CORRIGENDUM-1

Ref. No. IIT(BHU)/IPCELL/2024-25/CCTV/409 **Dated : 20.09.2024**

Consequent upon the Pre-Bid meeting held on 18.09.2024 in reference to **Tender Ref. No. : IIT(BHU)/IPCELL/2024-25/CCTV/385 for Campus Surveillance System: Supply, Installation, Testing, Commissioning and Maintenance at IIT (BHU) Varanasi,** the following amendments are incorporated in aforesaid Tender Document. The Referred content in Col. No. 2 and 3 may be read as appended in Col. No. 4:

Sl. No. (1)	Page no. (2)	Content mentioned in Tender document (3)	Referred content should be read as (4)
1	Point no.3, Page no. 20	The bidder must have executed One similar Order of Rs. 8 Crores or Two similar orders of Rs. 5 Crores of total project value of CCTV Surveillance during 2019 20, 2020-21, 2021-22, 2022-2023, 2023-24 in one of any IITs/IISc/IIM/IISER/NIT/ IIIT/Govt. Autonomous Bodies/Central or State Govt. University/Govt. Research Organizations/Government Offices/PSUs directly with minimum 100 outdoor CCTV cameras setup. The order(s) must be directly in favor of the bidder only.	The bidder must have executed One similar Order of Rs. 8 Crores or Two similar orders of Rs. 5 Crores of total project value of CCTV Surveillance during 2017-18, 2018-19, 2019 20, 2020-21, 2021-22, 2022-2023, 2023-24 in one of any IITs/IISc/IIM/IISER/NIT/ IIIT/Govt. Autonomous Bodies/Central or State Govt. University/Govt. Research Organizations/Government Offices/PSUs directly with minimum 100 outdoor CCTV cameras setup. The order(s) must be directly in favor of the bidder only.
2	Point no. 3, page no. 22	The supplier is required to complete the installation and demonstration of the equipment within **two** weeks of the arrival of materials at the IIT (BHU) site of installation, otherwise the penalty clause will be the same as per the supply of materials.	The supplier is required to complete the supply, installation, testing, commissioning and demonstration of the equipment within **5 months** after acceptance of purchase order, otherwise the penalty clause will be the same as per the supply of materials.
3	Point no. 7, Page no. 22	The bidder must provide the list of users where they have deployed similar nature of equipment during 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24 in prescribed format of Annexure III.	The bidder must provide the list of users where they have deployed similar nature of equipment during 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24 in prescribed format of Annexure III.
4	Point no. 9(e), page no. 26	Copy of similar relevant major purchase orders executed during 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24 in IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research	Copy of similar relevant major purchase orders executed during 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24 in IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/

