

**TECHNICAL CORRIGENDUM – 2 Dated : 15-07-2021**

**Establishment & Commissioning of Fibre Optic Network Infrastructure along with Supply, Installation, Testing & Maintenance of 1020 Nos. CCTV Camera to be installed within the Jurisdiction of Kolkata Police under “Nirbhaya Project” Tender No: WEBEL/EOT/COM/21-22/00011 Dated: 14-06-2021**

Sl No	Tender Page no	Tender Section	Sub Section	Descriptions as per the Tender Clause & corrigendum	Revised clause
1	Page No -31	Section - B: Eligibility Criteria	9. Bidders Criteria/ Work Experience	Intended Bidder should have prior experience in one CCTV surveillance systems and Fibre Optic Network Infrastructure and VMS at least 1 project for Government of India or any of the State/UT Governments, or, Public Sector Units, order value not less than Rs. 15.00 Cr or 2 orders of value not less than Rs. 7.5 Cr each or 3 orders of value not less than Rs. 5.00 Cr each in last 3 financial years (FY 2017-2018, 2018-2019 and 2019-2020). Relevant documents in this regard needs to be submitted. Ongoing projects wherein delivery and installation is completed and O&M phase is been executed is also allowed	Intended Bidder should have prior experience in one CCTV surveillance systems along with Network Infrastructure and VMS at least 1 project for Government of India or any of the State/UT Governments, or, Public Sector Units, order value not less than Rs. 15.0 Cr" or 2 orders of value not less than Rs.7.5.0 Cr each or 3 orders of value not less than Rs. 5.0 Cr each in last 3 financial years (FY 2017-2018, 2018-2019 ; and 2019-2020. Relevant documents in this regard needs to be submitted. Ongoing projects wherein delivery and installation is completed and O&M phase is been executed is also allowed
2	Page No -32	14. Authorization/OEM Certificate	D Manufacturer Certificate for GPON Equipment; point Viii	OEM should have Average Annual Financial Turnover not less than Rs.150 Crores. (in India) for the last three financial years	OEM should have Average Annual Financial Turnover not less than Rs.350 Crores. (Globally ) / 50 cr In India for the last three financial years (2017-18, 2018-19, 2019-20)
3	Page -32	Clause A-Manufacturer Certificate for CCTV Camera equipment	Ix. Onvif	The OEM should not have been blacklisted or banned or suspended the support by ONVIF. Rather OEM should be full member of ONVIF. The quoted product should be in ONVIF conformant list before the tender release date	The OEM or its brand should not have been blacklisted the support by ONVIF. Rather OEM or Its brand should be full member of ONVIF. The quoted product should be in ONVIF conformant list before the tender release date.
4	Page no 34	Clause-E- Eligibility Criteria of Software OEM( VMS)	ii. The Country of Origin	ii. The Country of origin of the OEM should not have strained trade relation with INDIA. Else OEM should be registered under competent authority in India.	The Country of origin of the OEM should not have strained trade relation with INDIA. Else OEM should be registered under competent authority in India like (Ministry of commerce and industrty, ERTL/ Similar Organization).
5	Page no -81	Section- G: Technical, Functional Requirement s> Video Management Software	a. VMS Edge device, key board and PTZ Support	The VMS shall be ONVIF profile S, G and profile T conformant.	To be amend as " VMS shall be Profile S,G & T or similar requirement and future up gradation should be supported by the quoted VMS."
6	Page No-90	Firewall	Point No 9	New Sessions/Second (TCP) : 180,000 or Higher	New Sessions/Second (TCP) : 170,000 or higher
7	Page No-90	Firewall	Point No 15	Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6)	Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) or Nat46 (IPv4-to-IPv6)
8	Page No-90	Firewall	Point No 29	ICSA Labs: Firewall, IPsec, IPS, Antivirus, SSL-VPN; USGv6/IPv6	ICSA Labs: Firewall, Antivirus, & Advance Threat detection
9	Page No-60	Camera Network Accessories	Point No. I	8 port 10/100Mbps Network Switch	8port 10/100Mbps managed High Temperature Network switch
10	Page No-71	10G SFP+ Modules	Point No. III Sub Clause :9	10G-SFP+ Modules : Receive Sensitivity : -15~-0.5dBm	10G-SFP+ Modules : Receive Sensitivity : -14~-0.5dBm
11	Page No-71	10G SFP+ Modules	Point No. III Sub Clause :15	10G-SFP+ Modules : Certifications : CE, FCC, TUV, UL, RoHS compliant ISO 9001:2015, ISO 14001 Applicable if the module is additionally fitted and not from the same OEM.	10G-SFP+ Modules : Certifications : CE/BSI, FCC/TUV/UL, RoHS compliant

