



ADDENDUM & CORRIGENDUM-3
REQUEST FOR PROPOSAL
FOR
SELECTION OF IMPLEMENTING AGENCY FOR
SUMAN EYE (CCTV NETWORK) PROJECT

RFP No.: SSCDL-SumanEye-RFP-01-2018

Last date for Price Bid Submission: 24. 10. 2018



Invited by

Surat Smart City Development Limited

115, Smart City Cell, Surat Municipal Corporation,

Muglisara, Main Road, Surat - 395003, Gujarat.

Surat Smart City Development Limited

ADDENDUM AND CORRIGENDUM-3

RFP Notification No.: SSCDL-SumanEye-RFP-01-2018

The Bidder are requested to take note of the following changes made in the RFP documents, which are to be taken in to account while submitting the RFP. They shall be presumed to have done so and submitted the RFP accordingly.

- This Addendum and Corrigendum shall be the part of the RFP documents.
- All items specified in this Addendum and Corrigendum supersede relevant items to that effect as provided in the original RFP documents. All other specifications, terms and conditions of the original RFP document shall remain unchanged.
- Bidder shall read and consider following points, which shall be a part of the RFP documents.
- All the changes mentioned in this document should be read across the RFP, Addendum & Corrigendum, wherever applicable.
- **The queries raised and given by SIs, but the clarifications are not made in this Addendum and Corrigendum shall be considered to remain unchanged as per the terms and conditions mentioned in the original RFP documents.**

Changes with respect to RFP Schedule

Please note that with respect to tendering schedules, the following changes have been effected. Bidders are requested to take note of the same and adhere to the dates specified hereunder with regards to Price Bid Submission and Technical Bid Submission:

Particular	Current Dates	Proposed Dates
Online Price Bid Submission Date	16.10.2018 up to 18:00 hrs.	24.10.2018 up to 18:00 hrs.
Technical Bid Submission (in Hard Copy) Filled-in Technical Bid along with Bid Fee, EMD and other documents	In sealed envelope strictly by RPAD/Postal Speed Post On or before 20.10.2018 up to 18:00 hrs. To the Chief Accounts, Surat Municipal Corporation, Muglisara, Surat – 395003, Gujarat by RPAD or Speed Post Only.	In sealed envelope strictly by RPAD/Postal Speed Post On or before 30.10.2018 up to 18:00 hrs. To the Chief Accounts, Surat Municipal Corporation, Muglisara, Surat – 395003, Gujarat by RPAD or Speed Post Only.

Other Changes

#	Section of Addendum-2	Page No.	Addendum-2 Reference	Amended/New Clause
1.	Annexure-II	17	7.2. OEM's Eligibility Criteria	Please refer to Annexure-I for revised OEM Eligibility criteria for CCTV Camera and NVR
2.	Annexure-V	22	13.11. TQ_10: Format for Specifying the Make & Model	Please refer to Annexure-II for the revised Format for Specifying the Make & Model
3.	Annexure-VI	63	14.20 Blade Chassis (if Blade Server is proposed)	Please refer to Annexure-III (Point 14.20) for the revised technical Specifications of Blade Chassis (if Blade Server is proposed)
4.	Annexure-VI	64	14.21 Storage	Please refer to Annexure-III (Point 14.21) for the revised technical Specifications of storage
5.	Annexure-VI	70	14.30 Cat-6 UTP Cable	Please refer to Annexure-III (Point 14.30) for the revised technical Specifications of Cat-6 UTP cable
6.	Annexure-VI	75	14.44 STP Cat 6 cable (Armoured)	<p>STP Cat 6 cable (Armoured) is revised to UTP Cat 6 cable with rodent resistant jacket</p> <p>Please refer to Annexure-III (Point 14.44) for the revised technical Specifications of UTP Cat 6 cable with rodent resistant jacket</p>
7.	Annexure-VIII	78	15.3 Commercial Bid Format	Please refer to Annexure-IV for the revised commercial Bid Format

