

DEVELOPMENT OF PERMANENT CAMPUS FOR NALANDA UNIVERSITY AT RAJGIR, BIHAR STATE

PRE BID QUERIES and THEIR REPLY- ELV- PACKAGE 5A

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
PROSPECTIVE BIDDER : 01				
Technical Specification - ELV Works (Package 5A) Page #5	1.1 F/UTP CAT6A - Construction and mechanical details	Polyethylene insulation, LSZH jacket, each pair to be individually foiled.	Since F/UTP cable is being asked for, please delete the feature 'each pair to be individually foiled' as to fulfil this the cable need to be F/FTP construction. It could be replaced with 'Foil shield on 4 pairs'.	OK, description shall be amended. Kindly refer to the corrigendum 1.
BOQ - Package 5A Item SI No. 3	SITC Of F/UTP CAT6A angular patch panel	SITC of F/UTP CAT6A angular patch panel pre-loaded with 24 ports in 1U form factor, with universal A/B labeling and 110 connector terminations on rear of panel allowing for quick and easy installation of 22 to 24 AWG cable, inclusive of termination of f/utp CAT6A cables at all 24 ports.	Since wallmounted / closed racks shall be used for housing panels and switches, angled panels may not fit in these racks. Hence request to consider using straight patch panels compatible with given rack enclosures.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #6	SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE: (vi) Cable Construction Type	Loose tube corrugated steel tape armored cable, provided with FRP or equivalent non-metallic central strength member	Please add the vital mechanical properties for outdoor cable: Cable shall have Glass yarns peripheral strength members in both constructions types for added tensile strength performance. Tensile Strength for Unitube: 1250N Tensile Strength for Multitube: 4000N Crush Resistance for Unitube: 3000N Crush Resistance for Multitube: 4000N	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #6	SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE: (vii) Outer Jacket Construction	High density polyethylene, anti - termite, anti - rodent suitable for direct burial application. Jacket must be UV stabilized	HDPE jacket thickness is not mentioned, for adequate protection in outdoor environments, min 2mm thickness of jacket is recommended.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #6	SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE: (viii) & (ix) Losses	Losses @ 1310nm frequency < = 0.4 dB/Km Losses @1550nm frequency < = 0.3 dB/Km	Please amend to the loss values to fit the required link loss budget and allow max. application future proofing. Loss @ 1310nm < = 0.34dB/Km; @ 1550nm < =0.22dB/Km; @ 1380-1386nm < =0.31dB/Km.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #7	SPECIFICATIONS FOR PIGTAILS (SINGLEMODE): compliant to ITU-G657.B Bend Insensitive Fiber	LC style, SM OS2. Simplex, 1 meter, compliant to ITU-G657.B - Bend Insensitive Fiber	Please make it compliant to OS2 grade as per ITU G652.D. Please delete G657.B	OK, description shall be amended. Kindly refer to the corrigendum 1 .
Technical Specification - ELV Works (Package 5A) Page #7	SPECIFICATIONS FOR FIBER OPTIC CABLE PATCHCORDS: Compliance to ITU-G657.B - Bend Insensitive Fiber	LC-LCstyle, SM OS2 as required. Available as either 1.6mm or 3mm simplex or duplex patch cord. Compliance to ITU-G657.B - Bend Insensitive Fiber	Please make it compliant to OS2 grade as per ITU G652.D. Please delete G657.B	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #7	SPECIFICATIONS FOR 19" RACK MOUNTED FIBER OPTIC PATCH PANELS: (viii) Construction	-	Please mention the gauge of metal. For securing metallic armored cables, atleast 1.6mm CRCA sheet is recommended. Please confirm to use this grade.	OK, description shall be amended. Kindly refer to the corrigendum 1.
PROSPECTIVE BIDDER : 02				
Technical Specification - ELV Works (Package 5A) Page #23	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	The camera shall be a Full HD Rapid Dome PTZ camera supporting triple streaming of codecs;simultaneously generating and transmitting JPEG and two independent H.264High Profile video streams different in resolutions and frame rates.	JPEG Video Codec is very 1st video codec which was used in imaging systems so most of OEMs now manufacturing with the different combination like H.264 & MJPEG, H.264 with JPEG so request that kindly make it generic specification for better competition and consider H.264 with MJPEG or JPEG.	OK, description shall be amended. Kindly refer to the corrigendum 1 .
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	The camera shall have 2-way audio features, i.e., the camera shall have built-in audio input and output jacks and be capable of transmitting and receiving full duplex audio stream on the same Ethernet connection as the video. The audio shall be encoded using the G.726 or equivalent ADPCM standard.	We request the clause to be deleted as after the deletion,It will allow a more global competition leading to better technical and price discovery.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	The camera shall have 4 external I/O Terminals for external alarms or controls.	We request the clause to be deleted as after the deletion,It will allow a more global competition leading to better technical and price discovery.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	The camera shall be capable of limiting bandwidth from 64 kbps to 8 Mbps in H.264 mode while also being able to operate without bandwidth limitation in JPEG format.	The limiting Bandwidth range may be differ with respective OEMs as every OEM may have some different range, but maximum should be same so we request to you kindly make changes to 256 kbps to 8Mbps.	NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Focal length shall be 4.3 to 129 mm with field of view coverage of 2.4° to 63.5°.	Focal Length of PTZ cameras varies from 4.2~4.4 mm to 126~132 as this specification show the optical zoom capability of PTZ camera which 30X (Max. Focal Length/Min. Focal Length) so request to make changes to 4.2~4.4 to 126~132 mm.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #25	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Power consumption for the camera shall be 20 watts maximum.	This is a technical restriction & power consumption may vary with respective OEMs, so Please delete the clause or make it as per OEMs and they will mention their power consumption.	Ok, specifications shall be amended.
Technical Specification - ELV Works (Package 5A) Page #25	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Audio Requirement	We request the clause be deleted, The deletion will allow a more global competition leading to better technical and price discovery	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #26	3.2. FULL HIGH DEFINITION, TRUE DAY/NIGHT, OUTDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	The camera shall incorporate a built-in algorithm for intelligent motion detection capability. The camera shall offer this feature with minimum four configurable areas per scene and ten sensitivity levels adjustment capabilities.	We request the clause be deleted, The deletion will allow a more global competition leading to better technical and price discovery	Kindly refer to the corrigendum 1.

