

प्रगत संगणन विकास केन्द्र
CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING

इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय की वैज्ञानिक संस्था
भारत सरकार
A Scientific Society of Ministry of Electronics and Information Technology
Government of India



गुलमोहर क्रॉस रोड सं. 9, जुहू,
मुंबई - 400 049, भारत
Gulmohar Cross Road No. 9
Juhu, Mumbai - 400 049, India
दूरभाष/ Tel: (022) 26201604 / 1574 / 1488
फैक्स/Fax : +91-22-26232195 / 26210139
<http://www.cdac.in>

Supply, Installation, and Commissioning of Data Centre Infrastructure for Long Range Identification & Tracking (LRIT) System

CDACM/PS/CA20-005 (Tender ID: 2019_DIT_484325_1)

Corrigendum 1

Sr. No.	RFP Clause No.	Description as per RFP	Revised Description/Addition
1	4.8 Delivery Schedule & Penalty for Delayed Deliveries section 4.8.1, Milestone II, page 12	Delivery of all the items mentioned in Purchase order, Installation & Commissioning and Acceptance by CDAC: five (5) weeks of purchase order date	Delivery of all the items mentioned in Purchase order, Installation & Commissioning and Acceptance by CDAC: Seven (7) weeks of purchase order date
2	4.8 Delivery Schedule & Penalty for Delayed Deliveries section 4.8.1, Milestone II, page 12	Training of deployment and installation & commissioning to operations team of CDAC after successful installation & commissioning along with sharing all respective diagrams/reports related to deployment and configurations: Six (6) weeks of purchase order date	Training of deployment and installation & commissioning to operations team of CDAC after successful installation & commissioning along with sharing all respective diagrams/reports related to deployment and configurations: Eight (8) weeks of purchase order date

3	6.1 Blade servers including Blade Enclosure(s) page 23	Blade Chassis <ul style="list-style-type: none"> • One or more blade chassis not exceeding a total quantity of 2 units with 16 hot pluggable blade servers (with minimum required specification listed below) populated in total. • The blade chassis should have redundant switches with 10G Ethernet and required number of FCoE ports supporting 16G SAN switches; Tape library etc; hot swappable redundant power supplies; cooling units etc and maximum redundancy of the components should be maintained. All servers and chassis and its modules must remain powered on in case of failure of one of the supplies. Power supply should be 80 plus platinum certified. • Should provide highly reliable and high performance midplane / backplane design in the blade enclosure. • Must have Chassis Monitoring Module (Must show real time data and historical data, logs) enabling monitoring of servers, internal switches and other peripheral devices. 	Blade Chassis <ul style="list-style-type: none"> • One or more blade chassis not exceeding a total quantity of 2 units with 16 hot pluggable blade servers (with minimum required specification listed below) populated in total. • The blade chassis should have redundant switches with minimum 8 nos. Ethernet ports supporting 10G and 4 nos. FC Ports supporting 16G Speed required to connect to 16G SAN switches; Tape library etc; hot swappable redundant power supplies; cooling units etc and maximum redundancy of the components should be maintained. All servers and chassis and its modules must remain powered on in case of failure of one of the supplies. Power supply should be 80 plus platinum certified. • Should provide highly reliable and high performance midplane / backplane design in the blade enclosure. • Must have Chassis Monitoring Module (Must show real time data and historical data, logs) enabling monitoring of servers, internal switches and other peripheral devices. If more than one enclosure, then redundant interconnect should be supplied; Management modules should be redundant and fail-safe; Unified Management of both enclosures through one Interface. • Connectivity with proposed KVM switch must be provided.
4	6.1 Blade servers including Blade Enclosure(s) page 23	Connectivity Connectivity Ports: FC+Ethernet	Connectivity Connectivity Ports: FC, Ethernet
5	6.1 Blade servers including Blade Enclosure(s) page 23	Addition under "Connectivity":	Connectivity: Redundant Network adaptor: Yes
6	6.2 Storage System page 24	Addition under "Specification":	Minimum drive slots in the Storage array: 24
7	6.2 Storage System page 24	Under "Specification": Hardware Form Factor of Storage System (RU)	Clause Dropped