ANNEXURE-I

7.2. OEM's Eligibility Criteria

#	Selection criteria for the OEM	Proof Document Required
A	CCTV Cameras and NVRs	
1.	<p>Presence in India</p> <p>The OEM for CCTV Camera should have registered office and service centre or authorized distributor with service center in India since last 3 years (i.e. If bidder wants to quote the “X” brand of CCTV Camera, then OEM/authorised distributor of “X” brand of CCTV Camera should have registered office and service centre in India since last 3 years).</p> <p>In case of authorized distributor: The distributor should have service centre facility in India to provide service support for the “X” brand quoted by the bidder.</p> <p>In case of OEM: Either the OEM or its subsidiary (in which OEM has majority stake) should have registered office and service center in India.</p>	<p>Please attach the following:</p> <p>A. In the case OEM has registered office and service centre in India</p> <ul style="list-style-type: none"> • Certificate of Incorporation / Registration in India • Copy of GST registration / Copy of PAN Card / VAT Registration/CST Registration • Details of Address and support phone number for Indian registered office and service center. • Any one of the following: Property Tax Bill / Electricity Bill / Telephone Bill / Valid Lease Agreement indicating presence since last 3 years. • Original or notarized copy of letter from CA / statutory auditor mentioning the shareholding pattern between parent and its subsidiaries to be provided. <p>B. In the case OEM has authorized distributor in India.</p> <ul style="list-style-type: none"> • Memorandum of understanding (MoU) between OEM and their authorized distributor (Notarized copy) • Certificate of Incorporation/Registration in India for distributor • Copy of GST registration / Copy of PAN Card for distributor • Details of Address and support phone number for Indian registered office of distributor and service center of distributor. • Detailed address of OEM with supporting document. • Any one of the following: Property Tax Bill / Electricity Bill / Telephone Bill / Valid Lease Agreement indicating presence since last 3 years for distributor.
2.	<p>Experience in Public Sector / Government</p> <p>OEM must have supplied minimum 3000 CCTV surveillance cameras in last 5 years as on bid start date for any PSU/State Govt./Central Govt./Police Department/ULB/Airport Authority in India .</p>	<p>End-user work order or PO document specifying no. and type of CCTV camera supplied under the project.</p>

#	Selection criteria for the OEM	Proof Document Required
3.	OEM must have supplied minimum 500 outdoor camera for atleast one City Surveillance (globally) in last 5 years as on bid start date.	SI work order or PO document specifying no. and type of CCTV camera supplied under the project.
4.	OEM must be one of the Top 10 as per Latest IHS World Report for Network Security Cameras.	In this regard OEM shall have to submit the latest IHS report
5.	<p>ONVIF Compliance: All CCTV Cameras & NVRs should be ONVIF 2.X standard compliant and should support for all necessary profiles so as to meet the requirements specified in the RFP.</p>	In this regard OEM shall have to submit self-declaration on their letterhead duly signed and stamp by competent authority as per Form-TQ_11
6.	<p>Commitment to Support The OEM should commit to support the product proposed in the scope of this RFP for at least five (5) years. End of support date should not have been announced for the product proposed. OEM will abide by the same SLA during support period as System Integrator.</p>	OEM self-certification as per Section-TQ_8 indicating the commitment to support along with product roadmap

ANNEXURE-II

13. Revised format for Technical Bid

13.11. TQ_10: Format for Specifying the Make & Model

The bidder needs to mention and submit relevant information as per the below mentioned table as part of their Technical Proposal.

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
IT Hardware Components								
1	2 Megapixel Full HD IR IP vandal proof Bullet Camera (2.8mm to 12mm Varifocal lens)	Yes	Yes	765	Number	Yes	Yes	TQ_11
2	2 Megapixel IR IP vandal proof Dome Camera (2.8mm to 12mm Varifocal lens)	Yes	Yes	308	Number	Yes	Yes	TQ_11
3	2 Megapixel IR IP Bullet Camera with Built-in 4G Sim Card Slot	Yes	Yes	10	Number	Yes	Yes	TQ_11
4	2 Megapixel IR IP Bullet Camera (Fixed Lens)	Yes	Yes	1298	Number	Yes	Yes	TQ_11
5	2 Megapixel IR IP Dome Camera (Fixed Lens)	Yes	Yes	741	Number	Yes	Yes	TQ_11
6	2 Megapixel IR IP PTZ Camera	Yes	Yes	26	Number	Yes	Yes	TQ_11
7	Local Storage (MicroSD/SDHC/SDXC card) for CCTV Camera	Yes	Yes	50	Number	Yes	No	No
8	PTZ Joystick Controller	Yes	Yes	1	Number	Yes	Yes	TQ_11
9	4 Channel Network Video Recorder (NVR)	Yes	Yes	50	Number	Yes	Yes	TQ_11

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
10	4 Channel Network Video Recorder (NVR) with built-in PoE Ports	Yes	Yes	20	Number	Yes	Yes	TQ_11
11	8 Channel Network Video Recorder (NVR)	Yes	Yes	80	Number	Yes	Yes	TQ_11
12	8 Channel Network Video Recorder (NVR) with built-in PoE	Yes	Yes	36	Number	Yes	Yes	TQ_11
13	16 Channel Network Video Recorder (NVR)	Yes	Yes	30	Number	Yes	Yes	TQ_11
14	32 Channel Network Video Recorder (NVR)	Yes	Yes	18	Number	Yes	Yes	TQ_11
15	4 TB Surveillance Hard Disk for NVR	Yes	Yes	To be specified by bidder as per sizing	Number	Yes	No	No
16	6 TB Surveillance Hard Disk for NVR	Yes	Yes	To be specified by bidder as per sizing	Number	Yes	No	No
17	8 TB Surveillance Hard Disk for NVR	Yes	Yes	To be specified by bidder as per sizing	Number	Yes	No	No
18	32" LED Display Screen with HDMI Cable	Yes	Yes	234	Number	Yes	Yes	TQ_8
19	8 Port PoE/PoE+ industrial grade network Switch	Yes	Yes	50	Number	Yes	Yes	TQ_8
20	1G SFP Transceiver Module for 8 Port PoE/PoE+ industrial grade network switch	Yes	Yes	30	Number	Yes	Yes	TQ_8