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Technical Specification - ELV Works (Package 5A) Page #26	3.2. FULL HIGH DEFINITION, TRUE DAY/NIGHT, OUTDOOR NETWORK RAPID PTZ CAMERA GENERAL REQUIREMENTS:	The camera shall have 4 external I/O Terminals for external alarms or controls.	We request the clause be deleted, The deletion will allow a more global competition leading to better technical and price discovery	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #28	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The camera shall be a Full HD dome network camera supporting three codecs, JPEG and 2 nos. H.264 high profile, any two of which can be used simultaneously. The camera shall utilize a 1/3" type CCD/MOS/CMOS sensor of approx. 2.0 Megapixels and have a true day/night capability.	JPEG Video Codec is very 1st video codec which was used in imaging systems so most of OEMs now manufacturing with the different combination like H.264 & MJPEG, H.264 with JPEG so request that kindly make it generic specification for better competition and consider H.264 with MJPEG or JPEG.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #28	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The camera shall support JPEG format and H.264 high profile compression. The camera shall be able to select the high quality mode in JPEG 1920x 1080 at minimum 25fps. The camera shall also be able to support full HD mode of 1920 x 1080 in H.264 compression mode with 60fps.	As per site requirement is 30FPS cameras asked, so please clarify is it 30fps or 60fps.	It is 30fps; Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #28	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The camera shall provide minimum 4 streams in H.264.	Triple Stream is sufficient for any surveillance system so request to you, kindly amend Min. 3 stream.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #29	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The minimum electronic shutter setting shall be 1 second, and a maximum of 1/40,000 sec.	As the shutter speed is depends on the image sensor and Lens which used by OEM so for best performance of Lens and Image sensor different OEM may have different shutter speed so request to kindly make it generic Change to 1ms-500ms.	NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #29	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The IR range shall be upto 30 mtrs.	As per asked Varifocal lens size 3~9mm Lens has it's own limited as @9mm Lens camera only can identify the object of height 2 meters up to 20 meters in day time, so as in night cameras it will less than as compared to day time so we request to kindly make amends of IR Range up to 20 meters.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #29	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The camera shall be a Full HD dome network camera supporting three codecs, JPEG and 2 nos. H.264 high profile, any two of which can be used simultaneously. The camera shall utilize a 1/3" type CCD/MOS/CMOS sensor of approx. 2.0 Megapixels and have a true day/night capability.	JPEG Video Codec is very 1st video codec which was used in imaging system so most of OEMs now manufacturing with the different combination like H.264 & MJPEG, H.264 with JPEG so request that kindly make it generic specification for better competition and consider H.264 with MJPEG or JPEG.	The Dome Camera focal length requirement is 3-8mm (same as BoQ Item No. 57) and hence Qty. of BoQ Item Sl. No. 58 are merged with BoQ Item Sl. No. 57 and revised Qty. of BoQ Item Sl. No. 58 is 0 (NIL). Sectio 3.4 of Technical Specifications is Not Applicable and hence deleted. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #29	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The camera shall provide minimum 4 streams in H.264.	Triple Stream is sufficient for any surveillance system so request to you, kindly amend Min. 3 stream.	- same as above -
Technical Specification - ELV Works (Package 5A) Page #29	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	The camera shall have an integral 5 to 50 mm p-iris type vari-focal lens with remote zoom and focus.	Dome camera with 5~50 mm P-iris Varifocal lens is proprietary with one OEM so as per industry standard it is 8~22mm Varifocal lens so request to change to 8~22mm or better.	- same as above -
Technical Specification - ELV Works (Package 5A) Page #29	3.4. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (5-50mm) GENERAL REQUIREMENTS:	The minimum electronic shutter setting shall be 1 second, and a maximum of 1/40,000 sec.	As the shutter speed is depends on the image sensor and Lens which used by OEM so for best performance of Lens and Image sensor different OEM may have different shutter speed so request to kindly make it generic Change to 1ms-500ms.	NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #32	3.5. FULL HIGH DEFINITION, OUTDOOR FIXED CS-MOUNT/BOX CAMERA GENERAL REQUIREMENTS:	The minimum electronic shutter setting shall be 1 second, and a maximum of 1/40,000 sec.	As the shutter speed is depends on the image sensor and Lens which used by OEM so for best performance of Lens and Image sensor different OEM may have different shutter speed so request to kindly make it generic Change to 1ms-500ms.	NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #33	3.6. FULL HIGH DEFINITION, INDOOR FIXED CS-MOUNT/BOX CAMERA GENERAL REQUIREMENTS:	The minimum electronic shutter setting shall be 1 second, and a maximum of 1/40,000 sec.	As the shutter speed is depends on the image sensor and Lens which used by OEM so for best performance of Lens and Image sensor different OEM may have different shutter speed so request to kindly make it generic Change to 1ms-500ms.	NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #33	3.6. FULL HIGH DEFINITION, INDOOR FIXED CS-MOUNT/BOX CAMERA GENERAL REQUIREMENTS:	The camera shall have a CS-mount 2MP IR corrected type vari-focal lens (3-8 mm/5-50mm) as standard accessory.	The same Camera lens specification has two different sizes of Varifocal lens so please clarify.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #33	3.6. FULL HIGH DEFINITION, INDOOR FIXED CS-MOUNT/BOX CAMERA GENERAL REQUIREMENTS:	The camera shall have a CS-mount DC auto-iris type vari-focal lens - focal length shall be 5-50mm.	Dome camera with 5~50 mm P-iris Varifocal lens is proprietary with one OEM so as per industry standard it is 8~22mm Varifocal lens so request to change to 8~22mm.	Kindly refer to the corrigendum 1.
PROSPECTIVE BIDDER : 03				
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	• Switch should have minimum 4 dedicated or shared SFP ports.	Please change the state ment as : Switch should have minimum 4 dedicated 1G SFP ports.	While it is true that when a SFP is installed in a sharing scenario, it will take away client ports (for PC, camera, Wi-Fi etc.), but SFP fiber optic transceivers are not installed in each and every switch - it is installed in only one switch per rack; in all other switches we will continue to get all 24 ports. In order to make all the ports active and not Exhaust the working ports it is decided to amend the description for providing dedicated ports. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	• Support for minimum 8k MAC addresses.	Please change the state ment as : Support for minimum 16k MAC addresses.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	• The switch should have at least 4 Nos. 10G - SFP+ ports	Please change the statement as : The switch should have at least 2 Nos. 10G - SFP+ ports	NIT Conditions shall prevail

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Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have non-blocking switching bandwidth of minimum 128Gbps	Please change the statement as : The switch should have non-blocking switching bandwidth of minimum 88Gbps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have forwarding rate of minimum 80Mpps	Please change the statement as : The switch should have forwarding rate of minimum 65.47Mpps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #15	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The Switch should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH	· The switch should have at least 2 Nos. 40G - QSFP+ ports	Kindly change the statement as : The switch should support at least 2 Nos. 40G - QSFP+ ports in future.	NIT Conditions shall prevail - we are not asking for 40G QSFP+ transceivers, but support for future is must.
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : Should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect if someone connect a Rogue Access Point in network and able to take appropriate action to contain rogue Access point.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect an Ad-hoc connection when a connected user forming a network with other system without an AP or try enabling bridging between two interface	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and take appropriate containment action if a smartphone user using tethering to connect other device.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect if a user try to spoof mac address of valid client or AP for unauthorized access/authentication.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	· It should be possible to locate function in map showing station location & Use signal from multiple APs for location identification & should also display station/rogue details	Our understanding of this point is that customer wants to advance location tracking of the access point in the campus, for better troubleshooting. Please clarify our understanding is correct or not??	Yes
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	· Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID	Please change the statement as : · Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID or AP name.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· RFC 2246 TLS protocol version 2.0	Kindly change the statement as : RFC 2246 TLS protocol version 1.0	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· WEP – 64 and 128 bit, TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	Kindly change the statement as : · TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Auto - discovery on Physical and logical basis	Please clarify what is logical discovery?	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Discovery of network elements should be on per device basis and it should be possible to import L2 and L3 topologies	Our understanding on this point is the topology should include both L2 and L3 devices. Please clarify our understanding is correct or not?	Yes, it should include both L2 and L3 devices.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should have the capability to capture logical connectivity information including virtual private network (VPN)	Please clarify what is meant by this point?? Nalanda is Campus. There is no VPN location. Kindly remove this statement, to avoid confusion.	Devices that are outside of campus may connect using broadband or other mechanisms - NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should provide facility to track the performance matrix on subnet basis, VLAN basis and protocol basis	Please change the statement as : System should provide facility to track the performance matrix on subnet basis or VLAN basis and protocol basis	OK, description shall be amended. Kindly refer to the corrigendum 1.