		Organizations/ Government Offices/PSUs	Government Offices/PSUs
5	Point no. 1, page no. 36	**SITC of 5MP Bullet Camera with 50M IR Distance.** Outdoor/Indoor VF Dome Camera Supply, Installation, Testing & Commissioning of 5MP (or better) IP Network TDN Low-Light IR Rugged Dome Camera, 1/2.8" CMOS or better, 5MP (2592 x 1944) @ 25fps or better, triple stream at various resolution & Frame Rates, Min. Illumination required 0.005 lux @ F1.6 (color), 0 Lux IR On, 4 IR LEDs Smart IR with upto 50m IR distance, Auto ICR (Infrared Cut Filter) 120dB True WDR, S/N Ratio 50db, Shutter Speed 1/8 - 1/30,000; Advance Video Compression technology such as H.265 & H.264 High Profile & MJPEG , Triple stream, 2.7 to 13.5mm 5X motorized focus & zoom lens, Field of View FoV H:96°-26°, BLC, HLC, 3DNR White Balance, Minimum Edge Intelligence Video Analytics : Video Motion Detection, Tampering, Loitering, Intrusion, & People Counting, 4 Privacy Mask, 8 Region Of Interest, Defog, TLS1.2, AES-128/256, SSH/Telnet closed, Stream Encryption, Dual channel Audio, Alarm: 1In/ 1out, 256GB SD card support, PoE (802.3 af) and 12V DC, Max 6W, IP 66, IK 10 vandal proof with Die Cast Aluminium Housing, Having Operating temp range : –40°C to 60° C. Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1 / Indian Standard IS 13252, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.	**SITC of 5MP Bullet Camera with 50M IR Distance.** Outdoor/Indoor VF Bullet Camera Supply, Installation, Testing & Commissioning of 5MP (or better) IP Network TDN Low-Light IR Rugged Bullet Camera, 1/2.8" CMOS or better, 5MP (2592 x 1944) @ 25fps or better, triple stream at various resolution & Frame Rates, Min. Illumination required 0.005 lux @ F1.6 (color), 0 Lux IR On, 4 IR LEDs Smart IR with upto 50m IR distance, Auto ICR (Infrared Cut Filter) 120dB True WDR, S/N Ratio 50db, Shutter Speed 1/8 - 1/30,000; Advance Video Compression technology such as H.265 & H.264 High Profile & MJPEG , Triple stream, 2.7 to 13.5mm 5X motorized focus & zoom lens, Field of View FoV H:96°-26°, BLC, HLC, 3DNR White Balance, Minimum Edge Intelligence Video Analytics : Video Motion Detection, Tampering, Loitering, Intrusion, & People Counting, 4 Privacy Mask, 8 Region Of Interest, Defog, TLS1.2, AES-128/256, SSH/Telnet closed, Stream Encryption, Dual channel Audio, Alarm: 1In/ 1out, 256GB SD card support, PoE (802.3 af) and 12V DC, Max 6W, IP 66, IK 10 vandal proof with Die Cast Aluminium Housing, Having Operating temp range : –40°C to 60° C. Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1 / Indian Standard IS 13252/CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.
6	Point no. 4, page no. 37	**SITC of 8 Port PoE Switch with 2 Port Fiber.** General Features : Switch should be 1U and rack mountable in standard 19" rack.	**SITC of 8 Port PoE Switch with 2 Port Fiber.** **General Features :**

		Switch should have minimum 2GB RAM and 4GB Flash. Performance : Switch shall have minimum 60 Gps of switching fabric and 44 Mpps of forwarding rate. Should be non-blocking and provide wirespeed forwarding rate. Switch shall have minimum 32K MAC Addresses and 4000 VLAN IDs Should support minimum 10K IPv4 routes or more Switch shall have 1K or more multicast routes. Switch should support atleast 16K flow entries Switch should have 6MB or more packet buffer. Functionality : Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.1ae, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, REP, PIM, OSPF, VRRP, PBR and QoS features from Day1. Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs. Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues. Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ . Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard. Switch should support 802.1x	Switch should be 1U and rack mountable in standard 19" rack. Switch should have minimum 2GB RAM and 4GB Flash. **Performance :** Switch shall have minimum 60 Gbps of switching fabric and 44 Mpps of forwarding rate. Should be non-blocking and provide wire speed forwarding rate. Switch shall have minimum 32K MAC Addresses and 4000 VLAN IDs Should support minimum 10K IPv4 routes or more Switch shall have 1K or more multicast routes. Switch should support atleast 16K flow entries Switch should have 6MB or more packet buffer. **Functionality :** Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.1ae, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, REP, PIM, OSPF, VRRP, PBR and QoS features from Day1. Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs. Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP,

		authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and also have support for MACSEC-128. Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type. Interface and Power Switch shall have 8 nos. 10/100/1000 POE+ ports and additional 2nos of 1G Base-T and 2 nos. of 10G SFP+ uplinks ports. Switch should have 240W of Power Budget. Certification: Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements. SITC of 24 Port PoE Indoor Switch with 4 port fiber. Specifications General Features : Switch should be 1U and rack mountable in standard 19" rack. Switch should support internal field replaceable unit redundant power supply from day 1. Switch should have minimum 2 GB RAM and 2 GB Flash. Switch should have dedicated slot/Ports for modular stacking, in addition to asked uplink ports. Should support for minimum 80 Gbps of stacking throughput with 8 switch in single stack. Performance : Switch shall have minimum 128 Gbps of switching fabric and 95 Mpps of forwarding rate.	RADIUS and TACACS+ . Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard. Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and also have support for MACSEC-128. Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type. **Interface and Power :** Switch shall have 8 nos. 10/100/1000 POE+ ports and additional 2nos of 1G Base-T and 2 nos. of 10G SFP+ uplinks ports. Switch should have 240W of Power Budget. **Certification:** Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.