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
21	8 Port PoE/PoE+ Web Managed network Switch	Yes	Yes	456	Number	Yes	Yes	TQ_8
22	1G SFP Transceiver Module for 8 Port Web Managed PoE/PoE+ network switch	Yes	Yes	30	Number	Yes	Yes	TQ_8
23	Core/Top of the Rack/ Data Centre network Switch	Yes	Yes	2	Number	Yes	Yes	TQ_8
24	Enterprise next generation firewall	Yes	Yes	1	Number	Yes	Yes	TQ_8
25	Blade/Rack Servers with no single point of failover	Yes	Yes	To be specified by bidder as per sizing	Number	Yes	Yes	TQ_8
	1. Video Management server (n+n mode)							
	2. Recording server							
	3. Database management server							
	4. Others as per solution provided by the bidder meeting RFP requirement							
Note: In n+1 mode for Recording Server, Database management server and others.								
26	Blade Chassis for above mentioned Blade Servers	Yes	Yes	To be specified by bidder as per sizing	Number	Yes	Yes	TQ_8
27	Storage with Complete mounting accessories	Yes	Yes	To be specified by bidder as per sizing	Number	Yes	Yes	TQ_8
28	SAN Switch (if Rack Mountable Server proposed)	Yes	Yes	2	Number	Yes	Yes	TQ_8

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
Software Components								
33	Video Management Server Software	Yes	Yes	1	Number	Yes	Yes	TQ_11
34	Video Management Software channel license	No	No	1476	Number	Yes	Yes	TQ_11
35	Video Management Software Desktop Client License	No	No	15	Number	Yes	Yes	TQ_11
36	Video Management Software Mobile Client License (for android and iOS)	No	No	30	Number	Yes	Yes	TQ_11
37	Antivirus software including licenses for DC infrastructure.	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	No	TQ_8
38	EMS Software	Yes	Yes	1	Number	Yes	Yes	TQ_8
39	EMS Client/device license	No	No	To be specified by bidder as per requirement	Number	Yes	Yes	TQ_8
40	Server OS Licenses (for physical Servers)	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	No	No
41	Server OS Licenses (for VMs)	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	No	No
42	Supply and configuration of Database Licenses	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	No	No

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
43	Supply and configuration of Virtualisation Management Software	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	No	TQ_8
44	Virtualisation Host Licenses	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	No	TQ_8
Civil and Non IT								
45	42U Networking/Server Rack in data center	Yes	Yes	To be specified by bidder as per requirement	Number	Yes	Yes	TQ_8
46	6U Wall Mount Network Rack	Yes	Yes	222	Set	Yes	Yes	TQ_8
47	2U Wall Mount Network Rack	Yes	Yes	234	Set	Yes	Yes	TQ_8
48	UPS with battery Bank as required for Data Center	Yes	Yes	1	Number	Yes	Yes	TQ_8
49	Media Convertor	Yes	Yes	30	Number	Yes	Yes	TQ_8
50	LIU with splicing and Complete mounting accessories as required	Yes	Yes	243	Number	Yes	Yes	TQ_8
51	SMPS Based PoE Injector with power supply and Complete mounting accessories as required	Yes	Yes	500	Number	Yes	No	No
52	Field Junction Box with WAN equipment	No	No	70	Set	Yes	No	No
53	Field Junction Box without WAN equipment	No	No	160	Set	Yes	No	No

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
54	6 mtr. Pole for with cantilever	No	No	420	Set	Yes	No	No
55	10 mtr. Pole for CCTV cameras	No	No	26	Set	Yes	No	No
56	UTP Cat-6 Cable with rodent resistance jacket	Yes	Yes	20,000	RM	Yes	Yes	TQ_8
57	UTP Cat-6 Cable	Yes	Yes	80,000	RM	Yes	Yes	TQ_8
58	6 core Fiber Optic Cable	Yes	Yes	5000	RM	Yes	Yes	TQ_8
59	3 core 1.5 sq. mm Power cable	Yes	Yes	1000	RM	Yes	No	No
60	3 core 1.5 sq. mm armoured Power cable	Yes	Yes	500	RM	Yes	No	No
61	32 mm HDPE Pipe	Yes	Yes	2000	RM	Yes	No	No
62	32 mm DWC Pipe	Yes	Yes	8000	RM	Yes	No	No
63	25 mm PVC Conduit Pipe	Yes	Yes	70000	RM	Yes	No	No
64	Open Digging, Trenching and Ducting	NA	NA	16000	RM	NA	NA	NA
65	Horizontal Directional Drilling (HDD)	NA	NA	800	RM	NA	NA	NA
Rate Discovery Items								
66	9U Wall Mount Network Rack	Yes	Yes	1	Set	Yes	Yes	TQ_8
67	3.5" 6TB 7200 RPM Near Line SAS drive compatible with offered storage solution	Yes	Yes	1	Number	Yes	No	No
68	2.5" 1.2 TB 10K RPM SAS drive compatible with offered storage solution	Yes	Yes	1	Number	Yes	No	No
69	2.5" SFF Additional HDD disk Enclosure compatible with offered storage solution with all necessary cable/accessories to make it functional	Yes	Yes	1	Number	Yes	No	No