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Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should support specific protocol level performance characteristics	Please remove this statement.	Kindly refer to the corrigendum 1.
PROSPECTIVE BIDDER : 04				
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	· Switch should have minimum 4 dedicated or shared SFP ports.	Please change the state ment as : Switch should have minimum 4 dedicated 1G SFP ports.	While it is true that when a SFP is installed in a sharing scenario, it will take away client ports (for PC, camera, Wi-Fi etc.), but SFP fiber optic transceivers are not installed in each and every switch - it is installed in only one switch per rack; in all other switches we will continue to get all 24 ports. However, we shall amend description for providing dedicated ports. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	· Support for minimum 8k MAC addresses.	Please change the state ment as : Support for minimum 16k MAC addresses.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have at least 4 Nos. 10G - SFP+ ports	Please change the statement as : The switch should have at least 2 Nos. 10G - SFP+ ports	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have non-blocking switching bandwidth of minimum 128Gbps	Please change the statement as : The switch should have non-blocking switching bandwidth of minimum 88Gbps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have forwarding rate of minimum 80Mpps	Please change the statement as : The switch should have forwarding rate of minimum 65.47Mpps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #15	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The Switch should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH	· The switch should have at least 2 Nos. 40G - QSFP+ ports	Kindly change the statement as : The switch should support at least 2 Nos. 40G - QSFP+ ports in future.	NIT Conditions shall prevail - we are not asking for 40G QSFP+ transceivers, but support for future is must.
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
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Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect if someone connect a Rogue Access Point in network and able to take appropriate action to contain rogue Access point.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect an Ad-hoc connection when a connected user forming a network with other system without an AP or try enabling bridging between two interface	Kindly refer to the corrigendum 1.
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Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	· Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID	Please change the statement as : · Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID or AP name.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· RFC 2246 TLS protocol version 2.0	Kindly change the statement as : RFC 2246 TLS protocol version 1.0	OK, description shall be amended. Kindly refer to the corrigendum 1.

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· WEP – 64 and 128 bit, TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	Kindly change the statement as : · TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Auto - discovery on Physical and logical basis	Please clarify what is logical discovery?	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Discovery of network elements should be on per device basis and it should be possible to import L2 and L3 topologies	Our understanding on this point is the topology should include both L2 and L3 devices. Please clarify our understanding is correct or not?	Yes, it should include both L2 and L3 devices.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should have the capability to capture logical connectivity information including virtual private network (VPN)	Please clarify what is meant by this point?? Nalanda is Campus. There is no VPN location. Kindly remove this statement, to avoid confusion.	Devices that are outside of campus may connect using broadband or other mechanisms - NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should provide facility to track the performance matrix on subnet basis, VLAN basis and protocol basis	Please change the statement as : System should provide facility to track the performance matrix on subnet basis or VLAN basis and protocol basis	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should support specific protocol level performance characteristics	Please remove this statement.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No 3 - F/UTP CAT6ACabling System – Cable and Components : COMMSCOPE-SYSTIMAX, PANDUIT-PANNET, TYCO-NETCONNECT	As per Tender Technical specification for ITS Infrastructure, Schneider is comply with the specification. Panduit - Pannet is not present in India, And Commscope & TYCO is Single company, hence request to amend the Name of Schneider to have the right competition in the Bid in term of technical and commercial benefit to Institute only. Request you to kindly mentioned the brand name as SYSTIMAX/SCHNEIDER/Panduit	Commscope and Tyco are not the same company - Commscope as a company had taken over cabling systems business of Tyco. Tyco independently used to operate and market their brand as NetConnect (it was also known as AMP-NetConnect). Today, CommScope as a company have both SYSTIMAX as well as NETCONNECT as 2 individual product lines, which they both are offering independently. (They also have a third line Uniprise, which is not popularly offered in India. - kindly refer to the following website link of CommScope.) As per our understanding, both brands are accepted together in industry as individual line-ups. Schneider bought over Digilink brand products few years ago, however, that range is not considered as par technically. For CAT6A F/UTP system the equivalent lineup in Schneider is ACTASSI. The modified list of makes in that case maybe as follows: COMMSCOPE-SYSTIMAX, COMMSCOPE-NETCONNECT, PANDUIT-PANNET,SCHNEIDER-ACTASSI
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No 4 - Fiber Optics Components (Data & Voice/Telecom, Single Mode) – Cables, LIUs, Shelves, Pigtails, Patchcords, Connectors, Couplers, Splices : COMMSCOPE-SYSTIMAX, PANDUIT-PANNET, TYCO-NETCONNECT	As per Tender Technical specification for ITS Infrastructure, Schneider is comply with the specification. Panduit - Pannet is not present in India, And Commscope & TYCO is Single company, hence request to amend the Name of Schneider to have the right competition in the Bid in term of technical and commercial benefit to Institute only. Request you to kindly mentioned the brand name as SYSTIMAX/SCHNEIDER/Panduit	Commscope and Tyco are not the same company - Commscope as a company had taken over cabling systems business of Tyco. Tyco independently used to operate and market their brand as NetConnect (it was also known as AMP-NetConnect). Today, CommScope as a company have both SYSTIMAX as well as NETCONNECT as 2 individual product lines, which they both are offering independently. (They also have a third line Uniprise, which is not popularly offered in India. - kindly refer to the following website link of CommScope.) As per our understanding, both brands are accepted together in industry as individual line-ups. Schneider bought over Digilink brand products few years ago, however, that range is not considered as par technically. For CAT6A F/UTP system the equivalent lineup in Schneider is ACTASSI. The modified list of makes in that case maybe as follows: COMMSCOPE-SYSTIMAX, COMMSCOPE-NETCONNECT, PANDUIT-PANNET,SCHNEIDER-ACTASSI
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No. 6 -- IP66 rated 96 core External Splicing Kit for outdoor fiber optics cable : 3M, RAYCHEM, TYCO	Request to amend as RFP asked Single OEM for all the Passive Component. Schneider supply IP 66 and IP 68 Rated Outdoor Splicing Kit. Request you to kindly mentioned the brand name as 3M, RAYCHEM, TYCO , Schneider	Please refer to the above reply and the list may be revised to include FO cable OEMs as follows: 3M, COMMSCOPE, PANDUIT, RAYCHEM, SCHNEIDER, TYCO
NIT Document Page #65	CLAUSE 1: Performance Guarantee	Time allowed for submission of Performance Guarantee Programme Chart (Time and Progress) and applicable labour Licenses, Registration with EPFO, ESIC, and BOCW Welfare board or proof of applying there from the date of issue of letter of acceptance within 15 (Fifteen) Days	request to amend this clause from the date of the Purchase order within 15 working days.	NIT Conditions shall prevail
		Date of pre-bid meeting 25.09.2018, 11.30AM	Request to extend the Pre-bid submission last date for 7 working days from today.	NIT Conditions shall prevail
		Date of submission of tender 09.10.2018 up to 3.00 PM	Request to extend the tender submission date for 20 working days from the proposed submission date.	NIT Conditions shall prevail
PROSPECTIVE BIDDER : 05				