8	6.2 Storage System page 24	Under "Specification": Minimum no of drive slot populated with SSD: 6 Minimum no of drive slot populated with SAS: 11	Minimum no of drive slot populated with SSD: 6 drives each with minimum 500 GB capacity Minimum no of drive slot populated with SAS: 11 drives, each with minimum 1TB capacity and 10K RPM
9	6.2 Storage System page 24	Under "Connectivity/Port": Type of Front end Ports: FC, iSCSI	Supported Type of Front end Ports: FC, iSCSI
10	6.2 Storage System page 24	System Cache: Cache Availability Type: Global Total Configurable Cache (GB): 16	Clause Dropped
11	6.2 Storage System page 25	Under "SAN Switches": Minimum Quantity Required: 2 (for redundancy) Rack mountable	Minimum Quantity Required: 2 (for redundancy) Rack mountable Active-active configuration
12	6.2 Storage System page 25	Under "Controllers": Active-Active Controllers Configured in HA: Yes	Active-Active Controllers Configured in HA (Volume/LUN Level): Yes
13	6.5 Server Load Balancer page 27	Under "Specification": Throughput (Maximum) (Gbps): 6 SSL Throughput (Maximum) (Gbps): 6 Hardware Based SSL Acceleration: No	Throughput (Minimum) (Gbps): 6 SSL Throughput (Minimum) (Gbps): 6 Hardware Based SSL Acceleration: Yes
14	6.5 Server Load Balancer page 27	Under "Specification": Throughput Scalability: Available If Available, then scalable without changing hardware upto (Gbps) with licence upgradation: 12	Clause Dropped
15	6.5 Server Load Balancer page 27	Under "Specification": Power Supply: Redundant	Power Supply: Redundant power supplies installed inside the load balancer
16	6.6 Link Load Balancer page 28	Under "Specification": Throughput (Maximum) (Gbps): 3.5	Throughput (Minimum) (Gbps): 3.5

17	6.6 Link Load Balancer page 28	Under "Specification": Power Supply: Redundant	Power Supply: Redundant power supplies installed inside the load balancer
18	6.6 Link Load Balancer page 28	Gartner /IDC Ratings: The proposed OEM must be in leader/challenger quadrant of latest Gartner reports	The proposed OEM must be in leader/challenger quadrant of latest Gartner reports or in top 5 of latest IDC market reports.
19	6.7 Core Switches page 30	Layer 2 Features: Policy Control of Users and Devices Firewall	Clause Dropped
20	6.7 Core Switches page 30	Layer 3 Features: Dynamic Routing Protocols: OSPFv2, RIPv2, VRRP, BGP, ISIS.	Dynamic Routing Protocols: OSPFv2, RIPv2, VRRP, BGP.
21	6.7 Core Switches page 30	Other Features: Packets Per Second (Duplex): 130 Mbps or more	Packets Per Second (Duplex): 130 Mpps or more
22	6.7 Core Switches page 30	Other Features: Network Latency : < 1μs	Network Latency : < 10μs
23	6.8 Access Switches page 31	Layer 2 Features: Policy Control of Users and Devices Firewall	Clause Dropped
24	6.8 Access Switches page 31	Other Features: Network Latency : < 1μs	Network Latency : < 10μs
25	6.9 UTM/Next Gen Firewall page 31	Make: Bidder to Specify	Make: Bidder to Specify (OEM Must be different from OEM of proposed Network Firewall)
26	6.9 UTM/Next Gen Firewall page 31	Power Supplies: Redundant	Power Supplies: Redundant Power supplies must be installed inside the UTM/next Gen firewall appliance