#	Description	Proposed Make	Proposed Model No./ Version	Quantity	Unit	Bidder's Compliance as per Section-14 on Letter Head and Datasheets submission	OEM's Compliance as per Section-14 on OEM's Letter Head	OEM's Compliance as per TQ_8 / TQ_11
70	3.5" LFF Additional HDD disk Enclosure compatible with offered storage solution with all necessary cable/accessories to make it functional	Yes	Yes	1	Number	Yes	No	No

ANNEXURE-III

14. Revised Technical Compliance Sheet

14.20 Blade Chassis (if Blade Server is proposed)

#	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
A	B	C	D
1.	Minimum 6U size, rack-mountable, capable of accommodating minimum 8 or higher hot pluggable blades		
2.	Dual network connectivity of 10 G speed for each blade server for redundancy		
3.	Shall support Industry standard virtualization hypervisor like Hyper-V, VMWARE, Oracle VM etc.		
4.	DVD ROM shall be available in chassis, can be internal or external, which can be shared by all the blades allowing remote installation of software		
5.	Minimum 4 USB port		
6.	Minimum 2 hot-plug/hot-swap 10 Gbps Ethernet modules each with 8 No. of Ethernet ports for uplink and sufficient internal 10 GBPS ports within chassis to support redundancy for each blade (Flexibility to use any port as 10GbE/25GbE/40GbE/100GbE with optics or breakout cables to meet the above mentioned requirement)		
7.	Two hot-plugs/hot-swap redundant 16 GBPS Fiber Channel module with 16 number of internal and 8 external 16 GBPS ports for connectivity to the external Fiber channel Switch / Storage Controller (Ports must be active and populated with SFP+ from day one.)		
8.	Power supplies shall have N+N. All power supplies modules shall be populated in the chassis. Required number of PDUs and power cables, to connect all blades, Chassis to Data Center power outlet.		

#	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
9.	Hot pluggable/hot-swappable redundant cooling unit		
10.	Provision of systems management and deployment tools to aid in blade server configuration and OS deployment		
11.	Blade enclosure shall have provision to connect to display console/central console for local management such as troubleshooting, configuration, system status/health display.		
12.	Single console for all blades in the enclosure, built-in KVM switch with facility for Virtual KVM features over IP		
13.	Dedicated management network port shall have separate path for remote management.		
14.	24 x 7 Five (5) years on-site back to back comprehensive warranty		
15.	Specify Make of proposed Chassis		
16.	Specify Model of proposed Chassis		

14.21 Storage

#	Parameter	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
A	B	C	D	E
1.	Make	OEM must be listed in Leader's Quadrant of the latest Gartner Magic Quadrant for General-Purpose Disk Arrays or amongst the top 5 for World-wide Market share in terms of Revenue as per IDC for Enterprise Storage Market		
2.	Controllers	<ul style="list-style-type: none"> At least 2 hot pluggable Controllers in active/active mode (for all required protocols) with automatic failover to each other in case of one controller failure. 		

#	Parameter	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
		<ul style="list-style-type: none"> The controllers / Storage nodes should be upgradable seamlessly, without any disruptions / downtime to production workflow for performance, capacity enhancement and software / firmware upgrades. Minimum four Xeon 8 Core CPU across storage controllers Controller must support Multipath I/O Architecture. 		
3.	Storage Operating System	<ul style="list-style-type: none"> Storage offered must be with the latest operating system 		
4.	Cache	<ul style="list-style-type: none"> Minimum 512 GB of useable cache across controllers, out of which minimum 384 GB Cache must be controller cache and rest can be flash based cache. Cache shall be used only for data and control operations and should not handle any overhead of operating system. 		
5.	Host Interface Port	Minimum 4 nos. of 16 Gbps Fibre Channel Ports per Controller shall be available. Ports must be active and populated with SFP+ from day one.		
6.	Back and front port	The storage should support 8/16 Gbps on FC to connect SAN Switch, 10Gbps on iSCSI (SFP+/Base-T) to Connect on LAN switch within same controller pair.		
7.	Scalability	System should support a minimum of 750 drives or more within the same set of controllers.		
8.	Disk Drive Support	System should have support for <ul style="list-style-type: none"> SSD/Flash drives 		

