Protocol	Query1: Switch should support routing protocols like MP-BGP, OSPF (v2, v3), RIP, PIM-SSM, ECMP from day 1 on the same hardware. Should support Link Layer Discovery Protocol	No Change. As per RFP.

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
22	D. Switch 2 (10 GbE) Sr.20	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 20 - OSPF and BGP Support Device should support graceful restart for OSPF and BGP.	Query1: Device should support for OSPF and BGP.	No Change. As per RFP.
23	D. Switch 2 (10 GbE) Sr.21	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 21 - Routing Support Device should support policy based routing (IPv4 & v6), VRRP (IPv4 &v6) and multi-hop BFD.	Query1: Device should support policy based routing (IPv4 & v6), VRRP (IPv4 &v6).	No Change. As per RFP.
24	D. Switch 2 (10 GbE) Sr.22	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 22 - Multicast Support Device should support Multicast with PIM-SM, PIM-SSM, MSDP and anycast-RP.	Query1: Device should support Multicast with PIM-SM, PIM-SSM	No Change. As per RFP.
25	D. Switch 2 (10 GbE) Sr.23	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 23 - MLAG/VPC Support Device should support VSS/VPC/MLAG/McLAG for active-active layer- 2 and layer-3 forwarding while running in VXLAN+EVPN based fabric.	Query1: Device should support Stacking/VSS/VPC/MLAG/McLAG for active-active layer- 2 and layer-3 forwarding	Refer Corrigenda
26	D. Switch 2 (10 GbE) sr.24	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 24 - Symmetric integrated routing support Device should support symmetric Integrated Routed and distributed anycast gateway functionality in VXLAN+EVPN fabric.	Query1: Request to delete	No Change. As per RFP.
27	D. Switch 2 (10 GbE) Sr.25	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 25 - VRF Support Device should support VRF.	Query1: Device should support VRF-Lite.	No Change. As per RFP.
28	D. Switch 2 (10 GbE) Sr.25	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 26 - Routed multicast in EVPN support Device should support routed-multicast/OISM with EVPN for multicast support in VXLAN overlay.	Query1: Request to delete	No Change. As per RFP.

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
29	D. Switch 2 (10 GbE) Sr.33	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 33 - PFC Support Device should support PFC/DCBX	Query1: Request to delete	No Change. As per RFP.
30	D. Switch 2 (10 GbE) Sr.34	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 34 - VOQ Support Device should have virtual output queuing based architecture or equivalent, such that every input port will have a virtual output queue for every output port on the switch.	Query1: Request to delete	No Change. As per RFP.
31	D. Switch 2 (10 GbE) Sr.37	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 37 - Logging Device should support IEEE 1588 PTP boundary clock, SNMP v3, IPFIX/Netflow/SFlow and logging.	Query1: Device should support NTP, SNMP v3, IPFIX/Netflow/SFlow and logging. Query2: PTP is specific OEM Features so kindly remove or allowed NTP/SNTP Query3: Device Supports NTP / SNTP , kindly allow this feature as well. and remove PTP Query4: Kindly ammend clause as "Device should support IEEE 1588 PTP boundary clock /NTP / SNTP, SNMP v3, IPFIX/Netflow/SFlow and logging".	Refer Corrigenda
32	D. Switch 2 (10 GbE) Sr.47	Section IV/ D. Switch 2 (10 GbE) / Sr. No. 47 - Cables 2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 25/40G QSFP+ MLAG	Query1: 2 nos. of 3/5Mts LC-LC OM3/OM4 fiber cable for 25/40/100G QSFP+ MLAG.	Refer Corrigenda
33	Technical Specifications/ Firewall/ Clause No: 20	Section IV/ E. Firewall (in HA Pair) / Sr. No. 20 The proposed NGFW solution should support importing of user accounts for at least 2000 users from OpenLDAP based LDAP server for provisioning SSL-VPN services in more than one Virtual System/Virtual Context/Virtual Firewall simultaneously	Query1: 1. Should the 2000-user capacity be supported per virtual system or shared across all virtual systems? 2. Does the requirement mandate that a single OpenLDAP directory be integrated and used concurrently across multiple virtual firewalls for SSL-VPN provisioning?	No Change. As per RFP.
34	SECTION IV- Point No- E Firewall	Section IV/ E. Firewall (in HA Pair) / Sr. No. 21 The proposed NGFW device should provide the functionality for configuration of SSL-VPN in Tunnel mode along with	Query1: Does CDAC require 2FA for all SSL VPN clients to be integrated with the SSL VPN solution from day one? Query2: Please confirm whether the Firewall and 2FA solution	No Change. As per RFP.

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
	(in HA Pair)	Split tunnelling. In addition, functionalities should be available for configuring Clientless i.e., SSL-VPN as well as 2FA for SSL-VPN services.	should be from the same OEM to ensure tight integration.	
35	Technical Specifications/ Firewall/ Clause No: 34	Section IV/ E. Firewall (in HA Pair) / Sr. No. 34 The proposed NGFW device should provide the functionality of Load Balancing for following traffic types in Round-robin fashion: TCP, UDP, IP, HTTP, HTTPS, and SSL.	Query1: As per industry standards, Next-Generation Firewalls (NGFWs) primarily focus on network security functionalities. Round-robin fashion is typically associated with dedicated load balancers or application delivery controllers (ADCs), and not a native function of most NGFW solutions. 1. Is there a specific use case or scenario that this load balancing functionality is intended to address ? 2. Does this clause means ISP load balancing ? Please help understand the load balancing requirement.	No Change. As per RFP.
36	Technical Specifications/ Firewall/ Clause No: 35	Section IV/ E. Firewall (in HA Pair) / Sr. No. 35 The proposed NGFW device should provide the functionality of integration with SAML based Single Sign-On Service.	Query1: Does the integration with SAML based Single Sign-On service required for VPN ? Please help understanding the use case.	No Change. As per RFP.
37	Technical Specifications/ Firewall/ Clause No: 39	Section IV/ E. Firewall (in HA Pair) / Sr. No. 39 The proposed NGFW device should support VRF for both IPv4 and IPv6.	Query1: Virtual Routing and Forwarding (VRF) is traditionally a routing function used to create multiple logical routing instances on a single physical router. While some next-generation firewalls offer limited VRF-like features or support routing table segmentation, this is not a standard function across all NGFW platforms. To help us understand your exact requirement and propose a suitable solution, we kindly request clarification on the following points:	No Change. As per RFP.
38	Technical Specifications/ Firewall/	Section IV/ E. Firewall (in HA Pair) / Sr. No. 42 The proposed NGFW device should be FIPS 140-2, RoHS and NDPP certified for compliance.	Query1: 1. Is strict NDPP certification mandatory, or will NGFW solutions certified under other recognized security standards under common criteria certification (such as EAL4+ or	No Change. As per RFP.

Sl. No.	Section / Page No.	Clause Reference	Query / Amendment requested	C-DAC Response
	Clause No: 42		NIAP-approved Protection Profiles) be considered compliant? 2. Is there a specific regulatory or operational requirement driving the need for NDPP certification?	
39	Technical Specifications/ Firewall/ Clause No: 44	Section IV/ E. Firewall (in HA Pair) / Sr. No. 44 The proposed NGFW device should have the functionality from day one to support at least 2000 VPN peers each for IPsec (Site-To-Site) IPsec (Client-To-Site) and SSL (Client-To- Site) simultaneously.	Query1: 1. Could you please confirm if all three VPN types (IPsec Site-to-Site, IPsec Client-to-Site, and SSL VPN) are expected to support 2000 concurrent peers each, running simultaneously? 2. Does the requirement imply that the base hardware and licenses should support the full 6000 concurrent VPN sessions from Day 1 without any future upgrades or add-ons? 3. Please clarify the expected use case behind such high concurrent VPN sessions? This will help sizing the appliance.	No Change. As per RFP.
40	Recommendation /Suggestion	Recommendation /Suggestion	Please add: The proposed firewall should have 35 Gbps or more IPS throughput	No Change. As per RFP.



CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING

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Technology, Government of India
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Pune - 411008

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www.cdac.in / mmg@cdac.in

**C-DAC invites ON-LINE bids through
Government e-Marketplace (GeM)**

for

**Supply, Installation, Integration, Testing & Commissioning
(SIITC) of IT Servers, HSMs, Switches and Firewalls
with Support for 5 years**

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SECTION I - INVITATION FOR BIDS (IFB)

1. Introduction

Centre for Development of Advanced Computing (C-DAC) - is a scientific society of Ministry of Electronics & Information Technology, Government of India. C-DAC invites **'ON-LINE' bids through GEM** from eligible bidders for Supply of Servers, HSMs, Switches and Firewalls as per schedule of requirements, terms and conditions stipulated in this document.

2. Contact Information

Materials Management Group,
2nd Floor,
Centre for Development of Advanced Computing (C-DAC),
Innovation Park, PANCHAVATI, Pashan Road, Pune 411009
Tel No.: +91-20-2550 3671, Fax No.: +91-20-25694004
E-mail: mmg@cdac.in

In case of any doubts, and/ or queries about the technical solution, specifications terms and conditions of the tender, the prospective bidder may send their queries in writing through e-mail (mmg@cdac.in). The queries, requests for clarifications etc. must be sent within 7 days from the date of publication of the Tender. The bidders are requested to go through the entire tender document thoroughly, before raising any query. C-DAC, Pune shall address the queries raised by the bidders. The replies to queries would be made available on the portal in due course of time. All the queries, doubts, clarifications etc. must be submitted in xls format only as below.

Name of the bidder:				
Sl. No.	Section / Page No	Clause Reference	Query from bidder	C-DAC Response

3. Documents to be submitted along with bid (Technical Cover)

- Covering letter, as per [Annexure A](#)
- Authority letter, as per [Annexure B](#).
- The undertakings from the Principal Manufacturers (OEMs) of equipment/ items offered as per Annexure - C.
- A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable, in support of eligibility criteria of this document.
- Copies of PAN and GST registration certificates, as applicable.
- Details of EMD amount OR in case of exempted bidders, the Undertaking on bidder's letterhead, towards EMD exemption as per format given in Annexure - E
Non-submission of EMD amount / EMD declaration may result in cancellation of bid.

- g) Copies of documents in support of eligibility requirements stipulated at [point 4 Section- II.](#)
- h) The copies of balance sheets **OR** the certificate from a Chartered Accountant certifying the annual sales turnover of the bidder for the **last 3** financial years.
- i) Undertaking to be submitted as per Annexure - F in compliance to the Make In India order/OM .
- j) Undertaking to be submitted as per Annexure - G in compliance to the Land Border Sharing order/OM
- k) Bidder shall submit the online links / documents, data and specification sheets pertaining to the quoted Hardware and Software.
- l) Integrity pact as per the format provided in [Annexure H](#) to be submitted by the bidder.