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	VMS Software Platform: GENETEC, MILESTONE, NICE	By adding condition customer is either favouring few vendors or restricting itself to get latest technologies and products. Approved make condition is not suitable in India because it is against the "Make in India" Concept. Most importantly if there are technical compliances to be met and Demo/POC for this project why the customer needs to add such conditions. Please find letter attached letter from Indian Government which advises against adding such conditions. Kindly give fair chance to all OEM and remove this clause or add i2V in Approved make list	For completely open CCTV system, we have suggested that cameras and camera monitoring software (VMS) shall be from different set of vendors. Several camera vendors have their own VMS but they are either small scale systems unable to support a large number of cameras or support only their own brand of cameras. Only we have third party VMS, we will be able to protect our investment. A small proprietary system will not support third party cameras. The listed VMS vendors are specialists in software and do not manufacture cameras or storage. The listed brands are truly the leaders and pioneers in VMS Software Platform. Being 'only VMS' vendors they are able to integrate a wide range of cameras from a wide range of camera manufacturers (OEMs). This information is provided by the VMS vendors on their websites. The following links are giving extensive information about various integration possibilities right down to types of features supported etc. in detail for the listed OEMs The above OEM i2V does not have this type of detailed information on their website. You may refer their ONVif details for further clarity. We are of the opinion that being a large site, we should opt for proven solution from large and vendors who have the experience and resources for a software based solution. NIT Conditions shall Prevail.
PROSPECTIVE BIDDER : 06				
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	· Switch should have minimum 4 dedicated or shared SFP ports.	Please change the state ment as : Switch should have minimum 4 dedicated 1G SFP ports.	While it is true that when a SFP is installed in a sharing scenario, it will take away client ports (for PC, camera, WI-Fi etc.), but SFP fiber optic transceivers are not installed in each and every switch - it is installed in only one switch per rack; in all other switches we will continue to get all 24 ports. However, we shall amend description for providing dedicated ports. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	· Support for minimum 8k MAC addresses.	Please change the state ment as : Support for minimum 16k MAC addresses.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have at least 4 Nos. 10G - SFP+ ports	Please change the statement as : The switch should have at least 2 Nos. 10G - SFP+ ports	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have non-blocking switching bandwidth of minimum 128Gbps	Please change the statement as : The switch should have non-blocking switching bandwidth of minimum 88Gbps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have forwarding rate of minimum 80Mpps	Please change the statement as : The switch should have forwarding rate of minimum 65.47Mpps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #15	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The Switch should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH	· The switch should have at least 2 Nos. 40G - QSFP+ ports	Kindly change the statement as : The switch should support at least 2 Nos. 40G - QSFP+ ports in future.	NIT Conditions shall prevail - we are not asking for 40G QSFP+ transceivers, but support for future is must.
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : Should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect if someone connect a Rogue Access Point in network and able to take appropriate action to contain rogue Access point.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect an Ad-hoc connection when a connected user forming a network with other system without an AP or try enabling bridging between two interface	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and take appropriate containment action if a smartphone user using tethering to connect other device.	Kindly refer to the corrigendum 1.

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect if a user try to spoof mac address of valid client or AP for unauthorized access/authentication.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	· It should be possible to locate function in map showing station location & Use signal from multiple APs for location identification & should also display station/rogue details	Our understanding of this point is that customer wants to advance location tracking of the access point in the campus, for better troubleshooting. Please clarify our understanding is correct or not??	Yes
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	· Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID	Please change the statement as : · Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID or AP name.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· RFC 2246 TLS protocol version 2.0	Kindly change the statement as : RFC 2246 TLS protocol version 1.0	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· WEP – 64 and 128 bit, TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	Kindly change the statement as : · TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Auto - discovery on Physical and logical basis	Please clarify what is logical discovery?	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Discovery of network elements should be on per device basis and it should be possible to import L2 and L3 topologies	Our understanding on this point is the topology should include both L2 and L3 devices. Please clarify our understanding is correct or not?	Yes, it should include both L2 and L3 devices.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should have the capability to capture logical connectivity information including virtual private network (VPN)	Please clarify what is meant by this point?? Nalanda is Campus. There is no VPN location. Kindly remove this statement, to avoid confusion.	Devices that are outside of campus may connect using broadband or other mechanisms - NIT Conditions shall prevail.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should provide facility to track the performance matrix on subnet basis, VLAN basis and protocol basis	Please change the statement as : System should provide facility to track the performance matrix on subnet basis or VLAN basis and protocol basis	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should support specific protocol level performance characteristics	Please remove this statement.	Kindly refer to the corrigendum 1.
PROSPECTIVE BIDDER : 07				
Technical Specification - ELV Works (Package 5A) Page #5	1.1 F/UTP CAT6A - Construction and mechanical details	Polyethylene insulation, LSZH jacket, each pair to be individually foiled.	Since F/UTP cable is being asked for, please delete the feature 'each pair to be individually foiled' as to fulfil this the cable need to be F/FTP construction. It could be replaced with 'Foil shield on 4 pairs'.	OK, description shall be amended. Kindly refer to the corrigendum 1.
BOQ - Package 5A Item SI No. 3	SITC Of F/UTP CAT6A angular patch panel	SITC of F/UTP CAT6A angular patch panel pre-loaded with 24 ports in 1U form factor, with universal A/B labeling and 110 connector terminations on rear of panel allowing for quick and easy installation of 22 to 24 AWG cable, inclusive of termination of f/utp CAT6A cables at all 24 ports.	Since wallmounted / closed racks shall be used for housing panels and switches, angled panels may not fit in these racks. Hence request to consider using straight patch panels compatible with given rack enclosures.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #6	SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE: (vi) Cable Construction Type	Loose tube corrugated steel tape armored cable, provided with FRP or equivalent non-metallic central strength member	Please add the vital mechanical properties for outdoor cable: Cable shall have Glass yarns peripheral strength members in both constructions types for added tensile strength performance. Tensile Strength for Unitube: 1250N Tensile Strength for Multitube: 4000N Crush Resistance for Unitube: 3000N Crush Resistance for Multitube: 4000N	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #6	SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE: (vii) Outer Jacket Construction	High density polyethylene, anti - termite, anti - rodent suitable for direct burial application. Jacket must be UV stabilized	HDPE jacket thickness is not mentioned, for adequate protection in outdoor environments, min 2mm thickness of jacket is recommended.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #6	SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE: (viii) & (ix) Losses	Losses @ 1310nm frequency <= 0.4 dB/Km Losses @1550nm frequency <= 0.3 dB/Km	Please amend to the loss values to fit the required link loss budget and allow max. application future proofing. Loss @ 1310nm <= 0.34dB/Km; @ 1550nm <=0.22dB/Km; @ 1380-1386nm <=0.31dB/Km.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #7	SPECIFICATIONS FOR PIGTAILS (SINGLEMODE): compliant to ITU-G657.B Bend Insensitive Fiber	LC style, SM OS2. Simplex, 1 meter, compliant to ITU-G657.B - Bend Insensitive Fiber	Please make it compliant to OS2 grade as per ITU G652.D. Please delete G657.B	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #7	SPECIFICATIONS FOR FIBER OPTIC CABLE PATCHCORDS: Compliance to ITU-G657.B - Bend Insensitive Fiber	LC-LCstyle, SM OS2 as required. Available as either 1.6mm or 3mm simplex or duplex patch cord. Compliance to ITU-G657.B - Bend Insensitive Fiber	Please make it compliant to OS2 grade as per ITU G652.D. Please delete G657.B	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #7	SPECIFICATIONS FOR 19" RACK MOUNTED FIBER OPTIC PATCH PANELS: (viii) Construction	-	Please mention the gauge of metal. For securing metallic armored cables, atleast 1.6mm CRCA sheet is recommended. Please confirm to use this grade.	OK, description shall be amended. Kindly refer to the corrigendum 1.