#	Parameter	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
		<ul style="list-style-type: none"> SAS drives Near-line SAS drives 		
9.	RAID support	Should support various RAID Levels (RAID 0 / 1 / 5 / 6 / 10 or any combination of RAID level on single Storage system)		
10.	Solution/ Type	Bidder is required to offer corresponding ports both in server as well as storage controller based on the solution proposed (FC/iSCSI).		
11.	Storage	<p>The Storage Array shall be offered with</p> <ul style="list-style-type: none"> 2PB Usable Capacity: Using RAID Level 6 (Dual Parity) with 8 no. drives in each LUNS using 6TB Near-Line SAS 7.2k RPM HDDs for mainly storing camera output (video / images / audio) with 10 No. of HDD to be provisioned for Global Hot Spare 15TB Usable Capacity: Using RAID Level 5 (Single Parity) with 7 no. drives in each LUNS using 1.2TB SAS 10k RPM HDDs with 2 No. of HDD to be provisioned for Global Hot Spare for storing VMS application/ database /etc. 		
12.	Global Hot Spare	<ul style="list-style-type: none"> System should have the capability to designate global hot spares that can be automatically be used to replace a failed drive anywhere in the system. Storage system should be configured and offered with required Global Hot-spares for the different type and no. of disks configured, as per the system architecture best practices. 		

#	Parameter	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
13.	Minimum LUNs	<ul style="list-style-type: none"> Capacity to create minimum 2048 numbers of LUNs 		
14.	Thin Provisioning	<ul style="list-style-type: none"> Offered Storage System should have Thin Provisioning and Thin Reclamation. 		
15.	Hardware Platform	<ul style="list-style-type: none"> Rack mounted form-factor Modular design to support controllers and disk drives expansion 		
16.	On-line Expansion/RAID Group creation/ Expansion	<ul style="list-style-type: none"> System should have online expansion and shrinking of RAID Group or addition and deletion of new RAID Group. Must be able to add and delete additional disks on the fly to expand or reduce the RAID group capacity or create new RAID Group. 		
17.	Redundancy and High Availability	<ul style="list-style-type: none"> The Storage System should be able to protect the data against single point of failure with respect to hard disks, Cache memory, Controller card, connectivity interfaces, fans and power supplies 		
18.	Management software	<ul style="list-style-type: none"> All the necessary software (GUI Based) to configure and manage the storage space, RAID configuration, logical drives allocation, snapshots etc. are to be provided for the entire system proposed from day-1. Licenses for the storage management software should include disc capacity/count of the complete solution and any additional disks to be plugged in in the future, upto max capacity of the existing controller/units. A single command console for entire storage system. Should also include storage performance monitoring and management software. This should provide detail of performance like IOPs utilization, response time 		

#	Parameter	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
		<p>and also provide capacity detail like amount of capacity allocated, capacity used and capacity free.</p> <ul style="list-style-type: none"> • Should provide the functionality of proactive monitoring of Disk drive and Storage system for all possible disk failures • Should be able to take "snapshots" of the stored data to another logical drive for backup purposes • There should be a dedicated Ethernet port for management and it should not use the iSCSI host ports for management. 		
19.	Data Protection	The storage array must have complete cache protection mechanism either by de-staging data to disk or providing complete cache data protection with battery backup for up to 4 hours		
20.	Perpetual software License	The software license supplied should be perpetual so that there will be no additional software cost while replacing the storage within the same class.		
21.	Server Operating System Support	Must be completely supported by the server operating system offered by the bidder for all the features and technology		
22.	Virtualization Support	Storage System must be completely supported by the virtualization technology offered by the bidder for all the features and technology		
23.	Accessories	All the necessary tools & tackles licenses, cables/connectors for Ethernet/ Fibre/USB/ Power etc.		

#	Parameter	Minimum Specifications	Compliance (Yes, No)	Deviation from Specifications/ Remarks if Any
		required for making the system operational shall be provided by the bidder.		
24.	SAN Switch	<p>If Rack Server based solution is proposed, it is required to supply rack mountable SAN switch with:</p> <ul style="list-style-type: none"> • Standard 24 Port 16Gbps SAN Switches x 2 Nos. • Each SAN switch with minimum 12 Activated ports from day one or if more active ports require as per proposed application architecture, bidder has to provide the same. • Necessary SFP modules, patch cables and other required accessories has to be provided. 		
25.	Warranty	24 x 7 five (5) years on-site back to back comprehensive warranty		
26.	Specify Make of proposed Storage			
27.	Specify Model of proposed Storage			

14.30 Cat-6 UTP Cable

#	Minimum Specifications	Compliance (Yes/No)	Deviation from Specifications/ Remarks if Any
A	B	C	D
1.	Shall be of 4 twisted pairs of 23 AWG solid conductors or better		
2.	Shall support network line speeds upto 1 gigabits per second or better		