Note: C-DAC reserves the right to reject the bid if any of the above listed documents are not submitted.

(END OF SECTION I)

SECTION II - INSTRUCTIONS TO BIDDERS (ITB)

1. Locations for Supply, Installation and Integration

A. Centre for Development of Advanced Computing

C-DAC Innovation Park, Panchavati, Pashan,

Pune - 411 008, Maharashtra (India)

Phone: +91-20-25503100, Fax: +91-20-25503131

B. Centre for Development of Advanced Computing

Tidel Park, 8th Floor,

'D' Block(North & South),

No.4 Rajiv Gandhi Salai, Taramani,

Chennai- 600113, Tamilnadu (India)

Phone:+91-44-22542226/7, Fax: +91-44-22542294

2. Execution and Delivery period

All the scope of work defined in Section-IV should be completed in two stages within 30 days from order placement as given below:

- i) The delivery of all equipment should be completed within **15 days** of award of contract. This includes both locations i.e. Pune and Chennai.
- ii) The next phase of installation, commissioning and acceptance of the equipment should be completed within next **15 days** after delivery of components. This includes both locations i.e. Pune and Chennai.

3. Training

Installation, Integration and hands-on training shall be carried out for all Systems/ Software and other functional aspects pertaining to the projects.

4. Eligibility Criteria

The bidder must comply with each of the following eligibility requirements.

- a) The bidders should upload the required documents / financial instruments as stipulated at [point 3 of Section - I](#).
- b) The bidder must be either a Principal Manufacturer (OEM - Original Equipment Manufacturer) of the items required or their respective Indian subsidiary, or their (OEM's) authorized system integrator/dealer in India.
- c) The Original Equipment Manufacturer (OEM) of the offered product must have a minimum of 5 years of experience in the regular manufacturing and supply of servers.
- d) The OEM or its authorized reseller shall provide documentary proof of having successfully supplied same server product as offered in the bid to any Central/State Government Organization, PSU, or any other government organization
- e) The Bidder should have average annual turnover as mentioned in the GeM bid document for the last three financial years ending on 31st March 2025. Bidder shall submit the supporting documents towards the same.
- f) **Manufacturer authorization:** Manufacturers Authorization Form (MAF)/

Certificate from OEM(s) need to be submitted with details such as Bid No., OEM name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid.

- g) If the bidder is an authorized system integrator/dealer, the specific authorization letter/s from Principal/s, as per Annexure - C must be submitted along with the technical bid. In this case, the authorization letter (Annexure - C) issued by the Indian subsidiary of the Principal Manufacturer is acceptable.
- h) If the bid is submitted by the Indian subsidiary of the Principal Manufacturer (OEM), the letter from the Principal Manufacturer (OEM) must be submitted certifying that the bidder is the subsidiary company of the Principal Manufacturer (OEM) in India.
- i) The Indian agent or System Integrators/dealer and the Principal manufacturer (OEM) of the item cannot bid simultaneously. Further, the OEM is not allowed to quote/ allow to bid/quote their product through SI if they themselves are participating in the bid directly.
- j) Vendor should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune and Chennai for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.
- k) **Past Performance of Similar supplies / work**
 - (i) The bidder/OEM must have successfully supplied, installed and commissioned servers, HSMs, switches and firewalls to **at least** 5 nos. of Central / State Govt Organization / PSU / Public Listed Company. Out of these 5 nos. orders, 1 no. of order must include successful supply installation testing and commissioning of HSM.
 - (ii) The OEM or its authorized reseller shall provide documentary proof of having successfully supplied similar category products to any Central/State Government Organization, PSU, or any other government organization.
 - (iii) HSM OEM should have supplied at least one HSM to Central / State Govt Organization / PSU / Public Listed Company.
 - (iv) Copies of contracts / work orders and documentary evidence of successful execution / completion in support of Past Experience of Similar work along with names, address and contact details signed by clients needs to be submitted by the bidder.
- l) **The bidder must have an average annual sales turnover of Rs. 8 crores (Rs. Eight crores only) for the last three financial years ending F.Y. 2024-25.**
- m) C-DAC reserves the right to verify the documents submitted by the bidder directly with the respective purchaser to confirm the details of the supply and performance.
- n) C-DAC reserves the right to reject a bid if the OEM/bidder has a record of non-fulfilment of contractual obligations or unsatisfactory performance in

any previous contracts with C-DAC, as documented by the respective end-user.

- o) The bidder must quote for all the items required to complete the scope of supplies as given in **Section III** of this document.
- p) The bidder must agree to provide and execute the entire scope of work involved as per [section - IV](#).
- q) The bidder must not be blacklisted by C-DAC or any other Educational / R&D / Govt. Organizations / PSUs, as on date of submission of bids. A certificate or undertaking to this effect must be submitted as per [Annexure A](#).
- r) ***Exemption to MSE & start-up shall be provided for the Turnover Criteria and not on past experience as the procurement is of mission critical project. The necessary applicable experience criteria shall be required.***
- s) The product offered should be in compliance with the Order No.F.7/10/2021-PPD
(1) (Public Procurement No. 4) dated 23.02.2023 issued by Procurement Policy Division, Department of Expenditure, Ministry of Finance, GOI. Bidder has to submit a declaration in this regard as per [Annexure G](#). Also, bidder has to declare the COUNTRY OF ORIGIN OF OEM and COUNTRY OF MANUFACTURING of the offered product as per [Annexure G](#)
- t) As the Make In India Order No. P-45021/2/2017-PP(BE-II)-Part(4)Vol.II dated 19.07.2024 issued by Public Procurement Section, Department of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, Govt. of India, kindly mention the MII (%) of the offered product as per [Annexure F](#). Bidder should declare and abide by the Terms and Conditions of the mentioned [Annexure F](#).
- u) The printed catalogue/leaflet/brochures/ product links, published by the principal manufacturer of the items quoted to be submitted along with the Technical Bid.
- v) C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.
- w) The bidder/OEM to provide a successful installation report from the end user
- x) The bidder must submit the technical compliance sheet/report as per the technical requirements/features, the mandatory conditions, scope of work, benchmarks, stating deviations if any.
- y) Integrity Pact - The bidder is required to enter into an Integrity Pact with C-DAC. For this, the bidder shall submit the scanned copy of signed, stamped and notarized Integrity Pact on minimum Rs. 100 stamp paper, as part of technical bid, failing which, the Proposal submitted by the concerned bidder will be summarily rejected. The original document should be couriered to C-DAC. The format for the Integrity Pact is provided in [Annexure H](#)
Details of IEM is provided below:
 - 1) Shri. M P Johnson - Email ID- johnsonmp1961@gmail.com
 - 2) Shri. Vijay Kumar Singh Email ID - vijaysinghsls10@gmail.com

Note: The bidders should provide necessary and sufficient documentary evidence to

support the eligibility criteria stipulated above. C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.

5. Exemptions

If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements under any Rules, process, Guidelines, Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule, process, Guidelines or Directives. In this case the bidder must submit necessary and sufficient valid documents along with the technical bid, in support of their claim. The decision about granting the exemption/relaxation will be taken by the bid evaluation committee which is empowered to grant exemption/relaxation.

6. Bid Security / EMD

The bidder should submit an EMD amount as mentioned in the GeM bid document. MSE and Start-ups (in case of Original Manufacturer of the required solution) may be exempted from submitting the EMD. Bidder may also submit EMD undertaking as per [Annexure E](#) instead of EMD amount. Bidder seeking exemption towards EMD needs to mandatorily submit the EMD undertaking as per [Annexure E](#).

The EMD shall be forfeited OR actions shall be taken as per the EMD Declaration in following cases:

- 1.1.If the bidder withdraws the bid during the period of bid validity specified in the tender.
- 1.2.In case a successful bidder, fails to furnish the Performance Security (Refer Clause 3 of Section II).
- 1.3.If the bidder fails to furnish the acceptance in writing, within 7 days of award of contract/ order.

7. Purchaser's Right to amend / cancel

- a) C-DAC reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc.
- b) C-DAC reserves the right to cancel the entire tender without assigning any reasons thereof.

8. The legal actions may be taken as per the Declaration in following cases:

- a. If the bidder withdraws the bid during the period of bid validity specified in the tender.
- b. In case a successful bidder, fails to furnish the Performance Security (Refer Clause 3 of Section II).
- c. If the bidder fails to furnish the acceptance in writing, within 7 days of award of contract/ order.

9. Corrupt or Fraudulent Practices

- a) It is expected that the bidders who wish to bid for this project have highest standards of ethics.

- b) C-DAC will reject bid if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract.
- c) C-DAC may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award / execution of contract.

10. Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity/ dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Director General, C-DAC shall be final and binding on all parties.

11. Indemnity:

The successful bidder shall indemnify, protect and save C-DAC from/against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from/arising out of:

- a. infringement of any law pertaining to intellectual property, patent, trademarks, copyrights, safety and security etc. by the bidder or
- b. such other statutory infringements by the successful bidder pertaining to perform the work, or
- c. any act/omission/performance/under or non or part performance/failure of the bidder.

12. Termination

In case of the delay in providing the stipulated supplies / services, and /or defect/under or non- performance pertaining to the services / products supplied by the bidder, C-DAC will give written notice to the bidder requesting to rectify the needful within 15 days of notice. If bidder fails to comply with the requirements, C-DAC shall have the right to terminate the contract and / or cancel the order/s. The successful bidder agrees and accepts that he shall be liable to pay damages claimed by C-DAC, in the event of termination of contract / cancellation of order. The successful bidder may terminate the contract by at least 15 days' written notice, only in the event of non-payment of undisputed invoices for 30 days from the due date. Except this situation, the successful bidder shall have no right of termination.

- a. C-DAC reserves the right to terminate the contract / cancel order with or without cause/ reason, by giving 30 days' notice to the successful bidder.

13. Assignment:

Selected bidder/ Party shall not assign, delegate or otherwise deal with any of its rights or obligation under this Contract without prior written permission of C-DAC.

(END OF SECTION II)

SECTION III - SPECIAL CONDITIONS OF CONTRACT (SCC)

1. Prices

- a) The price shall be considered firm. No price escalation will be permitted (except Govt. Statutory Levies if changed by Govt after submission of the bid).
- b) The prices will be compared on GST-inclusive rates quoted/calculated by the bidder and as per the GeM GTC. In case of errors, the bidders will not be permitted to change the GST percentage.
- c) The prices quoted must be “All inclusive- till destination”, (including local freight, insurance, forwarding, loading/unloading, installation, testing, commissioning and all incidental charges till destination).
- d) The statutory taxes and duties applicable at the time of supply of material shall be applicable if offered.
- e) The responsibility, cost and risk of the consignment shall rest with the bidder till receipt of goods is acknowledged by the end user at site(s). However, such receipt/ acknowledgement shall not be treated as acceptance of goods.