		Switch shall have minimum 16K MAC Addresses and 250 active VLAN. Should support minimum 11K IPv4 routes or more Switch shall have 1K or more multicast routes. Switch should support atleast 16K flow entries Switch should support 128 or more STP Instances. Switch should have 6MB or more packet buffer. Functionality : Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, PIM, OSPF(1000 routes), VRRP, PBR and QoS features from Day1 Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs. Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues. Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ . Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard. Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports. Switch must have the capabilities to enable automatic configuration	

		of switch ports as devices connect to the switch for the device type. Interfaces Switch shall have 24 nos. 10/100/1000 Base-T PoE ports and additional 4 nos. SFP+ uplinks ports. All 24 port should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 370 W. Certification: Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch‘s Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification. OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from the last 3 years before releasing this RFP.	
7	Point no. 3, page no. 37	**SITC of Video Management Software for 320 Cameras along with Client License (8 No's).** Supply, Installation, Testing & Commissioning of ONVIF Certified Network Video Management Software (VMS) system required to support min 500 Cameras for Central Monitoring and Control on need basis as and when required. VMS support UHD, 4K, Full HD resolution, H.265 compression codec, multi-imager/lens cameras and 360° fisheye cameras. The VMS shall have option to support failover features if required in future. VMS shall be licenced for 320 cameras & 4 users clients expandable beyond in the same hardware	**SITC of Video Management Software for 320 Cameras along with Client License (8 No's).** Supply, Installation, Testing & Commissioning of ONVIF Certified Network Video Management Software (VMS) system required to support min 500 Cameras for Central Monitoring and Control on need basis as and when required. VMS support UHD, 4K, Full HD resolution, H.265 compression codec, multi-imager/lens cameras and 360° fisheye cameras. The VMS shall have option to support failover features if required in future. VMS shall be licenced for 320 cameras & 8 users clients expandable beyond in the same hardware server to

		server to support 2000 cameras and 25 User Clients . The VMS should support network joystick controller, GPU rendering support for H.264 and H.265 decoding , video on demand, Adaptive video throttling over network for Live Video, rule engine, operator role management, server based Video Motion Detection (VMD), edge storage backfill support, bookmark with manual comment, bookmark based search, timeline search, Preview search, synchronous playback, monitor wall support, surrounding camera mode, Cyber secured with features such as Digital Signing, General Data Protection Regulation (GDPR) compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones, seamless integration with integrated Access Control System.	support 2000 cameras and 25 User Clients . The VMS should support network joystick controller, GPU rendering support for H.264 and H.265 decoding , video on demand, Adaptive video throttling over network for Live Video, rule engine, operator role management, server based Video Motion Detection (VMD), edge storage backfill support, bookmark with manual comment, bookmark based search, timeline search, Preview search, synchronous playback, monitor wall support, surrounding camera mode, Cyber secured with features such as Digital Signing, General Data Protection Regulation (GDPR) compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones, seamless integration with integrated Access Control System.
8	Point no. 5, page no. 39	**SITC of 24 Port PoE Switch with 4 port Fiber.** Functionality : Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.1ae, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, REP, PIM, OSPF, VRRP, PBR and QoS features from Day1. Switch should support internal field replaceable unit redundant power supply from day 1. Switch should have minimum 2 GB RAM and 2 GB Flash. Switch should have dedicated slot/Ports for modular stacking, in addition to asked uplink ports. Should support for minimum 80 Gbps of stacking thoughput with 8 switch in single stack. Performance :	**SITC of 24 Port PoE Switch with 4 port Fiber**. **Specifications** **General Features :** Switch should be 1U and rack mountable in standard 19" rack. Switch should support internal field replaceable unit redundant power supply from day 1. Switch should have minimum 2 GB RAM and 2 GB Flash. Switch should have dedicated slot/Ports for modular stacking, in addition to asked uplink ports. Should support for minimum 80 Gbps of stacking throughput with 8 switch in single stack. **Performance :** Switch shall have minimum 128 Gbps of