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Make List for Industrial Ethernet Switch	Since Industrial Ethernet switch is not mentioned as per BOQ specification, the approved make list for Industrial Ethernet switch should not be applicable	Kindly refer to the corrigendum 1 for correct description.
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Make List CCTV system	Request you to include Honeywell as the approved make list for CCTV equipments	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Make List Access Control system	Request you to include Honeywell as the approved make list for Access Control system	NIT Conditions shall prevail
Eligibility Criteria (Notice Inviting Tender) Page # 13	Eligibility Criteria (Notice Inviting Tender)	Eligibility Criteria	We request you to please modify eligibility criteria as mentioned below: 1. Three similar works each costing not less than Rs. 7.40 cr. in single premise during last seven years ending previous day of the last date of submission of tender. ELV components include combination of any one of the following or any one in the individual category: Fire detection & alarm, CCTV, BMS, Data Network, Access Control, Parking management, Boom Barrier, Energy Management , Exit Signage, SCADA works.	NIT Conditions shall prevail
Eligibility Criteria (Notice Inviting Tender) Page # 13	Eligibility Criteria (Notice Inviting Tender)	Eligibility Criteria	1. One similar work of Rs. 15 Cr. in single premise during last seven years ending previous day of the last date of submission of tender. Partial Completion of project staisfying the above value should be allowed. ELV components include combination of any one of the following or any one in the individual category: Fire detection & alarm, CCTV, BMS, Data Network, Access Control, Parking management, Boom Barrier, Energy Management , Exit Signage, SCADA works.	NIT Conditions shall prevail
PROSPECTIVE BIDDER : 07				
Technical Specification - ELV Works (Package 5A) Page #12	2.1. TYPE-1 EDGE SWITCH (ACCESS SWITCH) Layer 2, 8 x 10/100/1000 Base-Tx Ports, PoE+, plus minimum 2 dedicated SFP Ports	Layer 2, 8x10/100/1000 Base-Tx Ports, PoE+, plus minimum 2 dedicated SFP Ports	Layer 2, 8x10/100/1000 Base-Tx Ports, PoE+, plus minimum 2 dedicated 2x1/10G SFP+ ports	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH) Layer 2, 24 x 10/100/1000Base-Tx Ports, PoE+, minimum 4 dedicated or shared SFPPorts	Layer 2, 24x 10/100/1000Base-Tx Ports, PoE+, minimum 4 dedicated or shared SFP ports.	Layer 2, 24x 10/100/1000Base-Tx Ports, PoE+, minimum 2 2 dedicated 1/10G SFP+ ports	4 dedicated SFP ports are required - Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH Layer 3, 24 x 10G SFP+ Ports, 2 x 40G QSFP+ Ports, Redundant Power Supply, Redundant Fan, Full Advanced L3 Features	Switch should have the capabilities to stack upto 8 switches with dedicated stacking port/virtual chasis from day 1 and with minimum stacking bandwidth of 240 GBPS	Request to change this as Stacking bandwidth of 160Gbps as its available with most of the OEM's as per port speed calculation.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER	Shall support 15000 users from day one	Shall support min 25000 concurrent user	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	WMS should support following key feature - iv. - Wireless Heat Map	This is NMS feature not relevant for controller functionality,request to remove for wider participation.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	WMS dashboard should provide real time summary of status & activity based on parameters such as: - iv. - MOST RECENT ALARMS	Alarm generation is NMS feature, controller can provide alert basis on certain threshold value. Request to change.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	It should be possible to locate function in map showing station location & use signal from multiple AP's for location identification & should also display station/rogue details.	These are all NMS feature,request to remove.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	WMS should have the ability to display heat maps & clients	These are all NMS feature,request to remove.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	WMS should have functionality to generate graphical maps showing wireless coverage heat maps, devices and location	These are all NMS feature,request to delete from controller scope,so that max OEM can participate.	NIT Conditions shall prevail