2. Software Licenses: (if applicable)

Software licenses, if any, shall be required in the name host institutes. The licenses shall contain paper/electronic licenses (wherever applicable).

3. Completeness Responsibility

Notwithstanding the scope of work, supply and or services stated in bid document, any equipment or material, engineering or technical services which might not be even specifically mentioned under the scope of supply of the bidder and which are not expressly excluded there from but which - in view of the bidder - are necessary for the performance/ execution of work in accordance with the specifications are treated to be included in the bid and has to be performed by bidder. The items which are over & above the scope of supply specified in the Schedule of Requirements may be marked as “Optional Items” and the details of the same must be provided in their Technical Bids. The price(s) of such item/services / software etc. may be filled in the optional/additional line item of the BoQ.

4. Performance Security

Within 7 days of placement of order on GeM portal, the selected bidder should submit a Performance Security, for an amount equivalent to 5% of the contract/order value. This performance security can be in the form of a Demand Draft or a Bank Guarantee, in the name of C-DAC, Pune for duration of 67 months from the date of successful installation, testing, commissioning and acceptance by C-DAC. The performance security (if submitted in the form of a Bank Guarantee) shall remain valid for a period of 60 days beyond the date of completion of contractual obligations as specified in the order including warranty. The Performance Security will be returned/refunded within two weeks of completion of contractual obligations.

C-DAC reserves the right to invoke the Performance Bank Guarantee(s) submitted by bidder, in case of the following:

- a. The vendor fails to supply/install / test/commission / execute any other associated activity; or
- b. The Item/Components fail to achieve the performance as stipulated in this document or
- c. The bidder fails to provide the warranty and other services in scheduled time frame, as stipulated in this document or
- d. The bidder delays to provide the warranty services as stipulated in this document.

5. Warranty:

The Supplier warrants that all the Goods are new, unused and that they incorporate all recent improvements in design and materials unless provided otherwise in the order. The supplier further warrants that all Goods supplied shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the supplier. The warranty should be comprehensive on site, repair/replacement basis free of cost covering 5 years period after successful supply, installation, testing, commissioning and acceptance by C-DAC. Storage OEM must send the engineers onsite for any hardware replacement and software upgrade.

The supplier also warrants that the said goods would continue to conform to the description and quality aforesaid for a period of min. 5 years from the date of acceptance by the end user and that notwithstanding the facts that the Purchaser/ end user (Inspector) may have inspected and/or approved the said Goods. If during the aforesaid period of 5 years the Goods be discovered not to conform to the description and quality aforesaid or have deteriorated Purchaser will be entitled to reject the Goods or such portion thereof as may be discovered not to conform to the said description and quality. On such rejection, the Goods will be at the supplier's risk and all the provisions herein contained relating to rejection of Goods, shall apply. The supplier if called upon to do so, shall replace within one month or such further period as may be extended by the Purchaser on his discretion on an application made thereof by the supplier the goods or such portion thereof as is rejected by Purchaser and in such an event the above mentioned warranty period shall apply to the Goods replaced from the date of acceptance of the replacement otherwise, the supplier shall pay to the Purchaser such damages as may arise by reason of breach of the conditions therein contained.

All the Goods supplied must have 5 (Five) years onsite comprehensive warranty with 24x7 support along with 8 hours response time and 48 hours resolution time, covering all parts & labor starting from the date after the successful installation and acceptance by C-DAC, Pune. During the warranty period, supplier will have to undertake comprehensive maintenance of all the items/components, support and accessories supplied at the place of installation of the equipment.

The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. Goods requiring warranty replacements must be replaced on free of cost basis.

Onsite comprehensive warranty and support for complete supplies for Five years from the date of acceptance of the solution.

The warranty support will be backed by supplier by submitting a Performance Bank Guarantee.

All items supply shall include 5 (Five) years onsite comprehensive warranty with NBD support under the scope in Section-IV. The following warranty terms shall be uniformly applicable to all supplied devices and components:

- A. All supplied devices shall carry a 5-year onsite comprehensive warranty at no additional cost for change or replacement of parts, labor charges, consumables, shipment, and insurance.
- B. The warranty shall include 24x7 support with a 4-hour response time and Next Business Day (NBD) resolution.
- C. Hardware replacement or resolution shall be completed within 24 hours of issue reporting.
- D. Hard disks provided with all devices shall be covered under warranty on a non-returnable basis.
- E. The warranty shall cover and support all software, firmware, and associated licenses (including all subscribed features) effective from Day One.
- F. Telephonic, Email, and Chat support with a single point of contact for 24x7x365 call logging shall be provided by the OEM, along with an escalation matrix.
- G. The devices shall not go out of support/warranty for at least 2 years after the expiry of the initial warranty period.
- H. All cables and accessories supplied shall be covered under standard warranty and support.
- I. New version upgrades, updates, patches, etc for all the components/ sub-components through the period of contract shall be provided. 24/7 telephonic and email OEM support.

6. Payment Terms

- A) Advance of up to 30% of the order value will be released against an equivalent bank guarantee, valid for 12 months. Applicable TDS will be deducted.

B) Payment will be released as per table given below:

Sr. No.	Milestones	Payment
1	Delivery of all items to the respective delivery locations	80%
2	Installation, commissioning and acceptance	20%

Note: All the payments are subject to submission of the valid and complete tax invoices.

7. Penalty for delayed Delivery /Services

For delayed delivery of the solution the penalty shall be as per GEM standard clause.

For delay in services/support, if the Vendor fails to complete service / rectification with defined time limit, a penalty of 0.5% of total price of the delayed product shall be charged as penalty for each week of delay from the Vendor. Vendor can deposit the penalty with C-DAC directly else the C-DAC shall have a right to recover all such penalty amount from the Performance Security deposit (PBG/ePBG).

C-DAC reserves the right to cancel the order in case the delay is more than 2 weeks. The delay in delivery and/or execution, not attributed to supplier viz. delay in site allocation / availability, delay in submission of required documents (by C-DAC), approval etc. and the conditions arising out of Force Majeure will not be considered for the purpose of calculating penalties.

All delays occurring/envisaged by the vendor need to be intimated at least two weeks in advance from the occurrence (including Force Majeure).

8. Jurisdiction

The disputes, legal matters, court matters, if any shall be subject to Pune jurisdiction only.

9. Force Majeure

C-DAC may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the contract is the result of an Force Majeure. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.), acts of states / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

10. Risk and Ownership

Upon 100% of payment and post successful acceptance testing, C-DAC shall become owners of goods / software ordered.

However, all risks, responsibilities, liabilities thereof in all goods shall remain with selected bidder till installation, commissioning, integration, training and knowledge transfer of all goods to the end user. Part deliveries shall not be treated as deliveries. Only full deliveries of all items ordered will be considered as delivery.

11. Severability

If any provision of this Contract is determined to be invalid or unenforceable, it will be deemed to be modified to the minimum extent necessary to be valid and enforceable. If it cannot be so modified, it will be deleted and the deletion will not affect the validity or enforceability of any other provision.

12. Sub-Contracting

The supplier shall notify the Procuring Entity in writing all subcontracts awarded under the contract. In its original bid or later, such notification shall not relieve the contractor from any of its liability or obligation under the terms and conditions of the contract. Subcontracts must comply with and should not circumvent Contractor's compliance with its obligations as per this tender, based on which the contract was awarded to him.

(END OF SECTION III)

SECTION IV - SCHEDULE OF REQUIREMENTS / SCOPE OF WORK

1. Detailed Scope of Work/Requirements

- i. All the components shall be supplied, installed and integrated at C-DAC, Pune and at C-DAC Chennai
- ii. Bidder should provide all required support for installation and commissioning of all devices.
- iii. Quoted product should not be end-of-life for next 5 years from the date of delivery of items to C-DAC for all the items.
- iv. Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any
- v. Installation, Commissioning, Testing, Configuration (if any - whichever is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorized Reseller/channel-partner.
- vi. Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Vendor has to complete the required Service / Rectification within 3 days' time limit.
- vii. Cumulative Penalty cannot exceed more than 10% of the total contract value after which the C-DAC will have the right to get the service / rectification done from alternate sources at the risk and cost of the vendor besides forfeiture of PBG. Vendor will be liable to re-imburse the cost of such service / rectification to the C- DAC at actuals.
- viii. The vendor will be required to share details of any independent testing and security audit and will be responsible to remediate any vulnerability or defects discovered as part of testing by C-DAC or any agency engaged by C-DAC.
- ix. Bidder need to provide all the updates pertaining to Software (both major and minor releases), Firmware's, Subscriptions, signatures during the warranty period without any additional costs.
- x. The bidder should provide Technical Specifications with compliance status and Remark.
- xi. HSM OEM Professional Services
 - a. Installation, Commissioning, and Configuration

- i. Verify site readiness for implementing HSM devices
- ii. Racking and stacking of devices
- iii. Perform basic configuration (assign IP address, set date & time)
- iv. Initialize the HSMs
- b. Assistance in Backup of Existing Systems
 - i. Support in backing up configurations of any existing HSM or related systems (if applicable)
- c. Deployment and Configuration of New Systems
 - i. Configure network settings, IP addresses, and ports
 - ii. Create HSM partitions
 - iii. Install HSM network client
 - iv. Initialize partitions
 - v. Configure High Availability (HA)
- d. Development support for eSign application integration
 - i. Comprehensive training on SDK and Subject Matter Expertise for C-DAC eSign application stack
 - ii. Address performance issues and optimization
 - iii. Assessment of application flow and mapping of C-DAC eSign application API calls to HSM's SDK (JCE/JNI) calls
 - iv. Development of modules/interfaces for C-DAC's eSign S/W stack.
 - v. Integration with OCSP and TimeStamp Server
- e. Operational Setup
 - i. Assist in setting up operational credentials and keys in the HSM devices, as required
 - ii. Formulation of SoP in alignment with CCA guidelines and current operational manual in effect
- f. Documentation & Handover
 - i. Prepare and deliver final configuration and operational documentation
 - ii. Handover the system to the C-DAC's operations team

A. Server - Quantity: 12

Sr. No.	Parameter	Requirement
1	Rack Unit	Max. up to 1U, Rack mountable
2	CPU	Dual CPUs populated, each CPU with minimum 32 cores / 64 threads. The processor's Base Clock frequency should be 2.7 GHz or above. It should support virtualization, Hyper Threading and Turbo Boost. The processor launch date should in the year 2023 or after.
3	Memory	1. Minimum 512 GB, DDR5 @4800 MHz ECC RDIMM or better, in balanced configuration for maximum performance. Advanced ECC with multi-bit error protection.