		Switch shall have minimum 128 Gbps of switching fabric and 95 Mpps of forwarding rate. Switch shall have minimum 16K MAC Addresses and 250 active VLAN. Should support minimum 11K IPv4 routes or more Switch shall have 1K or more multicast routes. Switch should support atleast 16K flow entries Switch should support 128 or more STP Instances. Switch should have 6MB or more packet buffer. Functionality : Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, PIM, OSPF(1000 routes), VRRP, PBR and QoS features from Day1 Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs. Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues. Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ . Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard. Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128	switching fabric and 95 Mpps of forwarding rate. Switch shall have minimum 16K MAC Addresses and 250 active VLAN. Should support minimum 11K IPv4 routes or more Switch shall have 1K or more multicast routes. Switch should support atleast 16K flow entries Switch should support 128 or more STP Instances. Switch should have 6MB or more packet buffer. **Functionality :** Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z. Switch must have functionality like static routing, RIP, PIM, OSPF(1000 routes), VRRP, PBR and QoS features from Day1 Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs. Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues. Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ . Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source

		on hardware for all ports. Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type. Interfaces Switch shall have 24 nos. 10/100/1000 Base-T PoE ports and additional 4 nos. SFP+ uplinks ports. All 24 port should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 370 W. Certification: Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch‘s Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification. OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years before releasing this RFP.	Guard. Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports. Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type. Interfaces Switch shall have 24 nos. 10/100/1000 Base-T PoE ports and additional 4 nos. SFP+ uplinks ports. All 24 port should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 370 W. **Certification:** Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment. Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements. Switch / Switch‘s Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification. OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from the last 3 years before releasing this RFP.

9	Point no. 28, Page no. 53	**SITC of VMS Client Workstation**. Required Qty. Mentioned : 8	**SITC of VMS Client Workstation with Joystick Controller**. Actual Required Qty. : 9 **In Addition to existing technical requirement of VMS Client Workstation, following is the required Technical Specifications for Joystick Controller** SITC of 3 Axis Joystick Controller for PTZ Camera with 3 axis control & Screen, to control the PTZ and set the tour of the PTZ Camera, Complete control of up to 128 HDT PTZ domes. Joy Stick supports touch wheet QWERTY Keyboard, 3 Axis variable speed Twist Zoom Control, 20 function key. Multiple control interfaces like TCP/IP, RS232, RS422 & RS485. LCD screen must have 122 x 32 dot, blue - white back light. Certification UL, CE, FCC. Joystick must support PoE, 12V DC
10	Point no. 29, Page no. 54	**SITC of 32'' full HD LED Screen for Workstation**. Required Qty. Mentioned : 8	**SITC of 32'' full HD LED Screen for Workstation**. Actual Required Qty.: 9
11	Point no. 30, Page no. 55	**SITC of 55'' Video Wall (2x2 Matrix) with controller** Display wall It shall be made up of multiple LCD modules stacked up in 2® rows and 2(C) columns to achieve a video wall OEM The LCD video wall as well as the Controller should be from the same OEM Panel 55 inch Xtra Narrow Bezel Bezel 1.8mm or lower Back Light type LED Resolution Full HD 1920 x 1080, professional-grade display Display Colors 1.07 billion Display Mode Direct LED Backlight Brightness (Typ.) 500 nits	**SITC of 55'' Video Wall (2x3 Matrix) with controller** Display wall **It shall be made up of multiple LCD modules stacked up in 2(R) rows and 3(C) columns to achieve a video wall** OEM The LCD video wall as well as the Controller should be from the same OEM Panel 55 inch Xtra Narrow Bezel Bezel 1.8mm or lower Back Light type LED Resolution Full HD 1920 x 1080, professional-grade display Display Colors 1.07 billion Display Mode Direct LED Backlight Brightness (Typ.)