SI No	Tender Page no	Tender Section	Sub Section	Descriptions as per the Tender Clause & corrigendum	Revised clause
12	Page No-74	Layer 3 Access Switch:	Point No.1 Sub Clause :1	Layer 3 Access Switch: «1. Port : 10/100/1000Base-T * 24 or better & 10 G SFP+ * 12 or better	Layer 3 Access Switch: 1. Port : 10/100/1000Base-T * 24 or better & 10 G SFP+ 8 or higher
13	Page No-74	Layer 3 Access Switch::	Point No.1 Sub Clause :3	Layer 3 Access Switch:: Stack Bandwidth : 480 Gbps and above. At least 10 switches in a stack	Layer 3 Access Switch:: Stack Bandwidth : 400 Gbps and above. At least 8 switches in a stack
14	Page No-74	Layer 3 Access Switch::	Point No.1 Sub Clause :4	Layer 3 Access Switch: Switching Capacity : Non Blocking (Gbps) : 288	Layer 3 Access Switch: Switching Capacity : Non Blocking (Gbps) : 208
15	Page No-74	Layer 3 Access Switch::	Point No.1 Sub Clause :5	Layer 3 Access Switch:: Forwarding rate : 214 Mpps, Switching Capacity with stacking : 768Gbps	Layer 3 Access Switch:: Forwarding rate : 150Mpps, Switching Capacity with dedicated stacking port : 688Gbps
16	Page No-75	Layer 3 Access Switch::	Point No.1 Sub Clause :14	Layer 3 Access Switch:: <b>Features : 32MB packet buffer or higher</b>	Layer 3 Access Switch:: <b>Features : 16MB packet buffer or higher</b>
17	Page No-75	Layer 3 Access Switch::	Point No.1 Sub Clause :9	Layer 3 Access Switch: .Total number of MAC addresses : 64000	Layer 3 Access Switch: .Total number of MAC addresses : 32000
18	Page No-75	Layer 3 Access Switch::	Point No.1 Sub Clause :13	Layer 3 Access Switch: IEEE 802.1Qbb Priority based Flow control	Layer 3 Access Switch: IEEE 802.1Qbb Priority based Flow control or equivalent
19	Page No-75	Layer 3 Access Switch::	Point No.1 Sub Clause :13 Line 7	Layer 3 Access Switch: Total Static routes: 1000	Layer 3 Access Switch: Total Static routes/ Dynamic Routes: 1000
20	Page No-75	Layer 3 Access Switch::	Point No.1 Sub Clause :13 Line 11	Layer 3 Access Switch: Port security, ACL, bandwidth control, Three color marker (trTCM, srTCM)	Layer 3 Access Switch: Port security, ACL, bandwidth control, Three color marker (trTCM, srTCM) or equivalent
21		Layer 3 Access Switch::	New Clause	Layer 3 Access Switch. : Compliant Standards : IEEE 802.1D, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1s,IEEE 802.1ae or equivalent  802.1w, IEEE 802.1x, IEEE 802.3ab, IEEE 802.3ad (LACP), IEEE 802.3x, ITU-T G.8032	Layer 3 Access Switch: Compliant Standards : IEEE 802.1D, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1s,IEEE 802.1ae or equivalent  802.1w, IEEE 802.1x, IEEE 802.3ab, IEEE 802.3ad (LACP), IEEE 802.3x, <b>ITU-T G.8032 or equivalent</b>
22		Layer 3 Access Switch::	New Clause	Layer 3 Access Switch: New Clause	Layer 3 Access Switch: The switch should have IPv6 Ready Logo certifications and should also be NDPP/EAL certified
23		Layer 3 Access Switch::	New Clause	Layer 3 Access Switch: New Clause	Layer 3 Access Switch: The switch should have MACSEC-256 or equivalent enabled on all the interfaces for encrypted traffic forwarding
24	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1, Sub Clause 1	L3 Core switch: Port : 10G SFP+ * 24 or Higher & 40G QSFP+ * 4 or Higher & 100G QSFP28 * 2 or higher	L3 Core switch: Port : 10G/25G SFP+ * 24 or Higher & 40G QSFP+ * 2 or Higher & 100G QSFP28 * 2 or higher
25	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1, Sub Clause 3	L3 Core switch: Stack Bandwidth: 720 Gbps and above. At least 10 switches in a stack	L3 Core switch: Stack Bandwidth: 720 Gbps or above. Switches should be able to form a virtual chassis with 2 nodes in a single logical node
26	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1 Sub Clause 7	L3 Core switch: IPv4 routing entries : 30000 and Higher	L3 Core switch: IPv4 routing entries : 60000 and Higher
27	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1, Sub Clause 12	L3 Core switch: Multicast routing scale : 16000 or Higher	L3 Core switch: Multicast routing scale : 30000 or Higher
28	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1, Sub Clause 17	L3 Core switch: Total Static routes: 1000	L3 Core switch: Total Static routes/Dynamic Routes: 1000