#	Minimum Specifications	Compliance (Yes/No)	Deviation from Specifications/ Remarks if Any
3.	Shall be 4-pair Unshielded twisted pair with a cross filler/ isolator (+), meeting Category 6 tested till 500 MHz as per EIA/TIA-568C.2.		
4.	Should comply with all of the performance requirements for current and proposed applications such as Gigabit Ethernet, 100BASE-Tx, digital video and Voice		
5.	The Category 6 Solution shall fully comply with the link segment specifications for 1000 Base-TX in addition to the ANSI/TIA and ISO/IEC Category 6 requirements.		
6.	Shall have the length printed on the outer jacket of the cable after every meter.		
7.	Inner Sheath Material-PE		
8.	Outer Sheath Material-LSZH		
9.	Insulation-High Density Polythene		
10.	Specify Make of proposed Cat 6 Cable		
11.	Specify Model of proposed Cat 6 Cable		

14.44 UTP Cat 6 cable with rodent resistant jacket

#	Minimum Specifications	Compliance (Yes/No)	Deviation from Specifications/ Remarks if Any
A	B	C	D
1.	Shall be of 4 twisted pairs of 23 AWG solid conductors or better		
2.	Shall support network line speeds upto 1 gigabits per second or better		
3.	Shall be 4-pair Unshielded twisted pair with a cross filler/ isolator (+), meeting Category 6 tested till 500 MHz as per EIA/TIA-568C.2.		

#	Minimum Specifications	Compliance (Yes/No)	Deviation from Specifications/Remarks if Any
4.	Should comply with all of the performance requirements for current and proposed applications such as Gigabit Ethernet, 100BASE-Tx, Digital Video and Voice.		
5.	The Category 6 Solution shall fully comply with the link segment specifications for 1000 Base-TX in addition to the ANSI/TIA and ISO/IEC Category 6 requirements.		
6.	Shall have the length printed on the outer jacket of the cable after every meter.		
7.	With Rodent Resistance jacket		
8.	Inner Sheath Material-PE		
9.	Outer Sheath Material-LSZH		
10.	Insulation-High Density Polythene		
11.	Support for Temperature Range: 0 deg. To 50 deg		
12.	Specify Make of proposed UTP Cat 6 Cable		
13.	Specify Model of proposed UTP Cat 6 Cable		