		Contrast Ratio (Typ.) 2000:1 Inputs 1x Analog RGB (D-Sub) 1x Digital DVI-D 2x HDMI 1x USB 3x BNC-Component (YPbPr) 1x BNC-Composite (shared with component) 1x DP 1x OPS Slot 1x Audio-In (RCA L/R) 1x Stereo mini jack Output 1x DVI / DP 1x Audio-Out 1x Speaker Out Control 1x RS 232 In 1x RS 232 Out 1x RJ45 Power Control AC Power ON/OFF Switch Internal Speaker 10W x 10W AC Power Input Range 100~240VAC, 50/60Hz Power Consumption Normal Mode: <150W Standby Mode: <0.5W Dimensions (W x H x D) 1211.4 x 682.2 x 98.5 mm(@Vesa Mount)/ 106.9mm (@ Handle) Operating Temperature 5°C ~ 40°C Storage Temperature -20°C ~ 60°C Operating / Storage Humidity Operating / Storage Humidity 10% ~ 90%, non-condensing Operating Life >50,000 hours The Controller should be able to make the 4 cubes behave as one logical area. It should be possible to display any or all the inputs on the video wall in any desired configuration. OEM The LCD video wall as well as the Controller should be from the same OEM Architecture Should be based on PC architecture Operating System	500 nits Contrast Ratio (Typ.) 2000:1 Inputs 1x Analog RGB (D-Sub) 1x Digital DVI-D 2x HDMI 1x USB 3x BNC- Component (YPbPr) 1x BNC-Composite (shared with component) 1x DP 1x OPS Slot 1x Audio-In (RCA L/R) 1x Stereo mini jack Output 1x DVI / DP 1x Audio-Out 1x Speaker Out Control 1x RS 232 In 1x RS 232 Out 1x RJ45 Power Control AC Power ON/OFF Switch **Internal or External Speaker** 10W x 10W AC Power Input Range 100~240VAC, 50/60Hz Power Consumption Normal Mode: <150W Standby Mode: <0.5W Dimensions (W x H x D) 1211.4 x 682.2 x 98.5 mm(@Vesa Mount)/ 106.9mm (@ Handle) Operating Temperature 5°C ~ 40°C Storage Temperature -20°C ~ 60°C Operating / Storage Humidity Operating / Storage Humidity 10% ~ 90%, non-condensing Operating Life >50,000 hours The Controller should be able to make the 4 cubes behave as one logical area. It should be possible to display any or all the inputs on the video wall in any desired configuration. OEM The LCD video wall as well as the Controller should be from the same OEM Architecture Should be based on PC architecture Operating System Windows 7 or higher -64 bit

		Windows 7 or higher -64 bit RAM 4 GB or higher Client 4 client licenses to be provided to control from client workstations HDD 500 GB or higher Power Supply Single/Dual Redundant Power Supply Outputs 15 DP/DVI outputs to the cubes Inputs 4 HD inputs Wall Management Software Software to be provided to manage the layout on the display Layout Management All the Layouts can be scheduled as per user convenience. Software should support auto launch of Layouts according to specified time event by user. It should be possible to create offline layouts Log File Software should support user log file management Live View The software GUI should be able to show the live view of all the sources on the browser Region Management System software should able to manage Videowall region into multiple regions as per user requirements. Caruosel User should be able to see multiple signal source in one window with specified time interval and with user defined sequence. Ipad/Android control User should be able to control complete system through IPAD and Android system over Wi-Fi Scenarios Software should able to Save and Load desktop layouts from Local or remote machines Layout Scheduler All the Layouts can be scheduled as per	RAM 4 GB or higher Client **8 client licences to be provided to control from client workstations** HDD 500 GB or higher Power Supply Single/Dual Redundant Power Supply Outputs **9 DP/DVI outputs to the cubes** Inputs **9 HD inputs** Wall Management Software Software to be provided to manage the layout on the display Layout Management All the Layouts can be scheduled as per user convenience. Software should support auto launch of Layouts according to specified time event by user. It should be possible to create offline layouts Log File Software should support user log file management Live View The software GUI should be able to show the live view of all the sources on the browser Region Management System software should able to manage Videowall region into multiple regions as per user requirements. Caruosel User should be able to see multiple signal source in one window with specified time interval and with user defined sequence. Ipad/Android control User should be able to control complete system through IPAD and Android system over Wi-Fi Scenarios Software should able to Save and Load desktop layouts from Local or remote machines Layout Scheduler