SI No	Tender Page no	Tender Section	Sub Section	Descriptions as per the Tender Clause & corrigendum	Revised clause
29	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1 Sub Clause 2	L3 Core switch: Compliant Standards : IEEE 802.3ae, IEEE 802.1D, IEEE802.1p, IEEE 802.1s, IEEE 802.1w, IEEE 802.3ab, IEEE 802.1AX (LACP), IEEE 802.3x, ITU-T G.8032	L3 Core switch: Compliant Standards : IEEE 802.3ae, IEEE 802.1D, IEEE802.1p, IEEE 802.1s, IEEE 802.1w, IEEE 802.3ab, IEEE 802.1AX (LACP), IEEE 802.3x, <b>ITU-T G.8032 or equivalent</b>
30	Page No-76	HQ Switch & Modules : L3 Core switch	Point No. 1, Sub Clause 20	L3 Core switch: 20. Features : Access Control List (ACL) support, Strict priority, WRR or equivalent, DHCP support, Flexible NetFlow (FNF) or sFlow or equivalent, Layer 3 VPN (L3VPN) support, MPLS support, Multicast Source Discovery Protocol (MSDP), Private VLAN, Quality of Service (QoS), STP, RSTP, MSTP Remote Switch Port Analyzer (RSPAN), Spanning Tree Protocol (STP) support, Trunking, Virtual Route Redundancy Protocol (VRRP) support, Virtual Routing and Forwarding (VRF), VLAN Double Tagging (Q-in-Q), Weighted Random Early Detection (WRED), SNMPv1, v2c, and v3, Support AAA Authentication and Authorization using RADIUS or TACACS+ server	L3 Core switch: 20. Features : Access Control List (ACL) support, Strict priority, WRR or equivalent, DHCP support, Flexible NetFlow (FNF) or sFlow or equivalent, Layer 3 VPN (L3VPN) support, <b>VXLAN support</b> .MPLS support, Multicast Source Discovery Protocol (MSDP), Private VLAN, Quality of Service (QoS), STP, RSTP, MSTP Remote Switch Port Analyzer (RSPAN), Spanning Tree Protocol (STP) support, Trunking, Virtual Route Redundancy Protocol (VRRP) support, Virtual Routing and Forwarding (VRF), VLAN Double Tagging (Q-in-Q), Weighted Random Early Detection (WRED), SNMPv1, v2c, and v3, Support AAA Authentication and Authorization using RADIUS or TACACS+ server
31		HQ Switch & Modules : L3 Core switch	New Clause	Forwarding rate: Wire-speed performance under fully loaded (all ports loaded & operational) condition	The forwarding rate should be 1 Bpps or higher
32		HQ Switch & Modules : L3 Core switch	New Clause	Switching Capacity: Non-Blocking architecture under fully loaded (all ports loaded & operational) condition	Switching Capacity: 2 Tbps or higher
33	Page No. -76	HQ Switch & Modules : L3 Core switch	Point No. 7	DRAM: 4GB, FLASH: 4GB or better	DRAM: 8 GB , FLASH: 8GB or better
34		HQ Switch & Modules : L3 Core switch	New Clause	L3 Core switch: New Clause	L3 Core switch: The switch should have IPv6 Ready Logo certifications and should also be NDPP/EAL certified
35		HQ Switch & Modules : L3 Core switch	New Clause	L3 Core switch: New Clause	L3 Core switch: The switch should have MACSEC-256 or equivalent enabled on all the interfaces for encrypted traffic forwarding
36	Page No. - 49	8 MP IR Varifocal Motorised Bullet IP Camera	I,20	Resolution: 25 fps (3840 × 2160, 2592 × 1944, 1920 × 1080, 1280 × 720) @ (1–25/30 fps) or better	Resolution: 25 fps (3840 × 2160, 3072 × 1728, 1920 × 1080, 2688 × 1520, 1280 × 720) @ (1–25/30 fps) or Better
37	Page No. - 54	2MP ANPR Camera	III,21	80dB – 120dB or better	90dB – 120dB or better
38	Page No. - 68	Distributed Storage Cluster (In 3 Locations)	a. I. d.	The system should provide a variety of mixed type data storage, video stream, picture, files; it should support direct-streaming storage/ object storage/ file storage/ block storage.  The bidder can also provide the total storage solution of three (03) PB in three (03) physical locations with the same features / functionality is described in the tender document	The system should provide a variety of mixed type data storage, video stream, picture, files; it should support distributed direct-streaming storage/ distributed object storage/ distributed file storage/ distributed block storage.  The bidder can also provide the total storage solution of three (03) PB in three (03) physical locations with the same features / functionality is described in the tender document

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39	Page No. - 68	Distributed Storage Cluster (In 3 Locations)	a. I. d.	The Storage should support non-disruptive recovery of data in case of a disk failure. Adequate number of hot spare drives needs to be provisioned while configuring the storage	The Storage should support non-disruptive recovery of data in case of a disk failure. The storage needs to be configured accordingly  The System should support up to 2TB/hour or higher data recovery speed
40	New Clause			Offered Rack OEM must have Annual Financial Turnover not less than 200Cr for their business in India for the last five financial years and must in steady profitable business for last five financial years (FY 2015-16 to 2019-20). Bidder shall have to submit audited accounts in support to their claim	To be deleted

**THE ABOVE CORRIGENDUM IS A PART OF ORIGINAL TENDER DOCUMENT**