Sr. No.	Parameter	Requirement
6	Hard disk drive	1. Populated with minimum 10 nos of 7.68 TB of SATA/SAS/NVMe SSDs. 12 Disks slots/bays with support for SATA/SAS/NVMe SSDs 2. All disks should be hot swappable. 3. Hard Disk should be covered under warranty on non-returnable basis
7	RAID Controller	1. Onboard SAS/SATA/NVMe H/W Raid Controller with RAID 0/1/1+0/5/6 support. 2. The offered controller should have a minimum of 4GB Flash Backed Write Cache (FBWC) OR Equivalent 3. It should support RAID configuration through OS (Linux and windows) as well apart from through RAID controller UI. Utilities for the same to be provided. 4. Any additional licenses required for the same should also be supplied. The licenses should be perpetual to use.
7	Networking features	1. Four 1GbE network ports (Excluding management ports) and 4 no. of 2 meters CAT6 Copper Ethernet cables with factory crimped connectors 2. Two 10GbE SFP+ Network ports populated with transceivers (Excluding management ports) and 2 no. of 3Mts LC-LC patch cable
9	Interfaces	1 VGA port and 2 USB 3.0 ports in rear.
10	Expansion Slots	2 PCIe 5.0 x16 FH , 2 PCIe, 5.0 x 8 and 2 M.2 Expansion Slots. All PCI-e slots must operate at Gen 5 speed when fully populated.
11	Power Supply	Redundant hot swappable Power Supplies having Titanium or better grade Power Supplies. 1200 Watt
12	Fans	Redundant hot-plug system fans
13	Graphics	Integrated graphics controller
14	Operating Systems Certification	Server model should be certified with Windows, Red Hat Enterprise Linux (RHEL), Ubuntu Operating System. Server model must be listed at OS vendor Hardware Compatibility List.
15	Advance BIOS Features	• Server Should have below advance BIOS Features:
		• ACPI 6.4 or latest
		• SMBIOS 3.5 or latest
		• UEFI 2.8 or latest
		• Trusted Platform Module (TPM) version 2.0 or latest
16	Server Management	• Server should have dedicated 1Gbps remote management port.
		• Support for IPMI, SNMPv3 to get alerts/traps
		• Web console for base board mgmt.
17	Rack mounting	• The server should fit in Standard 42 U, 19" rack
		• Rack mounting sliding rail Kit should be provided
		• IEC 13/14 type power cables

Sr. No.	Parameter	Requirement
18		Power cable: required no. of C13-14 power cables with each server for redundancy. Server should configure with Trusted Platform Module (TPM) version 2.0 or latest.
19	Performance Benchmark	1. SPEC fp_rate_base 2017 >600 2. SPEC int_rate_base 2017 >600 Server OEM must have listed SPEC benchmark score as mentioned above in www.spec.org with the same node model or a model from the similar series, with same CPU configuration as quoted in the bid.

B. HSM - Quantity:6

Sr. No.	Parameters	Requirement
1.	Physical Characteristics	19 Inch Rack Mount with a maximum size of 1U along with rack mounting kit, Input Voltage - 230 V AC 50 Hz, Operating Temperature range must include 15 degrees Centigrade to 35-degree centigrade, Operating humidity range must be better than 30 to 70 (RH) Non condensing at 35 degree centigrade, Protection against physical attacks such as use of potting of critical components, tamper evident security labels etc.
2.	Supported operating Systems	Programming APIs must be available for Windows and Linux, Should be configurable to communicate only with authenticated servers.
3.	Host connectivity	TCP/IP Network based 2 nos. of 1 Gigabit Copper interface and 2 nos. of 10GbE Fiber interface.
4.	Safety, security and environmental compliance	Compliance to standards like RoHS, UL, CE, FCC
5.	Hash/message digest	Minimum SHA-1, SHA-2 (224, 256 and 384)
6.	Cryptography Symmetric	Symmetric Algorithm: AES, 3 DES (2 Key and 3 Key)
7.	Cryptography Asymmetric	Cryptographic algorithms: Diffie-Hellman, RSA (2048, 4096 bit), DSA
8.	Cryptography ECC	Full Suite B implementation with fully licensed Elliptic Curve Cryptography (ECC), ECDSA and ECDH
9.	Cryptographic module security and certification	1. Compliance to FIPS 140-2 Level 3, Password and Multi-Factor 2. FIPS 140-2 Level 3 (FIPS certificate should be on proposed HSM OEM name only and third party FIPS certification will not be considered) 3. HSM OEM shall upgrade the Firmware to FIPS 140-3 Level 3 at no additional cost before the sunset of FIPS 140-2 Level 3. An undertaking should be submitted by OEM along with the bid stating that

Sr. No.	Parameters	Requirement
		HSM Model quoted for supply meets all FIPS 140-3 requirements and shall only require on-field firmware upgrade for compliance to FIPS 140-3 Level 3. 4. OEM should also submit an undertaking stating the current status of achieving the FIPS 140-3 certification from NIST approved labs and completion date. 5. Proposed HSM OEM must have developed the HSM firmware and all HSM client libraries by their own and must provide Level 3 support including patches & the security updates on time-to-time basis. (Self-declaration on the organization's letterhead duly signed by the signatory authority should be submitted as documentary evidence). 6. Proposed HSM must be certified as per global standards like CC EAL (Evaluation Assurance Level), etc. for better security assurance, especially for critical processes SDLC & STLC.
10.	Min. Memory within HSM (MB)	8 MB
11.	Number of Partitions within HSM	10
12.	Number of Partitions Expandable up to within HSM	100
13.	Key Storage Area	Inside and outside the HSMs with FIPS 140-2 level3 cryptography boundary
14.	Application Interfaces (APIs)	Compatibility: PKCS#11, OpenSSL, Java (JCE), C and C++, Compatible to interface with opensource based CA software like OpenCA and EJBCA
15.	Key Generation and Storage	1. Ability to generate and store ECC P256 minimum 1000 keys on board on demand 2. Key generation speed RSA (2048bit) 10 keys/sec or more 3. Key generation speed ECC (256 bit) 1000 keys/sec or more
16.	Signing Performance	Minimum ECC-P256 20000 and RSA-2048 10000
17.	Access control	Authenticated multi-level access control, Protection for configurability using secure devices such as smart card and USB token, Roles - Support for role-based access control (minimum 2 roles). HSM should

Sr. No.	Parameters	Requirement
		be provided with required tokens or smart cards as applicable.
18.	Load Balancing	Clustering, load-balancing
19.	Key back up	1. The HSM should provide backup and restore of keys across multiple HSMs at different data center for disaster recovery. 2. The HSM should be provided with required tokens or smart cards or FIPS 140-2 level 3 compliant backup device to take backup of HSM stored keys.
20.	Support for multiple HSMs	Multiple HSMs to be supportable for DR, key backup, key update, and key processes, load balancing and failover
21.	Power source	Dual hot-swap power supplies, field serviceable
22.	Monitoring	Storing of event-based audit logs and standard mechanisms for viewing logs
23.	CLI / GUI	Command line interface (CLI) and graphical user interface (GUI)
24.	Custom Client Algorithm	1. HSM should provide a licensing mechanism that supports the upload of custom client algorithms and the ability to update firmware as needed.
25.	Reliability	MTBF: Minimum 40000 hrs
26.	Licenses	Supply should include all the necessary licenses required for meeting the above specifications.
27.	Rack mounting	HSM should mountable and fit in standard 42 U, 19" rack Mounting sliding rail Kit and with cable manager
28.	Packaging contents	1. Supply with User manual or links 2. Server Rail Kit with screws. 3. IEC type power cables
29.	PQC Feature	1. HSM must be able to support PQC including Stateful and Stateless hashing algorithm with a clear roadmap towards quantum resistance HSM (HSM firmware must be PQC ready) from day one. 2. HSM must be able to support PQC including Stateful and Stateless hashing algorithm with a clear roadmap towards quantum resistance HSM (HSM firmware must be PQC ready) from day one

C. Switch 1 (1 GbE) - Quantity:2

Sr. No.	Parameters	Specifications
1.	General Requirements	IPv6 Ready.
		Compatible to 19" rack mountable - 1RU Switch
2.	Interface requirements	- Minimum of 48 ports one gig ethernet Base-T ports and 4x 10G SFP+ uplink ports with required transceivers - Dedicated stacking ports/MLAG with minimum 80 Gbps stacking bandwidth should be available. - Cables should be provided from day 1.
		1 x Out of Band IP based management Port /Console Port.
3.	Design & Performance	Should have minimum 400 Gbps switching capacity
		Should be equipped with minimum 16MB Flash and 2GB RAM
		Should have LED indicator for per port status and redundant AC PSU
		0°C to 40°C operating temperature and 10% to 90% relative Humidity
		Support for Ipv6 configuration from day one
		The switching system shall have a minimum 32K MAC Addresses and 4K VLAN IDs and 9K Jumbo Frames
4.	Switching / Routing	Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w 802.1x 802.3ad 802.3x 802.1p 802.1Q
		Should have Port based VLAN, UDLD or equivalent Q-in-Q MAC based VLAN
		Shall have 802.1p class of service. Should support strict priority queuing and Eight priority queues per port.
		Switch should support routing protocols like MP-BGP, OSPF (v2, v3), RIP, EVPN, PIM-SSM, BFD, ECMP, VRF, VXLAN overlay from day 1 on the same hardware.
		Should support Link Layer Discovery Protocol
		Should support control Plane Policing & Statistics
5.	Security	Should support 802.1x authentication and accounting, ACLs and DoS Attack Protection IGMP(V1/V2) Snooping
		Should support ACLs using L2 L3 and L4 fields
		Protection from unnecessary or DoS traffic by using storm control functions for unicast/multicast/broadcast.
		Should support traffic flow analysis based on Netflow/sFlow/IPfix
		Switch should support Port Mirroring, Dynamic ARP Inspection or equivalent
		- Switch should support non-blocking architecture. - Switch should support VSS/VPC/MLAG/McLAG features allowing links that are physically connected to two different switches to appear as a single port channel.
		Device should support MST, Per VLAN RSTP, BPDU Guard, Loop Guard, DHCP Snooping, Port Security.

Sr. No.	Parameters	Specifications
6.	High Availability	VRRP, active-active, active-passive operation Software upgrades with minimal traffic disruption during the upgrade LAG load balancing based on L2 Ipv4 or Ipv6 headers
7.	Management	Switch should support management features like web-based GUI, CLI, Telnet, SSHv2 SNMPv2c SNMPv3 SSHv1/2 TACACS+ AAA, Radius Switch should support API Driven configuration and support Netconf/ YANG/REST API or equivalent data model. It should support automation tool like python. • Should support configuration commit/check/rollback for ease of operations and management. • Switch OS should support configuration management through Puppet/ chef/Rest API/Python and ansible. • The switch should support onboard tcpdump/Wireshark for troubleshooting purpose and should support mirroring to L3 destination.
8.	Certification	• IEC61000*/EN61000*, UL/CE or equivalent certifications Indian bodies i.e., TEC/TSEC, STQC, BIS or any Indian accredited lab for quoted product. • Datasheet for the same must be submitted with technical bid. • All the licenses should be perpetual.
9.	Power Supply	• Supply should include embedded desirable dual power supply. • Switch shall have a hot swappable 1:1 redundant internal power supply and redundant fan.
10.	Cables	• 2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 10G SFP+ MLAG.