		user convenience Software should support auto launch of Layouts according to specified time or event by user Layout Preview Software should support layout preview option Launch Application Software should be able to support Integration with 3rd party devices System should offer interface to enable control from 3rd party devices like Creston ,AMX etc. Live Preview Software should able to provide live preview of videowall Work space allocation System should provide functionality to the administrator to define and allocate work space for a particular broadcaster or a group of broadcasters when working on a Video wall Authentication Software should offer 4 levels of Authentication (User accounts, Permissions for functionality & Roles etc). Offline Layouts It should be possible to create offline layouts User friendly Software should be user friendly Ticker Ticker message can be positioned anywhere on the display wall. Inside the ticker window, font size, colour and background can be set Ticker Type Software should able to prepare various kinds of tickers: text ticker, RSS ticker, transparent and time ticker SNTP System should support SNTP function Protection System should have Hardware License key to protect the software from unauthorized access.	All the Layouts can be scheduled as per user convenience Software should support auto launch of Layouts according to specified time or event by user Layout Preview Software should support layout preview option Launch Application Software should be able to support Integration with 3rd party devices System should offer interface to enable control from 3rd party devices like Creston, AMX etc. Live Preview Software should able to provide live preview of videowall Work space allocation System should provide functionality to the administrator to define and allocate work space for a particular broadcaster or a group of broadcasters when working on a Video wall Authentication Software should offer 4 levels of Authentication (User accounts, Permissions for functionality & Roles etc). Offline Layouts It should be possible to create offline layouts User friendly Software should be user friendly Ticker Ticker message can be positioned anywhere on the display wall. Inside the ticker window, font size, colour and background can be set Ticker Type Software should able to prepare various kinds of tickers: text ticker, RSS ticker, transparent and time ticker SNTP System should support SNTP function Protection System should have Hardware License key to protect the software from unauthorized access.

		Source Carousel: User can set multiple sources that can change sequence after some time interval without changing the layout. Region management Admin can assign Videowall workspace to user based on pixel map Snap sensitivity Enables the magnetic behaviour to fit the sources automatically for easy alignment on the wall Scalable GUI Scalable GUI to scale to any size of Videowall screen. Scheduler User can schedule the layout on specific date & time, weekday, weekend , start & end date Source positioning User can position the source input on Videowall with single click IPAD Management App for control should be available on App Store Transparency Controller should support transparent image and SVG content Perspective sharing Should support sharing of perspectives with operator workstation and video wall.	Source Carousel: User can set multiple sources that can change sequence after some time interval without changing the layout. Region management Admin can assign Videowall workspace to user based on pixel map Snap sensitivity Enables the magnetic behaviour to fit the sources automatically for easy alignment on the wall Scalable GUI Scalable GUI to scale to any size of Videowall screen. Scheduler User can schedule the layout on specific date & time, weekday, weekend , start & end date Source positioning User can position the source input on Videowall with single click IPAD Management App for control should be available on App Store Transparency Controller should support transparent image and SVG content Perspective sharing Should support sharing of perspectives with operator workstation and video wall.
12	Point no. 46, page no. 70	**SITC of 5MP Outdoor IR PTZ Camera** Outdoor PTZ Dome Camera Supply, Installation, Testing & Commissioning of Outdoor 1/2.8 inch CMOS 5MP or better, IR PTZ Camera, Effective pixels 2592 x 1944, 5MP, 25 fps; 30x Optical Zoom & 16x Digital Zoom, tripple stream; IR distance: 150 meter; Lens type: Wide 5 to 6mm, Tele 150 to -180mm Motorized Auto focus zoom lens; Memory card slot: Min 256GB support. Minimum Illumination- Sense up on- Color: 0.005 lux color, B/W: 0 lux IR On, WDR 120dB, Edge	**SITC of 5MP Outdoor IR PTZ Camera** Outdoor PTZ Dome Camera Supply, Installation, Testing & Commissioning of Outdoor 1/2.8 inch CMOS 5MP or better, IR PTZ Camera, Effective pixels 2592 x 1944, 5MP, 25 fps; 30x Optical Zoom & 16x Digital Zoom, tripple stream; IR distance: 150 meter; Lens type: Wide 5 to 6mm, Tele 150 to -180mm Motorized Auto focus zoom lens; Memory card slot: Min 256GB support. Minimum Illumination- Sense up on- Color: 0.005 lux color, B/W: 0 lux IR On, WDR 120dB, Edge Video Analysis Video Motion Detection, Intrusion, Lioter, Counter &