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	Solution should support troubleshooting tools, packet capture & reports to resolve connectivity & performance issues	These are all NMS feature,request to delete from controller scope,so that max OEM can participate.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	4X4:3 Multiple Input/ Multiple Output (MIMO) Wave 2 access point	Request to change this as 4x4:4 MU-MIMO Wave 2 access point	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE		Requesting the clarity, this is AAA solution which is not related to NMS solution and should be separate solution for better functionality and security features which is very much relevant in educational campus. Request for clarity whether University is looking for a AAA solution which can be integrated with NMS or else.	Centralised Network Management and Monitoring Software shall support AAA Server.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE		Requesting the clarity, this is AAA solution which is not related to NMS solution and should be separate solution for better functionality and security features which is very much relevant in educational campus. Request for clarity whether University is looking for a AAA solution which can be integrated with NMS or else.	Yes, required.
PROSPECTIVE BIDDER : 08				
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	MAKELIST5A	" Specified Brand/Make/Manufacturer" please include tyco brand also for better Competition.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #23	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:23 ,pointm 3.1.: The camera shall be capable of 360 degree pan rotation and a minimum tilt range of 0° to 180°, designed for ceiling mount operation.	we are requesting you please change it to "YES, 360° Continuous Rotate,From -15° to 90° (auto Flip) cause	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #23	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:23 ,pointm 3.1. The camera shall incorporate a built-in 30X optical, auto-focus zoom lens, and shall have 12X digital zoom capability with 360X total zoom capability.	"Zoom capability with 360X or mean 360 degree" please clarify the same.	It is to be read as zoom capacity - "The camera shall incorporate a built-in 30X optical, auto-focus zoom lens, and shall have 12X digital zoom capability with 360X total zoom capability."
Technical Specification - ELV Works (Package 5A) Page #23	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:23 ,pointm 3.1. The PTZ camera shall be able to send and receive trigger commands from any other camera even if the VMS is offline.	Please remove this point. We suggest automatic recording on SD card for the video footages . Also we found this point is not available for Outdoor PTZ.	Ok, the description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #23	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:23 ,pointm 3.1. The camera shall be capable of supporting up to five (05) users simultaneously over the network.	we are requesting you please change it to "Up to 20 users. "	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #23	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:24 ,pointm 3.1. The camera shall have 4 external I/O Terminals for external alarms or controls.	2-ch alarm input and 1-ch alarm output is sufficient for the project Please clarify why 4 external I/O Terminals for external alarms or controls required.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:24 ,pointm 3.1. The camera shall have a local storage capability via a memory card slot which can support up to 64GB memory card that can cache images in the event of a network failure. The camera shall also support manual/alarm recording to the optional memory card. The camera shall provide notification of the remaining capacity of the memory card.	we recomanded for Built-in memory card slot, supporting Micro SD/SDHC/SDXC, up to 128GB because as per the volum and criticality of the project memory card should be 256 GB max for future readiness.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:24 ,pointm 3.1. Power consumption for the camera shall be 20 watts maximum.	Please change it to 24 VAC and Hi-PoE; Max.: 40 W (Max. 14 W for IR)	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:24 ,pointm 3.1. The camera shall have mini-jack connectors accessible via pigtail to support external microphone and active speakers.	1-ch audio input,1-ch audio output is sufficient for the communication .	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #24	3.1. FULL HIGH DEFINITION, TRUE DAY/NIGHT, INDOOR NETWORK RAPID PTZCAMERA GENERAL REQUIREMENTS:	Page No:24 ,pointm 3.1. The camera shall be vandal resistant with IK10 rating or IEC 62262 compliance.	We recomanded for the following features " IP66 Standard, TVS 4000V Lightning Protection, Surge Protection and Voltage Transient Protection, " so requesting you please change the parameters	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #28	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	Page 28,3.3: The camera shall provide minimum 4 streams in H.264.	please make it triple stream as three stream is sufficient for the said project	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #28	3.3. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (3-8mm) GENERAL REQUIREMENTS:	Page 28,3.3: The camera shall have an integral 3 to 9 mm p-iris type vari-focal lens with remote zoom and focus.	Please make it optional with D-Iris	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #29	3.4. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (5-50mm) GENERAL REQUIREMENTS:	MINIDOME NETWORK_5-50mm	5-50 mm lens basically use for ANPR purpose , we are requesting you please make it 2.8 to 12 mm and angle of view: 90.1°~31°.	Kindly refer to the corrigendum 1.

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #29	3.4. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (5-50mm) GENERAL REQUIREMENTS:	Page No:29, 3.4: Cameras shall have a wide dynamic range of between 85 to 95dB (for Fixed Box/CS-Mount and Indoor Dome/Mini-dome models and between 120 to 130dB (for indoor/outdoor PTZ models)for ensuring good image performance in varying light conditions.	please make it 120 to 130dB	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #29	3.4. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (5-50mm) GENERAL REQUIREMENTS:	The camera shall be installed in a vandal resistant IK10 rated housing.	please mention housing parameters	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #29	3.4. FULL HIGH DEFINITION, TRUE DAY/NIGHT, MINIDOME NETWORK CAMERA (5-50mm) GENERAL REQUIREMENTS:	The camera shall be outdoor rated and having IP66 rating for ingress protection.	please mention housing parameters	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #32	3.6. FULL HIGH DEFINITION, INDOOR FIXED CS-MOUNT/BOX CAMERA GENERAL REQUIREMENTS:	Page :32,3.6INDOOR FIXED CS-MOUNT The camera shall incorporate a built-in algorithm for intelligent motion detection capability. The camera shall offer this feature with minimum Ten configurable areas per scene and ten sensitivity levels adjustment capabilities.	please remove this point.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #32	3.6. FULL HIGH DEFINITION, INDOOR FIXED CS-MOUNT/BOX CAMERA GENERAL REQUIREMENTS:	The camera shall be installed in a vandal resistant IK10 rated housing.	please mention housing parameters	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #35	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	Page 35, 3.7 VMS Health Monitoring Role for monitoring and logging health events and warnings from the various client applications, roles, and services. It shall also log events within the Windows Event Log, generating reports on health statistics and health history.	It is a aprt of EMS not comes under VMS.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #35	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	The VMS shall be able to use multiple CCTV keyboards to operate the entire set of cameras throughout the system, including cameras of various manufacturers' brands, including their PTZ functionalities.	Not required , VMS , camera andf key board from same oem for better integration	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #35	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	Playbackat:1x,2x,4x,6x,8x,10x,20x,40x,100x.	Please make it upto 24X and it s sufficient for the said project	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #35	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	Visual tracking shall be available with both live and recorded video.	Please remove this point	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #39	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	ARCHIVING The Archiver shall digitally sign the recorded video.	make it option exported video shall digitally sign the recorded video.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #39	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	The Archiver shall have the capacity to configure the key frame interval in seconds or number of frames.	Please remove this point	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #39	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	The Archiver shall support minimum 300 cameras or 300 Mbps of recording throughput whichever comes first in case the network is end to end multicast.	Please make it optional as 128 Nos of camera per server	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #40	3.7. VIDEO MANAGEMENT SOFTWARE (VMS)	SMART PHONE AND TABLET APPS The VMS shall support mobile apps for various popular smart phones and tablets, including e.g., Apple iPod Touch, iPhone, and iPad., RIM BlackBerry smart-phones, Android-compatible smart-phones and tablets.	Please remove RIM BlackBerry smart-phones.	Kindly refer to the corrigendum 1.
PROSPECTIVE BIDDER : 09		Certifications Not Mentioned	UI, FCC & CE to be incorporated	OK, the description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	· Switch should have minimum 4 dedicated or shared SFP ports.	Please change the state ment as : Switch should have minimum 4 dedicated 1G SFP ports.	While it is true that when a SFP is installed in a sharing scenario, it will take away client ports (for PC, camera, Wi-Fi etc.), but SFP fiber optic transceivers are not installed in each and every switch - it is installed in only one switch per rack; in all other switches we will continue to get all 24 ports. However, we shall amend description for providing dedicated ports. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH)	· Support for minimum 8k MAC addresses.	Please change the state ment as : Support for minimum 16k MAC addresses.	OK, description shall be amended. Kindly refer to the corrigendum 1.