D. Switch 2 (10 GbE) - Quantity:2

Sr.No	Parameters	Specification
1.	Ports	48 numbers of 10 Gbps SFP+ ports fully populated with multimode LC transceivers from day 1; 4x25/40G port for uplink with transceivers
2.	L2 & L3 Forwarding	Device should support wire rate L2 and L3 forwarding.
3.	Form factor	Device should be non-chassis based and should have support for virtual chassis.
4.	Switching Capacity	Device should have switching capacity of 720 Gbps or better.
5.	Throughput	Device should have throughput of 500 MPPS or better.
6.	Architecture	Device should be based on industry standard virtual output queue or equivalent based architecture to avoid head-of-line blocking issues.
7.	TCAM profiling	Device should support custom profiling/carving of TCAM hardware resource to support varying use cases.
8.	Overlay	Support open standard based protocol VXLAN + EVPN to build Leaf-

Sr.No	Parameters	Specification
	support	spine fabric.
9.	Distributed gateway	The Leaf-spine fabric should support distributed gateway based architecture with support for symmetric integrated routing and bridging.
10.	Packet buffer	Device should have deep packet buffers of 4GB or more to handle congestion scenarios arising out of TCP incast and varying in-out link speed.
11.	MAC Table	Device should be able to support up to 32K MAC address or more.
12.	VLAN Support	Device should support 4K VLANs, 9K bytes Jumbo frame.
13.	Switching Support	Device should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w 802.1x 802.3ad 802.3x 802.1p 802.1Q Device should have Port based VLAN, UDLD or equivalent Q-in-Q. Shall have 802.1p class of service. Should support strict priority queuing and Eight priority queues per port.
14.	Routing Support	Switch should support routing protocols like MP-BGP, OSPF (v2, v3), RIP, EVPN, PIM-SSM, BFD, ECMP, VXLAN overlay from day 1 on the same hardware. Should support Link Layer Discovery Protocol
15.	STP Support	Device should support MST, per-vlan RSTP, BPDU Guard, Loop Guard.
16.	Link Support	Device should support LLDP and LACP to bundle links and detect mis-cabling issues.
17.	ECMP Support	Device should support minimum 32-way ECMP.
18.	Routing Support	Device should be able to support 16K IPv4 routes and 8K IPv6 routes
19.	Routing Protocols	Device should support OSPF (IPv4 & IPv6), BGP, BGP monitoring protocol.
20.	OSPF and BGP Support	Device should support graceful restart for OSPF and BGP.
21.	Routing Support	Device should support policy based routing (IPv4 & v6), VRRP (IPv4 & v6) and multi-hop BFD.
22.	Multicast Support	Device should support Multicast with PIM-SM, PIM-SSM, MSDP and anycast-RP.
23.	MLAG/VPC Support	Device should support VSS/VPC/MLAG/McLAG for active-active layer-2 and layer-3 forwarding while running in VXLAN+EVPN based fabric.
24.	Symmetric integrated routing support	Device should support symmetric Integrated Routed and distributed anycast gateway functionality in VXLAN+EVPN fabric.
25.	VRF Support	Device should support VRF.
26.	Routed multicast in EVPN support	Device should support routed-multicast/OISM with EVPN for multicast support in VXLAN overlay.
27.	Authentication and Authorization	Device should support Role based access control, AAA with TACACS+ and RADIUS.

Sr.No	Parameters	Specification
	Support	
28.	ACL Support	Device should support ACL with Layer-2, L3 and L4 parameters.
29.	ACL Support	Device should have support 8K or more ingress/egress hardware ACL entries.
30.	Control plane protection	Device should support control plane policing to safeguard system from DOS attacks.
31.	QoS	Device should support policing, shaping, Marking, DSCP/COS classification and ACL based classification.
32.	Scheduling	Device should support priority queuing.
33.	PFC Support	Device should support PFC/DCBX.
34.	VOQ Support	Device should have virtual output queuing based architecture or equivalent, such that every input port will have a virtual output queue for every output port on the switch.
35.	Automation/API	Should advance automation with support for API.
36.	SNMP Support	Device should support streaming telemetry that is not dependent on SNMP, for example device should be able to stream CPU process information, LLDP information and much more.
37.	Logging	Device should support IEEE 1588 PTP boundary clock, SNMP v3, IPFIX/Netflow/SFlow and logging.
38.	Troubleshooting	Device should support onboard tcpdump/wireshark for troubleshooting purpose and should support mirroring to L3 destination.
39.	Path Management	Should support measure the two-way metrics such as delay, jitter, packet loss rate between two network elements using IP SLA or Two-Way Active Measurement Protocol (TWAMP) as per RFC 5357.
40.	Transceiver	For Seamless Integration, Interoperability and smooth functioning, the proposed Layer 3 core switch and its Transceiver Modules should be all from same OEM.
41.	LED Indicators	The proposed device should have LED indicator for per port status.
42.	Certificates	The proposed device should have safety and standards certifications as below: RoHS, UL/CE or Equivalent and FCC CFR 47 Part 15 OR equivalent, IEC61000*/EN61000* or equivalent certifications Indian bodies i.e., TEC/TSEC, STQC, BIS or any Indian accredited lab for quoted product.
43.	Power Supply	The active components of the proposed solution should have redundant hot swappable power supplies from day 1.
44.	Management Port	The active components of the proposed Network solution should have minimum one Out-of-Band (OoB) RJ45 and USB console port
45.	Power input	The active components of the proposed Network solution should operate at AC ~50Hz, 220-240V. Switch shall have a hot swappable 1:1 redundant internal power supply and redundant fan.

Sr.No	Parameters	Specification
46.	Environmental Features	The active components of the proposed Network solution should be capable of operating between 0°C to 40°C temperature and 10% to 90% relative humidity conditions.
47.	Cables	2 nos. of 5Mts LC-LC OM3/OM4 fiber cable for 25/40G QSFP+ MLAG.

E. Firewall (in HA Pair) - Quantity: 1(Firewall Solution)

The firewall solution shall comprise 2 units to be deployed at C-DAC Pune and C-DAC Chennai, one at each location. In the BoQ document, it is mentioned as a quantity of one at Sr. no.5 of the BOQ document; however, it should be interpreted as 4 firewalls in total – 2 at each site in HA configuration. The price should be quoted for all 4 units under firewall category.

Sr.No.	Parameter/Specification
1.	The proposed NGFW device should have at least 10 Gbps Threat Protection Throughput. The 10Gbps Threat Protection Throughput needs to be achieved with following features enabled for the Enterprise Traffic Mix for different packet size transactions. (a) Firewall (b) IPS (c) Application Control (d) Malware protection (Anti-Malware, Anti-Virus, Anti- Spyware, Anti-Bot) (e) Logging enabled (f) URL Filtering
2.	The proposed NGFW device should have the form factor of One RU or better.
3.	The proposed NGFW device should provide the functionality for at least the following features. a. Layer 3 - Layer 4 b. NAT c. VPN d. Application Visibility and Control (AVC) e. User Identity f. Next Generation Intrusion Prevention System (IPS) g. Zero Day Protection / Advance Malware protection h. Web Security Essentials / URL Filtering

4.	The proposed NGFW device should have the functionality to handle at least TCP & UDP traffic.
5.	The proposed NGFW device should handle packets of size 1024 KB or lower.
6.	The proposed NGFW device should handle 4 Million or higher concurrent sessions.
7.	The proposed NGFW device should handle at least atleast 180K new sessions per second.
8.	The proposed NGFW device should have at least eight (8) numbers of 1 Gbps Copper interface, eight (8) numbers of 10 Gbps SFP+ interface. (Required transceiver need to be factored by bidder).
9.	The proposed NGFW device should have at least the Active-Active (A-A) High-Availability (HA) functionality.
10.	The proposed NGFW device should be provided with licenses for at least the following functionalities. a. Web Security Essentials / URL Filtering b. IPS c. Application Visibility d. Advance Persistent Threat (Anti Malware Protection, C& C attacks, Geo IP Protection, Zero Day Threat Protection) e. Gateway Anti-virus
11.	The proposed NGFW device should have the functionality of supporting at least 10K NGIPS signature.
12.	The proposed NGFW device should provide the security intelligence for at least IP, URL and Domain.
13.	The proposed NGFW device should be IPv6 ready from day 1.
14.	The proposed NGFW device should come with on-site OEM warranty for at least five (5) years.
15.	The proposed NGFW device should provide the functionality of Virtual System/Virtual Context/Virtual Firewall wise Administrator delegation, Backup and restoration of configurations. The solution should include perpetual licenses for at least 10 Virtual System/Virtual Context/Virtual Firewall.
16.	The proposed NGFW device should provide the functionality of Operation mode as NAT for all Real(root) as well as Virtual System/Virtual Context/Virtual Firewall.
17.	The proposed NGFW device should provide the functionality of NGFW features along with VPN, etc. for all Virtual System / Virtual Context / Virtual Firewall and not just the Layer '3' firewall functionality. The Virtual System / Virtual Context / Virtual Firewall should be made available on the NGFW device itself. Any hardware or software licenses required to manage the NGFW device and Virtual System / Virtual Context / Virtual Firewall should be Perpetual and made available from day one (1).
18.	The proposed NGFW device should provide the functionality of integration with based OpenLDAP, Active Directory, SMTP, NTP servers.
19.	The proposed NGFW device should support integration with multiple (at least 5) OpenLDAP based LDAP servers.