ANNEXURE-IV

1.3 Commercial Bid Format

A. Capital Expenditure (CAPEX)

A. CAPITAL EXPENDITURE (CAPEX)								
#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
IT Hardware Components								
1	SITC of 2 Megapixel Full HD IR IP vandal proof Bullet Camera (2.8mm to 12mm Varifocal lense) with Complete mounting accessories as required	Number	765					
2	SITC of 2 Megapixel IR IP vandal proof Dome Camera (2.8mm to 12mm Varifocal lense) with Complete mounting accessories as required	Number	308					
3	SITC of 2 Megapixel IR IP Bullet Camera with Built-in 4G Sim Card Slot with Complete mounting accessories as required	Number	10					
4	SITC of 2 Megapixel IR IP Bullet Camera (Fixed Lens) with Complete mounting accessories as required	Number	1298					
5	SITC of 2 Megapixel IR IP Dome Camera (Fixed Lens) with Complete mounting accessories as required	Number	741					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
6	SITC of 2 Megapixel IR IP PTZ Camera with Complete mounting accessories as required	Number	26					
7	Local Storage (MicroSD/SDHC/SDXC card) for CCTV Camera	Number	50					
8	PTZ Joystick Controller	Number	1					
9	SITC of 4 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	50					
10	SITC of 4 Channel Network Video Recorder (NVR) with built-in PoE Ports with Complete mounting accessories as required	Number	20					
11	SITC of 8 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	80					
12	SITC of 8 Channel Network Video Recorder (NVR) with built-in PoE with complete mounting accessories as required	Number	36					
13	SITC of 16 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	30					
14	SITC of 32 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	18					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
15	SITC of 4 TB Surveillance Hard Disk for NVR	Number	To be specified by bidder as per sizing					
16	SITC of 6 TB Surveillance Hard Disk for NVR	Number	To be specified by bidder as per sizing					
17	SITC of 8 TB Surveillance Hard Disk for NVR	Number	To be specified by bidder as per sizing					
18	SITC of 32" LED Display Screen with Complete mounting accessories and HDMI Cable as required	Number	234					
19	SITC of 8 Port PoE/PoE+ industrial grade network Switch with Complete mounting accessories as required	Number	50					
20	1G SFP Transceiver Module for 8 Port PoE/PoE+ industrial grade network switch	Number	30					
21	SITC of 8 Port PoE/PoE+ Web Managed network Switch with Complete mounting accessories as required	Number	456					
22	1G SFP Transceiver Module for 8 Port Web Managed PoE/PoE+ network switch	Number	30					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
23	SITC of Core/Top of the Rack/ Data Centre network Switch with Complete mounting accessories as required	Number	2					
24	SITC of Enterprise next generation firewall with Complete mounting accessories as required	Number	1					
25	SITC of Blade/Rack Servers with Complete mounting accessories as required. Server for Suman eye (CCTV Network) project should have no single point of failover	Number	To be specified by bidder as per sizing					
	1. Video Management server (n+n mode)							
	2. Recording server							
	3. Database management server							
	4. Others as per solution provided by the bidder meeting RFP requirement							
Note: In n+1 mode for Recording Server, Database management server and others.								
26	SITC for Blade Chassis for Blade Server for above mentioned Blade Servers	Number	To be specified by bidder as per sizing					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
27	SITC of Storage with Complete mounting accessories	Number	To be specified by bidder as per sizing					
28	SITC for SAN Switch (if Rack Mountable Server proposed)	Number	2					
Software Components								
33	Supply and configuration of Video Management Server Software to meet RFP requirements	Number	1					
34	Supply and configuration of Video Management Software channel license	Number	1476					
35	Supply and configuration of Video Management Software Desktop Client License	Number	15					
36	Supply and configuration of Video Management Software Mobile Client License (for android and iOS)	Number	30					
37	Antivirus software including licenses for DC infrastructure.	Number	To be specified by bidder as per requirement					
38	EMS Software	Number	1					
39	EMS Client/device license	Number	To be specified by bidder as per requirement					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
40	Supply and configuration of Server OS Licenses (for physical Servers)	Number	To be specified by bidder as per requirement					
41	Supply and configuration of Server OS Licenses (for VMs)	Number	To be specified by bidder as per requirement					
42	Supply and configuration of Database Licenses	Number	To be specified by bidder as per requirement					
43	Supply and configuration of Virtualisation Management Software	Number	To be specified by bidder as per requirement					
44	Supply and configuration of Virtualisation Host Licenses	Number	To be specified by bidder as per requirement					
Civil and Non IT								
45	SITC of 42U Networking/Server Rack in data center with Complete mounting accessories as required	Number	To be specified by bidder as per requirement					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
46	SITC of 6U Wall Mount Network Rack with Complete mounting accessories as required	Set	222					
47	SITC of 2U Wall Mount Network Rack with Complete mounting accessories as required	Set	234					
48	SITC of UPS with Complete mounting accessories and battery Bank as required for Data Center	Number	1					
49	SITC of Media Convertor with Complete mounting accessories as required	Number	30					
50	SITC of LIU with splicing and Complete mounting accessories as required	Number	243					
51	SITC of SMPS Based PoE Injector with power supply and Complete mounting accessories as required	Number	500					
52	SITC of Field Junction Box with WAN equipment along with complete mounting accessories as required	Set	70					
53	SITC of Field Junction Box without WAN equipment along with Complete mounting accessories as required	Set	160					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
54	SETC of 6 mtr. Pole for with cantilever CCTV cameras with Complete mounting accessories and civil work as required	Set	420					
55	SETC of 10 mtr. Pole for CCTV cameras with Complete mounting accessories and civil work as required	Set	26					
56	SLTC of UTP Cat-6 Cable with rodent resistant jacket and complete accessories	RM	20,000					
57	SLTC of UTP Cat-6 Cable with complete accessories	RM	80,000					
58	SLTC of 6 core Fiber Optic Cable with complete accessories	RM	5000					
59	SLTC of 3 core 1.5 sq. mm Power cable with complete accessories	RM	1000					
60	SLTC of 3 core 1.5 sq. mm armored Power cable with complete accessories	RM	500					
61	SLTC of 32 mm HDPE Pipe with complete accessories	RM	2000					
62	SLTC of 32 mm DWC Pipe with complete accessories	RM	8000					
63	SLTC of 25 mm PVC Conduit Pipe with complete accessories	RM	70000					
64	Open Digging, Trenching and Ducting	RM	16000					

A. CAPITAL EXPENDITURE (CAPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Total w/o GST C=A*B (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST E=C+D (INR)
65	Horizontal Directional Drilling (HDD)	RM	800					
Total (INR)- Without GST								
Total (INR)- With GST								
Total (INR)- Without GST in Words								

B1. Operation and Maintenance Expenditure (OPEX)**B1. OPERATION AND MAINTENANCE EXPENDITURE (OPEX)**

#	Description	Unit of Measurement	Unit (A)	Unit Rate / Year (w/o GST) (INR) (B)	Total w/o GST for 4th & 5th Year C=A*B*2 (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST for 4th & 5th Year E=C+D (INR)
IT Hardware Components								
1	2 Megapixel Full HD IR IP vandal proof Bullet Camera (2.8mm to 12mm Varifocal lense) with Complete mounting accessories as required	Number	765					
2	2 Megapixel IR IP vandal proof Dome Camera (2.8mm to 12mm Varifocal lense) with Complete mounting accessories as required	Number	308					

B1. OPERATION AND MAINTENANCE EXPENDITURE (OPEX)