		Video Analysis Video Motion Detection, Intrusion, Lioter, Counter & Tampering, 3DNR, BLC, HLC, White Balance, EIS, Defog, Mechanical switchable IR filter (Auto ICR), Pan Range 360° continuous, Tilt Range -10° to 90°, Pan/Tilt Modes - Pan: 0.1°/s - 180°/s; Tilt: 0.1°/s - 90°/s, Presets 256, Preset Accuracy 0.25 Deg, 16 Patrol & Tours, Alarm I/O - 2In/2Out, 2-Way Audio- 1/1 Channel In/Out, 256GB Memory card slot, 4 individually configurable privacy masks, 8 Region of Interest, POE+ (802.3 at) or 24VAC 3A for indoor/Outdoor application, IP66/67, IK 10 ; Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1 / IS 13252, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.	Tampering, 3DNR, BLC, HLC, White Balance, EIS, Defog, Mechanical switchable IR filter (Auto ICR), Pan Range 360° continuous, Tilt Range -10° to 90°, Pan/Tilt Modes - Pan: 0.1°/s - 180°/s; Tilt: 0.1°/s - 90°/s, Presets 256, Preset Accuracy 0.25 Deg, 16 Patrol & Tours, Alarm I/O - 2In/2Out, 2-Way Audio- 1/1 Channel In/Out, 256GB Memory card slot, 4 individually configurable privacy masks, 8 Region of Interest, POE+ (802.3 at) or 24VAC 3A for indoor/Outdoor application, IP66/67, IK 10 ; Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1 / Indian Standard IS 13252/ CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.
13	Point. No. 5, page no. 72	Have you executed the similar nature of work during 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24, in IITs/IISc/IIM/IISER/NIT/IIIT/Govt. Autonomous Bodies/ Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs.	Have you executed the similar nature of work during 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24, in IITs/IISc/IIM/IISER/NIT /IIIT/ Govt. Autonomous Bodies/ Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs.
14	Point no.3, Page no. 73	The bidder must have executed One similar Order of Rs. 8 Crores or Two similar orders of Rs. 5 Crores of total project value of CCTV Surveillance during 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24 in one of any IITs/IISc/IIM/IISER/NIT/ IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs directly with minimum 100 outdoor CCTV cameras setup. The order(s) must be directly in favor of the bidder only.	The bidder must have executed One similar Order of Rs. 8 Crores or Two similar orders of Rs. 5 Crores of total project value of CCTV Surveillance during 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-2023, 2023-24 in one of any IITs/IISc/IIM/IISER/NIT/ IIIT/Govt. Autonomous Bodies/Central or State Govt. University/ Govt. Research Organizations/Government Offices/PSUs directly with minimum 100 outdoor CCTV cameras setup. The order(s) must be directly in favor of the bidder only.
15	Annexure III, Page no. 76	The bidder gives the details of purchase orders of identical or similar equipment supplied to any IITs/IISc/IIM/IISER/ NIT/IIIT/Govt. Autonomous Bodies/ Central or State Govt. University/ Govt. Research Organizations/ Government	The bidder gives the details of purchase orders of identical or similar equipment supplied to any IITs/IISc/IIM/IISER/ NIT/IIIT/Govt. Autonomous Bodies/ Central or State Govt. University/ Govt. Research Organizations/Government