20.	The proposed NGFW solution should support importing of user accounts for at least 2000 users from OpenLDAP based LDAP server for provisioning SSL-VPN services in more than one Virtual System/Virtual Context/Virtual Firewall simultaneously.
21.	The proposed NGFW device should provide the functionality for configuration of SSL-VPN in Tunnel mode along with Split tunnelling. In addition, functionalities should be available for configuring Client-less i.e., SSL-VPN as well as 2FA for SSL-VPN services.
22.	The proposed NGFW device should provide the functionality of integration with Linux based Rsyslog server for Real or Near Real Time logging on an external system.
23.	The proposed NGFW device should provide the functionality of integration with monitoring systems using SNMP versions 1 or 2c and 3.
24.	The proposed NGFW device should have the functionality to render HTML pages like URL block page and any other custom page based on scenarios.
25.	The proposed NGFW device should have the functionality to capture network packets for all interfaces (real as well as virtual). In addition,
26.	functionality should be available to apply filters at least such as IP addresses and Port Numbers.
27.	The proposed NGFW device should provide the functionality of Policy Based Routing (PBR).
28.	The proposed NGFW device should provide the functionality for the following Security Profiles: (Malware protection, Web Filter, App control, IPS, SSL Inspection) for main as well as all Virtual System/Virtual Context/Virtual Firewall simultaneously.
29.	The proposed NGFW device should support SSL Deep Packet Inspection for TLS v1.3 traffic for root as well as all Virtual System/Virtual Context/Virtual Firewall simultaneously.
30.	The proposed NGFW device should provide the functionality for creation of policies/rules based on IPv4, IPv6, NAT64, Schedule, IPv4 DoS, IPv6 DoS, Address objects grouping, custom service port definition objects.
31.	The proposed NGFW device should include full support for DNS64.
32.	The proposed NGFW device should provide the functionality of Traffic shaping and Traffic shaping policies.
33.	The proposed NGFW device should provide the functionality for redirecting traffic from the Internet to a server on a network behind the NGFW device.
34.	The proposed NGFW device should provide the functionality of Load Balancing for following traffic types in Round-robin fashion: TCP, UDP, IP, HTTP, HTTPS, and SSL.
35.	The proposed NGFW device should provide the functionality of integration with SAML based Single Sign-On Service.
36.	The proposed NGFW device should support IEEE 802.1q (VLAN Tagging) and VLANs on all Ethernet based interfaces (on board as well as add-on interfaces) with at least 1024 VLANs.
37.	The proposed NGFW solution should be configurable as Explicit Proxy for HTTP/s.

38.	The proposed NGFW device should support BGP and OSPF for both IPv4 and IPv6.
39.	The proposed NGFW device should support VRF for both IPv4 and IPv6.
40.	The proposed NGFW device should provide functionality to support integration with OpenStack based on-premise private cloud.
41.	The proposed NGFW solution should include full-fledged Logging and Reporting engine which should be either in-built in the NGFW or can be proposed as an external appliance with minimum 12 TB of usable file system space from SSD or HDD in RAID 1/5/10 for logging of historical logs. If any additional hardware along with licenses and support are required, bidders need to propose a hardware appliance (at most 1 Rack Unit) along with licenses and support for the same from day one and for warranty term chosen by C-DAC at the time of finalization.
42.	The proposed NGFW device should be FIPS 140-2, RoHS and NDPP certified for compliance.
43.	The proposed NGFW device should have the SSD capacity of at least 240 GB from day one.
44.	The proposed NGFW device should have the functionality from day one to support at least 2000 VPN peers each for IPsec (Site-To-Site) IPsec (Client-To-Site) and SSL (Client-To- Site) simultaneously.
45.	The proposed NGFW solution should include all the required licenses along with subscription for full enablement of services and functionalities asked as per bid and corrigendum/s.
46.	The bidder should supply the fully-compatible transceiver modules from the same OEM as that of NGFW device for all ports of the NGFW device from day 1.
47.	For Seamless Integration, Interoperability and smooth functioning, the proposed NGFW, its Transceiver Modules and Logging and Reporting engine appliance should be all from same OEM.
48.	The active components of the proposed Network solution should have redundant hot swappable power supplies from day 1.
49.	The active components of the proposed Network solution should have minimum one Out-of-Band (OoB) RJ45 based Management port.
50.	The active components of the proposed Network solution should operate at AC ~50Hz, 220-240V.
51.	The active components of the proposed Network solution should be capable of operating between 0°C to 40°C temperature and 10% to 90% relative humidity conditions

(END OF SECTION IV)

SECTION V - BOQ / BOM Details
(To be submitted with Technical Bid)

- (1) Bill of Quantities along with Bill of Material to be submitted as per the following table for the offered product by the bidder.
- (2) These exact details to be filled in the MII declaration as well as provided under ANNEXURE F
- (3) Any change request (i.e., for brand/model) at later stage shall not be entertained.

Item No.	Item Title	Item Description	Item Qty	Offered Make	Offered Model
1	Servers	1U Rack Mountable Servers as per ATC	12		
2	HSM	Network Hardware Security Module (HSM)	6		
3	Switch 1	1 GbE Network Switch as per ATC	2		
4	Switch 2	10 GbE Network Switch as per ATC	2		
5	Firewall	Firewall as per ATC **	1		
6	Any other item	Any other item to complete the solution	1		
7	Any other component	Any other component required to complete the solution	1		
8	Installation / Testing / Commissioning etc.	As per RFP ask, installation / testing / commissioning etc. as required.	1		

** The firewall solution shall comprise 2 units to be deployed at C-DAC Pune and C-DAC Chennai, one at each location. In the BoQ document, it is mentioned as a quantity of one at Sr. no.5 of the BOQ document; however, it should be interpreted as 4 firewalls in total – 2 at each site in HA configuration. The price should be quoted for all 4 units under firewall category.

(END OF SECTION V)

SECTION VI - FINANCIAL BID DOCUMENT

(To be submitted along with financial quote on the GeM portal
duly signed and stamped on bidder's letterhead)

Item No.	Item Title	Item Description	Item Qty	Unit of Measure	Consignee ID	Delivery Period (In number of days)
1	Servers	1U Rack Mountable Servers as per ATC	12	pieces	vinayaks	30
2	HSM	Network Hardware Security Module (HSM)	6	pieces	vinayaks	30
3	Switch 1	1 GbE Network Switch as per ATC	2	pieces	vinayaks	30
4	Switch 2	10 GbE Network Switch as per ATC	2	pieces	vinayaks	30
5	Firewall	Firewall as per ATC	1	pieces	vinayaks	30
6	Any other item	Any other item to complete the solution	1	Pieces/ lumpsu m	vinayaks	30
7	Any other component	Any other component required to complete the solution	1	pieces/ lumpsu m	vinayaks	30
8	Installation / Testing / Commissioning etc.	As per RFP ask, installation / testing / commissioning etc. as required.	1	pieces/ lumpsu m	vinayaks	30

(END OF SECTION VI)

SECTION VII - ANNEXURES

ANNEXURE A - COVERING LETTER

Date:

To:

The Centre Head

Centre for Development of Advanced Computing (C-DAC)

Innovation Park, Panchavati, Pashan Road,

Pune - 411008 Maharashtra, INDIA

Subject:

Reference:

Dear Sir,

We, the undersigned, offer to, in response to your GEM Bid & We are hereby submitting our proposal for same, which includes Technical bid and the Financial Bid through [GEM](http://gem.gov.in) (gem.gov.in) portal.

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

We undertake, if our proposal is accepted, to submit a **Performance Security of 5%** of the contract / order value, as per terms stipulated in the tender.

We confirm that the deliveries, installation will be done within **30 days** if the order is placed. The Post Warranty CAMC charges are not beyond 10% of the hardware and software items, as per requirements.

We hereby certify that my/ our firm has not been disqualified and / or blacklisted by any Office/ Department/ Undertaking of the State Government / Central Govt. of India, PSU/ Autonomous Body of Government of India, as on the date/time of submission of this bid.

We agree to abide by all the terms and conditions of the tender document, including corrigenda. We would hold the terms of our bid valid for 120 days as stipulated in the tender document.

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

The undersigned is authorized to sign this bid document. The authority letter to this effect is enclosed.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:

ANNEXURE B - AUTHORITY LETTER

Date:

To:

The Centre Head

Centre for Development of Advanced Computing (C-DAC)

Innovation Park, Panchavati, Pashan Road,

Pune - 411008 Maharashtra, INDIA

Subject: Authority Letter

Reference: GEM Bid Ref No.

Dear Sir,

We, M/s _____ (Name of the bidder) having registered office at _____ (address of the bidder) herewith submit our bid against the said tender document.

Mr./Ms. _____ (Name and designation of the signatory), whose signature is appended below, is authorized to sign and submit the bid documents on our behalf against said RFP

Specimen Signature:

The undersigned is authorised to issue such authorisation on behalf of us.

For M/s _____ (Name of the bidder)

Signature and company seal

Name

Designation

Email

Mobile No.

ANNEXURE C - UNDERTAKING(S) BY PRINCIPAL MANUFACTURER/OEM

(To be submitted in Original on Letterhead)

Date:

The Centre Head,
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune - 411008 Maharashtra, INDIA

Subject: Undertaking by Principal Manufacturer against GEM Bid &for
Supply, Installation, Testing and Commissioning of

Dear Sir,

We, M/s _____ (Name of the manufacturer) having registered office at _____ (address of the manufacturer) by virtue of being manufacturer for _____ (Name of the product/s), hereby certify that M/s _____ (Name of the bidder) having their office at _____ (Address of bidder) are our Authorised System Integrator/dealer for our range of products quoted by them, including post warranty support (CAMC) for, 6th & 7th year, if opted.

Within the scope of requirement as per the tender mentioned above, we undertake to provide technical & other support towards fulfilling the requirements of installation, acceptance criteria and product warranty services of the components, including post warranty support (CAMC) for 6th & 7th year, if opted; to be supplied and installed at C-DAC, Pune by M/s.....(Name of bidder)against said tender.

We also certify that the products offered are not nearing end-of-life / end-of-support five years down the line from the date of bidding.

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

For M/s _____ (Name of the manufacturer)

Signature & company seal

Name

Designation

Email

Mobile No.

ANNEXURE D - PROFORMA OF BANK GUARANTEE

(On non-judicial paper of appropriate value)

To,
The Centre Head
Centre for Development of Advanced Computing
Innovation Park, PANCHAVATI,
Pashan Road, Pune - 411 008

BANKS GUARANTEE NO:

DATE:

Dear Sir(S)

This has reference to the Purchase Order No. _____ Dated _____ been placed by Centre for Development of Advanced Computing(C-DAC), Pune on M/s _____ (Name & Address of vendor) for supply, installation, commissioning and warranty of _____ (description of items) at C-DAC, Pune.

The conditions of this order provide that the vendor shall,

1. Arrange to deliver the items listed in the said order to the consignee, as per details given in said order, and
2. Arrange to install and commission the items listed in said order at client's site, to the entire satisfaction of C-DAC and
3. Arrange for the comprehensive warranty service support towards the items supplied by vendor on site as per the warranty clause in said purchase order.

M/s (Name of Vendor) has accepted the said purchase order with the terms and conditions stipulated therein and have agreed to issue the performance bank guarantee on their part, towards promises and assurance of their contractual obligations vide the Supply Order No. _____ M/s. _____ (name of vendor) holds an account with us and has approached us and at their request and in consideration of the promises, we hereby furnish such guarantees as mentioned hereinafter.

C-DAC shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other undertaking of security in respect of the bidders obligations and / or liabilities under or in connection with the said contract or to vary the terms vis-a - vis the bidder or the said contract or to grant time and or indulgence to the bidder or to reduce or to increase or otherwise vary the prices or the total contract value or to forebear from enforcement of all or any of the obligations of the bidder under the said contract and/or the remedies of C-DAC under any security now, or hereafter held by C-DAC and no such dealing(s) with the bidder or release or forbearance whatsoever shall have the effect of releasing the bank from its full liability of C-DAC hereunder or of prejudicing right of C-DAC against the bank.