#	Description	Unit of Measurement	Unit (A)	Unit Rate / Year (w/o GST) (INR) (B)	Total w/o GST for 4th & 5th Year C=A*B*2 (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST for 4th & 5th Year E=C+D (INR)
3	2 Megapixel IR IP Bullet Camera with Built-in 4G Sim Card Slot with Complete mounting accessories as required	Number	10					
4	2 Megapixel IR IP Bullet Camera (Fixed Lens) with Complete mounting accessories as required	Number	1298					
5	2 Megapixel IR IP Dome Camera (Fixed Lens) with Complete mounting accessories as required	Number	741					
6	2 Megapixel IR IP PTZ Camera with Complete mounting accessories as required	Number	26					
7	PTZ Joystick Controller	Number	1					
8	4 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	50					
9	4 Channel Network Video Recorder (NVR) with built-in PoE Ports with Complete mounting accessories as required	Number	20					
10	8 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	80					

B1. OPERATION AND MAINTENANCE EXPENDITURE (OPEX)								
#	Description	Unit of Measurement	Unit (A)	Unit Rate / Year (w/o GST) (INR) (B)	Total w/o GST for 4th & 5th Year C=A*B*2 (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST for 4th & 5th Year E=C+D (INR)
11	8 Channel Network Video Recorder (NVR) with built-in PoE with complete mounting accessories as required	Number	36					
12	16 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	30					
13	32 Channel Network Video Recorder (NVR) with Complete mounting accessories as required	Number	18					
14	32" LED Display Screen with Complete mounting accessories and HDMI Cable as required	Number	234					
Software Components								
15	Video Management Server Software to meet RFP requirements	Number	1					
16	Antivirus software including licenses for DC infrastructure	Number	To be specified by bidder as per requirement					
17	EMS Software	Number	1					
18	Virtualisation Management Software	Number	To be specified by bidder as per requirement					

B1. OPERATION AND MAINTENANCE EXPENDITURE (OPEX)								
#	Description	Unit of Measurement	Unit (A)	Unit Rate / Year (w/o GST) (INR) (B)	Total w/o GST for 4th & 5th Year $C=A*B*2$ (INR)	Applicable GST (G)%	Total GST $D=C*G\%$ (INR)	Total With GST for 4th & 5th Year $E=C+D$ (INR)
19	Support Charges for Virtualisation Host Software	Number	To be specified by bidder as per requirement					
20	Support Charges for opensource based Server OS	Number	To be specified by bidder as per requirement					
21	Support Charges for opensource based Database	Number	To be specified by bidder as per requirement					
Civil and Non IT								
22	42U Networking/Server Rack in data center with Complete mounting accessories as required	Number	To be specified by bidder as per requirement					
23	6U Wall Mount Network Rack (Only for power strips and fan)	Set	222					
24	2U Wall Mount Network Rack (Only for power strips and fan)	Set	234					
25	UPS with Complete mounting accessories and battery Bank as required for Data Center	Number	1					
Total (INR)- Without GST								
Total (INR)- With GST								
Total (INR)- Without GST in Words								

B2. Support Engineer Cost

B2. SUPPORT ENGINEER EXPENDITURE							
#	Description	Unit (A)	Unit Rate / Year (w/o GST) (INR) (B)	Total w/o GST for 5 Years C=A*B*5 (INR)	Applicable GST (G)%	Total GST D =C*G% (INR)	Total With GST for 5 Years E=C+D (INR)
1	Support Engineer	5					
Total (INR)- Without GST							
Total (INR)- With GST							
Total (INR)- Without GST in Words							

Note:
The cost of Support engineer will be payable from the Go-Live date of RO1 (3 years warranty support + 2 years of O&M)

B3. Rate Discovery for Additional Items

B3. RATE DISCOVERY FOR ADDITIONAL ITEMS							
#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Applicable GST (G)%	Total GST C =B*G% (INR)	Total With GST D=B+C (INR)
1	Shifting of Pole with cameras & all accessories	Number	1				
2	Splicing for OFC cut	Number	1				
3	SITC of 9U Wall Mount Network Rack with Complete mounting accessories as required	Number	1				
4	3.5" 6TB 7200 RPM Near Line SAS drive compatible with offered storage solution	Number	1				

B3. RATE DISCOVERY FOR ADDITIONAL ITEMS

#	Description	Unit of Measurement	Unit (A)	Unit Rate (w/o GST) (INR) (B)	Applicable GST (G)%	Total GST C = B*G% (INR)	Total With GST D=B+C (INR)
5	2.5" 1.2 TB 10K RPM SAS drive compatible with offered storage solution	Number	1				
6	2.5" SFF Additional HDD disk enclosure compatible with offered storage solution with all necessary cable/accessories to make it functional	Number	1				
7	3.5" LFF Additional HDD disk enclosure compatible with offered storage solution with all necessary cable/accessories to make it functional	Number	1				
Total (INR)- Without GST							
Total (INR)- With GST							
Total (INR)- Without GST in Words							

Note: The above cost will be paid on actual during the contract period and shall not be considered for L1 calculation.

C. Project Summary

C. Project Summary			
#	Commercial Bid Summary	Total Price (INR) w/o Tax	Total Price (INR) with Tax
1	CAPEX (A)		
2	OPEX (B1+B2)		
	Total Project Cost (INR)		
	Total Project Cost In words		