		Offices/ PSUs as per below Format for the period of 2019-20, 2020 21, 2021-22, 2022-2023, 2023-24.	Offices/PSUs as per below Format for the period of 2017-18, 2018-19, 2019-20, 2020 21, 2021-22, 2022-2023, 2023-24.
16	Point no. 1.28 of BoQ	**SITC of VMS Client Workstation** (As per Technical specification given in Annexure-I) Required Qty. Mentioned : 8	**SITC of VMS Client Workstation with Joystick Controller** (As per Technical specification given in Annexure-I) Actual Required Qty. : 9
17	Point no. 1.29 of BoQ	**SITC of 32'' full HD LED Screen for Workstation** (As per Technical specification given in Annexure-I) Required Qty. Mentioned : 8	**SITC of 32'' full HD LED Screen for Workstation** (As per Technical specification given in Annexure-I) Actual Required Qty.: 9
18	Point no. 37 page no. 65 and page no. 75 & Point no. 1.37 of BoQ	**Supply and Laying of 48 Core SM Fiber Cable (400 MTR)**	**Supply and Laying of 48 Core SM Fiber Cable**
19	Point no. 24, page no. 46	**SITC of Network Video Recorder Primary** **(128 Channel Network Video Storage Manager Server).** Market position: The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters	**SITC of Network Video Recorder Primary** **(128 Channel Network Video Storage Manager Server).** Market position: The OEM for the proposed server must be in one of the top five server companies (by market share revenue in IDC) in any of the previous 2 quarters
20	Point no. 25, page no. 48	**SITC of Network Video Recorder Secondary (Failover)** **(128 Channel Network Video Storage Manager Server).** Market position: The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters	**SITC of Network Video Recorder Secondary (Failover)** **(128 Channel Network Video Storage Manager Server).** Market position: The OEM for the proposed server must be in one of the top Five server companies (by market share revenue in IDC) in any of the previous 2 quarters
21	Point no. 27, page no. 51	**SITC of Video Management System Server.**	**SITC of Video Management System Server.**

		Market position The OEM for the proposed server must be in one of the top three server vendors (by market share revenue in IDC) in any of the previous 2 quarters	Market position The OEM for the proposed server must be in one of the top Five server companies (by market share revenue in IDC) in any of the previous 2 quarters

NOTE:

1. The quoted make/model should not have been discontinued from manufacturing as on the date of submission of bid. The bidder is required to submit the proof of the same. Also the details of quoted make/model must be available on the website of their OEM.
2. The technical requirement mentioned in tender be considered as "**minimum technical requirement**". Bidder can quote their product with higher specifications but not lower than the minimum technical requirement mentioned in the tender document.
3. The bidder must ensure before uploading their bid that they have filled all the required information in the formats mentioned in the tender document.
4. The bidder must also ensure that their quoted product meets the latest guidelines of Govt. of India related to that product category. Bidder shall be fully responsible for this.
5. The bidder should also ensure **pagination** in each page of their bid document.
6. Those bidders who will upload the Bank Guarantee for EMD, the **Original Bank Guarantee** of the same must be delivered in the Institute before closing date and time of this tender (as per Critical Data Sheet) failing which their bid shall not be considered for evaluation purpose. Bidder shall be fully responsible for this, IIT (BHU) shall not be responsible for any kind of postal delay. Further, the envelop should be delivered to the **Chairperson, Campus Surveillance System, Institute Purchase Cell, Indian Institute of Technology (Banaras Hindu University), Varanasi – 221005, U.P.** The envelop must contain the **Tender ref. no., name of Tender, and the details of bidder with complete address.**
7. The Scope of Work includes **Warranty of entire deployed system for 5 years** post acceptance of deployment and declaration of Go-Live.
8. **Post quarterly payment shall be released for Manpower mentioned at Sr. No. 1.47 to 1.5 of BOQ excel sheet**. This shall be effective from the date of acceptance of deployed system and declaration of Go-Live.
9. Regarding exemption to MSMEs/Startups, please refer to point no. 19 page no. 24.
10. Regarding participation of OEM from a country sharing the land border with India, the latest guidelines of Govt of India shall be followed in this regard.

The remaining content of the Tender will remain unchanged.

(CHAIRPERSON)
CAMPUS SURVEILLANCE SYSTEM
IIT (BHU), VARANASI