This undertaking guarantee shall be a continuing undertaking guarantee and shall remain valid and irrevocable for all claims of C-DAC and liabilities of the supplier arising up to and until _____ (date)

This undertaking guarantee shall be in addition to any other undertaking or guarantee or security whatsoever that C-DAC may now or at any time have in relation to its claims or the supplier's obligations/liabilities under and / or in connection with the said contract and C-DAC shall have the full authority to take recourse to or enforce this undertaking guarantee in preference to the other undertaking or security (ies) at its sole discretion and no failure on the part of C-DAC in enforcing or requiring enforcement of any other undertaking or security shall have the effect of releasing the bank from its full liability hereunder.

We _____ (Name of Bank) hereby agree and irrevocably undertake and promise that if in your (C-DAC's) opinion any default is made by M/s _____ (Name of Vendor) in performing any of the terms and /or conditions of the agreement or if in your opinion they commit any breach of the contract or there is any demand by you against M/s _____ (Name of Vendor), then on notice to us by you, we shall on demand and without demur and without reference to M/s _____ (Name of Vendor), pay you, in any manner in which you may direct, the amount of Rs. _____/- (Rupees _____ Only) or such portion thereof as may be demanded by you not exceeding the said sum and as you may from time to time require. Our liability to pay is not dependent or conditional on your proceeding against M/s _____ (Name of Vendor) and we shall be liable & obligated to pay the aforesaid amount as and when demanded by you merely on an intimation being given by you and even before any legal proceedings, if any, are taken against M/s _____ (Name of Vendor)

The Bank hereby waives all rights at any time inconsistent with the terms of this undertaking guarantee and the obligations of the bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the supplier (whether or not pending before any arbitrator, Tribunal or Court) or any denial of liability by the supplier or any order or any order or communication whatsoever by the supplier stopping or preventing or purporting to stop or prevent payment by the Bank to C-DAC hereunder.

The amount stated in any notice of demand addressed by C-DAC to the Bank as claimed by C-DAC from the supplier or as suffered or incurred by C-DAC on the account of any losses or damages or costs, charges and/or expenses shall as between the Bank and C-DAC be conclusive of the amount so claimed or liable to be paid to C-DAC or suffered or incurred by C-DAC, as the case may be and payable by the Bank to C-DAC in terms hereof.

You (C-DAC's) shall full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said M/s _____ (Name of Vendor) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s _____ (name of Vendor) which under law relating to the sureties would but for the provisions have the effect of releasing us.

You will have full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said M/s _____ (Name of Vendor) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s _____ (Name of Vendor) which under law relating to the sureties would but for the provisions have the effect of releasing us.

Your right to recover the said sum of Rs. _____/- (Rupees _____ only) from us in manner aforesaid will not be affected/ or suspended by reason of the fact that any dispute or disputes have been raised by M/s _____ (Name of Vendor) and/ or that any dispute or disputes are pending before any officer, tribunal or court or Arbitrator.

The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said M/s _____ (Name of Vendor) but shall in all respects and for all purposes be binding and operative until payment of all dues to C-DAC in respect of such liability or liabilities.

Our liability under this guarantee is restricted to Rs. _____/- (Rupees _____ Only). Our guarantee shall remain in force until unless a suit action to enforce a claim under guarantee is filed against us within six months from (which is date of expiry of guarantee) all your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We have power to issue this guarantee in your favour under Memorandum and Articles of Association of our Bank and the undersigned has full power to do under the power of Attorney dated.

Notwithstanding anything contained herein:

- A. Our liability under this guarantee shall not exceed Rs _____ (in words)
- B. This bank guarantee shall be valid up to _____ & unless a suit for action to enforce a claim under guarantee is filed against us within 1 year from the date of expiry of guarantee. All your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there after i.e. after one year from the date of expiry of this Bank guarantee
- C. We are liable to pay the guaranteed amount or any parts thereof under this bank guarantee only and only if you serve upon us a written claim or demand or before _____
- D. The Bank guarantee will expire on (Min months from the date of successful installations of the items in the order) _____

Granted by the

Bank

SEAL OF THE BANK

Yours faithfully,
For (Name of Bank)

Authorised Signatory

ANNEXURE E - UNDERTAKING - EMD

(ON COMPANY'S LETTERHEAD - For Exempted Bidder as per GeM Policy)

Date:

To:

The Centre Head

Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune - 411008 Maharashtra, INDIA

Subject: Undertaking as per GFR - 2017, Rule 170(iii)

Dear Sir,

We, the undersigned, offer to Supply the -----
as per tender at C-DAC Pune, in response to your Tender No-----
-----.

We are hereby submitting our proposal for same, which includes Technical bid and the Financial Bid. As a part of eligibility requirement stipulated in said tender document, we hereby submit a declaration in lieu of Earnest Money Deposit (EMD), as given below:

1. Our bid (including commercial bid) shall remain valid for 120-days from the date of submission and that we will not withdraw or modify our bid during the validity period,
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 7 days of placement of order on us.
3. In case, we are declared as successful bidder and an order is placed on us, we undertake, to submit a Security Deposit / Performance Bank Guarantee of 5% of the order value, as per terms stipulated in the tender.
4. In case of failure on our part to comply with any of the above said requirements, we are aware that we shall be declared as un-eligible for said tender and /or debarred from any future bidding process of C-DAC for a period of minimum one year.
5. We hereby certify that my/ our firm has not been disqualified and / or blacklisted by any Office/ Department/ Undertaking of the State Government / Central Govt. of India, PSU/ Autonomous Body of Government of India, at the time of submission of this bid.
6. The undersigned is authorized to sign this undertaking.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:

ANNEXURE F - CERTIFICATION FROM BIDDER/OEM

(To be submitted duly Certified by the Cost Auditor /Statutory Auditor in case of company
OR To be submitted duly certified by the CA in other case)

Please submit the certificate as per format given below, **any change in the format may result in disqualification of the bidder:**

To:

Director General,

Centre for Development of Advance Computing, Pune - 411008

We hereby certify that the goods & software being offered by us vide our proposal, comply with the Make In India Order No. P-45021/2/2017-PP(BE-II)-Part(4)Vol.II dated 19.07.2024 issued by Public Procurement Section, Department of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, Gol.

We hereby certify the details pertaining to goods offered by us, as given below:

Sr. No	Item Description, Make, Model	Country of origin of OEM	Country of Manufacture of item	Percentage of local content for the solution **	Location of Value Addition
1	Details/breakup of major components to be provided				

** Note 1: The local content percentage (%) is s consolidated figure for the complete solution i.e. including all items mentioned above.

We abide by the following terms and conditions of this GeM bid / enquiry

1. CDAC reserves the right to Accept / Reject / Cancel the bid / GeM inquiry, at its sole discretion, based on the responses received against the MII declaration submitted by the bidders / vendors.
2. Any deviation in this format or not-covering all the major components as per the RFP ask may result in disqualification of the bidder. The BOM/BOQ details should exactly match with the item details provided herein.
3. Bidder has to mandatorily declare the consolidated figure for the complete solution.
4. We also certify that, we are not from a country sharing land border with India as defined in Order No.F.7/10/2021-PPD (1) (Public Procurement No. 4) dated 23.02.2023 issued by Procurement Policy Division, Department of Expenditure, Ministry of Finance, GOI and the goods offered by us comply with the provisions of said order.

For (Name of bidder)

Authorized Signatory Name & Designation: Mobile No:

ANNEXURE G - CERTIFICATE/UNDERTAKING FROM BIDDER/ OEM

To:
The Centre Head
C-DAC, Pune - 411008

Ref: Tender / Enquiry No. XXX dt. XXXX

We have read the clause mentioned in the Order No.F.7/10/2021-PPD (1) (Public Procurement No. 4) dated 23.02.2023 issued by Procurement Policy Division, Department of Expenditure, Ministry of Finance, GOI. and further Order/OMs regarding restrictions on procurement from a bidder of a country which shares a land border with India (if any).

In view of this, we certify that,

a. We are not from a country sharing land border with India and any registration as mentioned in said OM is not applicable to us.

OR

b. We are registered with the competent authority as mentioned in said OM. The copy of registration No.xxx dt.xxx is enclosed.

(Delete whatever is not applicable)

For (Name of Bidder)

Authorised Signatory
(Name & Signature)
(Company's Seal)

ANNEXURE H - INTIGRITY PACT

(To be executed on Rs. 100/- Stamp paper duly notarised and applicable for all tenders of value above Rs.1 Crore)

This Integrity Pact ("the Pact") is made and executed on this ____ Day of ____ Two Thousand Twenty ____ at ____.

By and Between

Centre for Development of Advanced Computing (C-DAC), an autonomous scientific Society under the Ministry of Electronics and Information Technology, Government of India, registered under the Societies Registration Act 1860 and the Bombay Public Trusts Act 1950, having its registered Office at Savitribai Phule Pune University Campus, Pune 411 007, hereinafter referred to as "C-DAC/Principal", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its administrators, successors or assignees, as the case may be. and

..... hereinafter referred to as "The Bidder(s)/Contractor(s)", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its administrators, successors or assignees, as the case may be.

(The Principal and the Bidder (s)/Contractor(s) are collectively referred to as "the Parties".

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for -----

----- ("the Contract"). The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s. The Principal intends to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into. The Principal also intends that Bidder/s and Contractor/s should abstain from bribing or indulging in any corrupt practices in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Bidder/s and Contractor/s shall commit to prevent corruption, in any form, by its officials by following transparent procedures.

In order to achieve these goals, the Principal, by way of this Integrity Pact ("the Pact") will appoint Independent External Monitor ("IEM") who will monitor the tender process and the execution of the Contract for compliance with the principles mentioned above.

The parties hereto hereby agree to enter into this Pact and agree as mentioned below.

Section 1 Commitments of the Principal

1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following:-

a) No employee of the Principal, personally or through relatives or any other person,

will in connection with the tender, or for the execution of the Contract, demand, promise or accept for himself/herself or any third person, any material or immaterial benefit or any other advantage from the bidder/s or contractor/s which he/she is not legally entitled to.

- b) The Principal will, during the tender process treat all Bidder/s and Contractor/s with equity and reason. The Principal will in particular, before and during the tender process, provide to all bidder/s and contractor/s the same information and will not provide to any bidder/s or contractor/s additional/confidential information through which the bidder/s and contractor/s could obtain an advantage in relation to the tender process or the contract execution.
 - c) The Principal will exclude from the process all known prejudiced persons.
- 2) If the Principal obtains information on the conduct of any of its employees, which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion and the same is prima facie found to be correct in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions. In such a case while such enquiry is being conducted by the Principal, the proceedings under the contract shall not be stalled.