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have at least 2 Nos. 10G - SFP+ ports	Please change the statement as : The switch should have at least 2 Nos. 10G - SFP+ ports	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have non-blocking switching bandwidth of minimum 128Gbps	Please change the statement as : The switch should have non-blocking switching bandwidth of minimum 88Gbps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH	· The switch should have forwarding rate of minimum 80Mpps	Please change the statement as : The switch should have forwarding rate of minimum 65.47Mpps	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #14	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #15	2.3. TYPE-3 BLOCK/CLUSTER DISTRIBUTION SWITCH		Kindly add : The Switch should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH	· The switch should have at least 2 Nos. 40G - QSFP+ ports	Kindly change the statement as : The switch should support at least 2 Nos. 40G - QSFP+ ports in future.	NIT Conditions shall prevail - we are not asking for 40G QSFP+ transceivers, but support for future is must.
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : The switch should have 4 GB DRAM and 2 GB Flash or more.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH		Kindly add : Should support 24000 IP Routes and 4000 Multicast route	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect if someone connect a Rogue Access Point in network and able to take appropriate action to contain rogue Access point.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect an Ad-hoc connection when a connected user forming a network with other system without an AP or try enabling bridging between two interface	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and take appropriate containment action if a smartphone user using tethering to connect other device.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER		Kindly add : WLC should detect and protect if a user try to spoof mac address of valid client or AP for unauthorized access/authentication.	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	· It should be possible to locate function in map showing station location & Use signal from multiple APs for location identification & should also display station/rogue details	Our understanding of this point is that customer wants to advance location tracking of the access point in the campus, for better troubleshooting. Please clarify our understanding is correct or not??	Yes
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	· Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID	Please change the statement as : · Customizable view listing security events by type, detected by APs, with time detected, mac address of device and SSID or AP name.	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· RFC 2246 TLS protocol version 2.0	Kindly change the statement as : RFC 2246 TLS protocol version 1.0	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	· WEP - 64 and 128 bit, TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	Kindly change the statement as : · TKIP-MIC: RC4 40 bit, 104 bit and 128 bit, SSL & TLS: RC4 128-bit	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Auto - discovery on Physical and logical basis	Please clarify what is logical discovery?	Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· Discovery of network elements should be on per device basis and it should be possible to import L2 and L3 topologies	Our understanding on this point is the topology should include both L2 and L3 devices. Please clarify our understanding is correct or not?	Yes, it should include both L2 and L3 devices.
Technical Specification - ELV Works (Package 5A) Page #20	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should have the capability to capture logical connectivity information including virtual private network (VPN)	Please clarify what is meant by this point?? Nalanda is Campus. There is no VPN location. Kindly remove this statement, to avoid confusion.	Devices that are outside of campus may connect using broadband or other mechanisms - NIT Conditions shall prevail.

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should provide facility to track the performance matrix on subnet basis, VLAN basis and protocol basis	Please change the statement as : System should provide facility to track the performance matrix on subnet basis or VLAN basis and protocol basis	OK, description shall be amended. Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE	· System should support specific protocol level performance characteristics	Please remove this statement.	Kindly refer to the corrigendum 1.
PROSPECTIVE BIDDER : 10				
Technical Specification - ELV Works (Package 5A) Page #12	2.1. TYPE-1 EDGE SWITCH (ACCESS SWITCH) Layer 2, 8 x 10/100/1000 Base-Tx Ports, PoE+, plus minimum 2 dedicated SFP Ports	Layer 2, 8x10/100/1000 Base-Tx Ports, PoE+, plus minimum 2 dedicated SFP Ports	Layer 2, 8x10/100/1000 Base-Tx Ports, PoE+, plus minimum 2 dedicated 2x1/10G SFP+ ports	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #13	2.2. TYPE-2 EDGE SWITCH (ACCESS SWITCH) Layer 2, 24 x 10/100/1000Base-Tx Ports, PoE+, minimum 4 dedicated or shared SFPPorts	Layer 2, 24x 10/100/1000Base-Tx Ports, PoE+, minimum 4 dedicated or shared SFP ports.	Layer 2, 24x 10/100/1000Base-Tx Ports, PoE+, minimum 2 2 dedicated 1/10G SFP+ ports	4 dedicated SFP ports are required - Kindly refer to the corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #16	2.4. TYPE-4CORE SWITCH Layer 3, 24 x 10G SFP+ Ports, 2 x 40G QSFP+ Ports, Redundant Power Supply, Redundant Fan, Full Advanced L3 Features	Switch should have the capabilities to stack upto 8 switches with dedicated stacking port/virtual chasis from day 1 and with minimum stacking bandwidth of 240 GBPS	Request to change this as Stacking bandwidth of 160Gbps as its available with most of the OEM's as per port speed calculation.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #18	2.5.2. WIRELESS CONTROLLER	Shall support 15000 users from day one	Shall support min 25000 concurrent user	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	WMS should support following key feature - iv. - Wireless Heat Map	This is NMS feature not relevant for controller functionality,request to remove for wider participation.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	WMS dashboard should provide real time summary of status & activity based on parameters such as: - iv. - MOST RECENT ALARMS	Alarm generation is NMS feature, controller can provide alert basis on certain threshold value. Request to change.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	It should be possible to locate function in map showing station location & use signal from multiple AP's for location identification & should also display station/rogue details.	These are all NMS feature,request to remove.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #19	2.5.3. WIRELESS LAN MANAGEMENT	WMS should have the ability to display heat maps & clients	These are all NMS feature,request to remove.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	WMS should have functionality to generate graphical maps showing wireless coverage heat maps, devices and location	These are all NMS feature,request to delete from controller scope,so that max OEM can participate.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #20	2.5.3. WIRELESS LAN MANAGEMENT	Solution should support troubleshooting tools, packet capture & reports to resolve connectivity & performance issues	These are all NMS feature,request to delete from controller scope,so that max OEM can participate.	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #20	2.5.4. ACCESS POINT	4X4:3 Multiple Input/ Multiple Output (MIMO) Wave 2 access point	Request to change this as 4x4:4 MU-MIMO Wave 2 access point	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE		Requesting the clarity, this is AAA solution which is not related to NMS solution and should be separate solution for better functionality and security features which is very much relevant in educational campus. Request for clarity whether University is looking for a AAA solution which can be integrated with NMS or else.	Centralised Network Management and Monitoring Software shall support AAA Server.
Technical Specification - ELV Works (Package 5A) Page #21	2.6. CENTRALISED NETWORK MANAGEMENT AND MONITORING SOFTWARE		Requesting the clarity, this is AAA solution which is not related to NMS solution and should be separate solution for better functionality and security features which is very much relevant in educational campus. Request for clarity whether University is looking for a AAA solution which can be integrated with NMS or else.	Yes, required.
PROSPECTIVE BIDDER : 11				