27	6.9 UTM/Next Gen Firewall page 32	Security Features: - Antivirus, Antispyware, Anti-adware, Antikeylogger, Antispam, Anti-malware.	- Antispam, Anti-malware.
28	6.9 UTM/Next Gen Firewall page 32	Protocols: - Static routes. - RIPv2 +v1 , RIPng, OSPF/OSPFv3, BGP, Multicast (Internet Group Management Protocol IGMPv1/2/3), PIM-SM/DM/SSM, Session Description Protocol (SDP), Distance Vector Multicast Routing Protocol (DVMRP), source-specific, Multicast inside IPsec tunnel, MSDP. - MPLS (RSVP, LDP, Circuit Cross-connect (CCC), Translational Cross-connect (TCC), Layer 2 VPN (VPLS),Layer 3 VPN, VPLS, NGMVPN).	Protocols: - Static routes. - RIPv2 +v1 , RIPng, OSPF/OSPFv3, BGP, Multicast (Internet Group Management Protocol IGMPv1/2/3), PIM-SM/DM/SSM, IPsec VPN
29	6.9 UTM/Next Gen Firewall page 32	Encapsulations: - Ethernet (MAC and VLAN tagged). - 802.1q VLAN - High-Level Data Link Control (HDLC)	Encapsulations: Ethernet (MAC and VLAN tagged). - 802.1q VLAN
30	6.10 Network Firewall page 33	Make: Bidder to Specify	Make: Bidder to Specify (OEM Must be different from OEM of proposed UTM/Next Gen Firewall)
31	6.10 Network Firewall page 33	Protocols: - Static routes. - RIPv2 +v1 , RIPng, OSPF/OSPFv3, BGP, Multicast (Internet Group Management Protocol IGMPv1/2/3), PIM-SM/DM/SSM, Session Description Protocol (SDP), Distance Vector Multicast Routing Protocol (DVMRP), source-specific, Multicast inside IPsec tunnel, MSDP. - MPLS (RSVP, LDP, Circuit Cross-connect (CCC), Translational Cross-connect (TCC), Layer 2 VPN (VPLS),Layer 3 VPN, VPLS, NGMVPN).	Protocols: - Static routes. - RIPv2 +v1 , RIPng, OSPF/OSPFv3, BGP, Multicast (Internet Group Management Protocol IGMPv1/2/3), PIM-SM/DM/SSM, IPsec VPN
32	6.10 Network Firewall page 33	Power Supplies: Redundant	Power Supplies: Redundant Power supplies must be installed inside the firewall appliance

33	6.11 Core Routers page 34	Power Supplies: Redundant	Power Supplies: Redundant Power supplies must be installed inside the router appliance
34	6.11 Core Routers page 34	Protocols: Hot Standby Router Protocol (HSRP), VRRP,	Hot Standby Router Protocol (HSRP)/ VRRP,
35	6.12 Tape Library with backup software page 34	Total Storage Capacity (Compressed): 80TB to 160 PB	Total Storage Capacity (Compressed): 80TB to 160 TB
36	Annexure K page 49	B. Annual Maintenance cost (AMC) i.: 04thYear: Quarterly Payment at the end of each Quarter calculated on the pro-rata basis of Fourth Year AMC value ii.: 05thYear: Quarterly Payment at the end of each Quarter calculated on the pro-rata basis of Fifth Year AMC value	i.: 04thYear: Quarterly payment within 30 working days of receipt of Invoice at the start of each quarter calculated on the pro-rata basis of Fourth Year AMC value ii.: 05thYear: Quarterly payment within 30 working days of receipt of Invoice at the start of each quarter calculated on the pro-rata basis of Fifth Year AMC value
37	Annexure M Manufacturer Authorization Form (MAF) page 52	We hereby certify that the above mentioned Hardware/Equipment/Software products are not end of life and we hereby undertake to support these Hardware/Equipment/Software for the duration of minimum 6years from the date of submission of the bid.	We hereby certify that the above mentioned Hardware/Equipment/Software products are not end of life and we hereby undertake to support these Hardware/Equipment/Software for the duration of minimum 6years from the date of submission of the bid. The End of sale date for these Hardware/Equipment/Software is:.....