Section 2 Commitments of the Bidder/ contractor

- 1) The Bidder / Contractor commits to take all measures necessary to prevent corrupt practices, unfair means and illegal activities . He commits himself to observe the following during his participation in the tender process and during the contract execution:
- a) The Bidder / Contractor undertakes that he/she has not given, offered or promised to give directly or indirectly any bribe, gift, consideration, reward, favour any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal, for which benefit etc. he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder / Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal, for which benefit etc. he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract
 - c) The Bidder / Contractor will not enter into any agreement or understanding with other Bidders in connection with the bid, including but not limited to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 - d) The Bidder / Contractor will not commit any offence under the relevant provisions of Anti- Corruption Laws of India/Indian Penal Code, 1860, Information and

Technology Act, 2000, Competition law or any other relevant laws, enactments, rules and regulations. Further the Bidder / Contractor will not use improperly, for purposes of competition or personal gain, or pass or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically. The Bidder / Contractor also undertakes to exercise due and adequate care of any such information so divulged.

- e) The Bidder / Contractor further confirms and declares to the Principal that the Bidder / Contractor is the original manufacturer / integrator / authorised government sponsored export entity and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Principal or any of its functionaries, whether officially or unofficially to the award of the contract to the Bidder / Contractor, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- f) The Bidder / Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to make or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and the details of the services agreed upon for such payments.
- g) The bidder(s)/ contractor (s) of foreign origin shall disclose the name and address of agents and representatives in India related to this tender. Similarly, the bidder(s)/ contractor(s) of Indian nationality shall furnish the name and address of their foreign principals or associates, if any, related to this tender.
- h) The Bidder / Contractor shall not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- i) If the Bidder / Contractor or any employee of the Bidder / Contractor or any person acting on behalf of the Bidder / Contractor, either directly or indirectly, is a relative of any of the officers of the Principal, or alternatively, if any relative of an officer of the Principal has financial interest / stake in the Bidder's / Contractor's firm, proprietorship, company, etc. the same shall be disclosed by the Bidder / Contractor at the time of filing of tender/EoI. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act, 2013.
- j) The Bidder / Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Principal.
- k) The bidder / contractor shall disclose the circumstances, arrangements, undertakings or relationships that constitute, or may reasonably be considered to constitute, an actual or potential conflict of interest with its obligations specified in the tender process or under any Agreement which may be negotiated or executed with Principal. Bidder / Contractor and its employees, agents, advisors and any other person associated with the bidder / contractor must not place themselves in a position which may, or does, give rise to conflict of interest (or a potential conflict

of interest between the interests of Principal or any other interests during this tender process or through operation of the Agreement.

- l) The bidder(s)/ contractor (s) who have signed the Pact shall not approach the Courts while the matters/disputes/issues, related to tender process or the Contract are presented before the IEM and awaiting the final decision.
- 2) The Bidder / Contractor will not instigate third persons to commit above mentioned acts / omissions / offences outlined above or be an accessory to such offences.

Section 3 Disqualification from tender process and exclusion from future contracts

- 1) If the Bidder, before the Contract is awarded, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question:
 - a) the Principal is entitled to disqualify the Bidder from the tender process or to terminate the Contract, if already signed, for such reason.
 - b) the Principal is entitled to exclude the Bidder / Contractor from participating in future contracts/tenders. The imposition and duration of the exclusion will be determined by the Principal based on the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder / Contractor and the amount of the damage. The exclusion will be imposed for a minimum of six (6) months and maximum of three (3) years.
- 2) An act/omission would be treated as a transgression after due consideration of the available evidence by the Principal.
- 3) The Bidder / Contractor accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such disqualification/exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision of disqualification/exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- 4) If the Bidder / Contractor can prove that he has restored the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the aforesaid disqualification/exclusion prematurely.

Section 4 Compensation for Damages

- 1) Without prejudice to any rights that may be available to the Principal under any law or the contract or its laid down policies and procedures, the Principal shall have the following rights in case of breach of this Pact by the Bidder/Contractor:
 - a) To forfeit the Earnest Money/Bid Security if the Bidder is disqualified from the tender process prior to the award in terms of Section 3;

- b) To forfeit/invoke the Security Deposit/ Performance Bank Guarantee if the Principal has either terminated or is entitled to terminate the Contract of the Bidder in terms of Section 3.
- c) To immediately call of the pre contract negotiations without assigning any reason or giving any compensation to the Bidder / Contractor.
- d) To immediately cancel the contract, if already signed, without giving any compensation to the bidder / contractor. The Bidder / Contractor shall be liable to pay the compensation for any loss or damage to the Principal resulting from such cancellation / rescission and the Principal shall be entitled to deduct the amount so payable from the amount due to the Bidder / Contractor.
- e) To recover all sums already paid by the Principal, with interest at _% @ p.a. if any outstanding payment is due to the Bidder / Contractor from the Principal in connection with any other contract, such outstanding payment could also be set off to recover the aforesaid sum and interest.
- f) To recover all sums paid in violation of this Pact by the Bidder / Contractor to any middleman or agent or broker with a view to securing the contract.

Section 5 Previous transgression

- 1) The Bidder declares that he has not committed any transgressions in the last three (3) years against any Company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could invite/justify his exclusion from this tender process.
- 2) Any concealment of information or misrepresentation of facts, in regard to the aforesaid, can lead to his disqualification from the tender process or termination of the Contract, if already awarded, or invite any other appropriate action(s) as deemed fit.

Section 6 Equal treatment of all Bidders / Contractors / Subcontractors

- 1) The Principal will enter into Pacts on identical terms with all bidders and contractors.
- 2) The Bidder(s) / Contractor(s) assures to procure from all their subcontractors an undertaking for the adoption of this Pact. The Bidder (s) / Contractor(s) shall alone be responsible for any violation (s) of the provisions laid down in the Pact by any/all of their sub-contractor (s) or sub-vendor (s).
- 3) The Principal will be entitled to disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 Independent External Monitor / Monitors

- 1) The Principal appoints competent and credible Independent External Monitor as nominated and approved by the Central Vigilance Commission. The task of the IEM is to review independently and objectively, whether and to what extent the Parties comply with the obligations under this Pact. The IEM would be required to sign 'Non- Disclosure

Agreements' alongwith a declaration of 'Absence of Conflict of Interest'. In case of any conflict of interest arises at a later date, the IEM shall inform Chairperson of the Board of the Principal and recuse himself/herself from that case.

- 2) The IEM is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal. The IEM would be provided access to all documents/records pertaining to the contract for which a complaint or issue is raised before them, as and when warranted. However, the documents/records/ information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.
- 3) The Bidder / Contractor accepts that the IEM has the right to access, without restriction, all Project documentation available with the Principal including the documents/ records/ information provided by the Bidder/Contractor. The Bidder/Contractor will also grant the IEM, upon their request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The IEM is under contractual obligation to treat the documents/ records/ information of the Bidder/Contractor/ Subcontractor with confidentiality.
- 4) The Principal will provide to the IEM sufficient information about all meetings among the parties related to the Project provided that such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor. The Parties will offer to the IEM the option to participate in such meetings.
- 5) As soon as the IEM notices, or suspects, a violation of this Pact, he will inform the Management of the Principal and request the Management to discontinue or rectify the violation, or take any other relevant action. The IEM can in this regard submit nonbinding recommendations. Beyond this, the IEM has no right to demand from the Parties that they act in a specific manner, refrain from action or tolerate action. However, the IEM shall give an opportunity to the Bidder / Contractor to present his case before making its recommendations to the Principal.
- 6) The IEM is expected to tender their recommendation on all the complaints within 30 days of their receipt, to the Chairperson of the Board of the Principal. Further, should the occasion arise, the IEM may submit proposals for correcting problematic situations.
- 7) If the IEM has reported to the Chairperson of the Board of the Principal a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India/Indian Penal Code, 1860, or any other relevant laws and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEM may transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8) The word 'IEM' would include both singular and plural.

Section 8 Pact Duration

- 1) This Pact comes into force when both parties have signed it. It expires for the Bidder /

Contractor 12 months after the last payment under the respective contract, and for all other Bidders / Contractors 6 months after the contract has been awarded.

- 2) If any claim is made / lodged during the aforesaid duration, the same shall continue to be valid despite the lapse of this pact as specified above, till it is discharged / determined by Chairperson of the Board of the Principal.

Section 9 Other provisions

- 1) This Pact is subject to Indian Laws. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Pune. The Arbitration clause provided in the main tender document / contract shall be applicable to any issue / dispute arising under this Pact.
- 2) If the Contractor is a partnership or a consortium, this Pact must be signed by all partners or consortium members.
- 3) In case of any allegation of violation of any provisions of this Pact or payment of commission etc. the Principal or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder / Contractor and Bidder / Contractor shall provide necessary information and documents and shall extend all possible help for the purpose of such examination.
- 4) If one or several provisions of this Pact are held to be invalid/unenforceable, the remainder of this Pact shall remain valid as though the invalid or unenforceable parts had not been included herein. In this case, the parties will strive to come to an agreement to their original intentions.
- 5) Issues like warranty/ guarantee etc. shall be outside the purview of IEM.

For the Principal

Place -----

Date -----

For the Bidder / Contractor

Witness 1 : -----

Witness 2: -----

ANNEXURE I - DOCUMENT LIST

Sr	Description	Page No (s)
1	Covering letter, as per Annexure - A .	
2	Authority letter, as per Annexure - B .	
3	The undertakings from the Principal Manufacturers (OEMs) of products/ items offered as per Annexure - C .	
4	Annexure-E - Declaration in lieu of EMD	
5	Annexure - F - Mandatory Declaration (M.I.I - O.M.s)	
6	Annexure - G - Mandatory Declaration (Land Border Sharing - O.M.s)	
7.	Annexure - H - Integrity Pact	
7	A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable, in support of eligibility criteria.	
8	Copy of GST registration certificates.	
9	The detailed technical catalogues, specifications for the offered Items as per format given in Section - III	
10	Compliance statement indicating the compliance of the items, equipment, solution offered with the tender specifications	
11	POST AMC charges declaration	
12	The bidder must submit all the documents as per Document Checklist - Annexure I , with appropriate page nos for the same. <u>The flow of the submitted documents must be in the same order.</u>	
13	The certificate from a Chartered Accountant certifying the average annual sales turnover of the bidder for the last 3 financial years.	
14	Other documents necessary in support of eligibility criteria, product catalogues, brochures etc.	
15	The bidder must not be blacklisted by any Govt. Organizations as on date of submission of the bids. A certificate or undertaking to this effect must be submitted (Annexure - A).	
16	The bidder should provide sufficient documentary evidence to support the eligibility criteria and exemptions mentioned in the Document.	
17	Any other supporting document, data sheet etc. as requested in the tender document.	

(END OF SECTION VII)***** (End of Document) *****