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No 3 - F/UTP CAT6ACabling System – Cable and Components : COMMSCOPE-SYSTIMAX, PANDUIT-PANNET, TYCO-NETCONNECT	As per Tender Technical specification for ITS Infrastructure, Schneider is comply with the specification. Panduit - Pannet is not present in India, And Commscope & TYCO is Single company, hence request to amend the Name of Schneider to have the right competition in the Bid in term of technical and commercial benefit to Institute only. Suggested Makes:SYSTIMAX/SCHNEIDER/Panduit	Commscope and Tyco are not the same company - Commscope as a company had taken over cabling systems business of Tyco. Tyco independently used to operate and market their brand as NetConnect (it was also known as AMP-NetConnect). Today, CommScope as a company have both SYSTIMAX as well as NETCONNECT as 2 individual product lines, which they both are offering independently. (They also have a third line Uniprise, which is not popularly offered in India. - kindly refer to the following website link of CommScope.) https://www.commscope.com/Product-Catalog/Networking-Systems/Product/Structured-Cabling/ As per our understanding, both brands are accepted together in industry as individual line-ups. Schneider bought over Digilink brand products few years ago, however, that range is not considered at par technically. For CAT6A F/UTP system the equivalent lineup in Schneider is ACTASSI. The modified list of makes in that case maybe as follows: COMMSCOPE-SYSTIMAX, COMMSCOPE-NETCONNECT, PANDUIT-PANNET,SCHNEIDER-ACTASSI
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No 4 - Fiber Optics Components (Data & Voice/Telecom, Single Mode) – Cables, LIUs, Shelves, Pigtaills, Patchcords, Connectors, Couplers, Splices : COMMSCOPE-SYSTIMAX, PANDUIT-PANNET, TYCO-NETCONNECT	As per Tender Technical specification for ITS Infrastructure, Schneider is comply with the specification. Panduit - Pannet is not present in India, And Commscope & TYCO is Single company, hence request to amend the Name of Schneider to have the right competition in the Bid in term of technical and commercial benefit to Institute only. Suggested Makes:SYSTIMAX/SCHNEIDER/Panduit	Commscope and Tyco are not the same company - Commscope as a company had taken over cabling systems business of Tyco. Tyco independently used to operate and market their brand as NetConnect (it was also known as AMP-NetConnect). Today, CommScope as a company have both SYSTIMAX as well as NETCONNECT as 2 individual product lines, which they both are offering independently. (They also have a third line Uniprise, which is not popularly offered in India. - kindly refer to the following website link of CommScope.) As per our understanding, both brands are accepted together in industry as individual line-ups. Schneider bought over Digilink brand products few years ago, however, that range is not considered at par technically. For CAT6A F/UTP system the equivalent lineup in Schneider is ACTASSI. The modified list of makes in that case maybe as follows: COMMSCOPE-SYSTIMAX, COMMSCOPE-NETCONNECT, PANDUIT-PANNET,SCHNEIDER-ACTASSI Please refer to the above reply.
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No. 6 -- IP66 rated 96 core External Splicing Kit for outdoor fiber optics cable : 3M, RAYCHEM, TYCO	Request to amend as RFP asked Single OEM for all the Passive Component. Schneider supply IP 66 and IP 68 Rated Outdoor Splicing Kit. Suggested makes: 3M, RAYCHEM, TYCO , Schneider	The modified list of makes in that case maybe as follows: 3M, RAYCHEM, SCHNEIDER, TYCO However, you may kindly review and revert.
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Make List 5A – Point Number - 10 - All CCTV Cameras	CCTV / Video-Surveillance All types of Cameras (Indoor and Outdoor) – Fixed Dome, Fixed CSMount/ Box, PTZ - AXIS, BOSCH, SONY. Please include PELCO as it is the largest Manufacturer and has the broadest spectrum of CCTV Camera offering Globally. Suggested Makes: AXIS, BOSCH, SONY, PELCO	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Make List 5A – Point Number - 11 VMS Software Platform	VMS Software Platform should include the CCTV Camera Manufacturers of the Tender. Also, there should be atleast 05 Nos. similar installed site of the VMS (Atleast 800+ Cameras) in running condition. We request inclusion of PELCO for the same which can match the same Globally. Suggested Makes: AXIS, BOSCH, SONY, GENETEC, MILESTONE, NICE, PELCO	NIT Conditions shall prevail. Refer Corrigendum 1.
ELV BoQ Item Sr. No. 55 & 56	PTZ Cameras	Dehumidification feature	Please confirm that "Dehumidification feature" means Camera should have built-in Heater and Blower.	Yes, inbuilt dehumidification feature
ELV BoQ Item Sr. No. 61	Video Management Software (VMS)	Camera Licence quantity should match the total number of Cameras. 50% expansion capability should be there.	Camera Licence quantity should be as per the overall Camera Quantity as mentioned in the BOM with expansion capability of 50% without any additional hardware or software.	OK, description shall be amended. Kindly refer to the corrigendum 1.
ELV BoQ Item Sr. No. 59	Outdoor CS-Mount Camera	5-50mm varifocal Lens should have built-in Motorised Function as the large Focal length can be controlled from the Software.	"5-50mm varifocal Lens, with Direct Drive auto Iris motorised function"	Ok, please refer to Corrigendum 1.
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No 16 : Fire Detection & Alarm System : NOTIFIER, SIEMENS-FIRE FINDER, TYCO - SIMPLEX	Schneider Electric is a global manufacturer of Fire Detection Products approved by EU as per En54 part 2 and 4. Would request you to include the same in the Tender. Suggested Makes: NOTIFIER, SIEMENS-FIRE FINDER, TYCO – SIMPLEX, SCHNEIDER ELECTRIC	NIT Conditions shall prevail

Clause, Section and Volume	Item Description	As per Bid Document	Prospective Bidder's Queries	Reply to Queries
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.No. 19 ; Access Control System Readers, Controllers : BOSCH, IDENTIV, LENEL, MATRIX	<p>Schneider Electric is a global manufacturer for Access Control System Products. Also for seamless integration of 3rd Party CCTV System, it is essential that ACS System should have built-in support for Integration of major 3rd Party CCTV System Manufacturers, kindly mention the same in the Tender.</p> <p>Also, it is essential that the Access Controller should be compliant with the latest technology and superbly advanced in Data Processing. Hence, it should have atleast 32 Bit advanced RISC processor with 2Gb total memory. Request you to convey your opinion on the same.</p> <p>Also, the Controller should support both RS485 and Wiegand readers for future expandability.</p> <p>Suggested Makes: Access Control System Readers, Controllers : BOSCH, IDENTIV, LENEL, MATRIX, SCHNEIDER ELECTRIC</p>	NIT Conditions shall prevail
Technical Specification - ELV Works (Package 5A) Page #58	LIST OF APPROVED MAKE / MANUFACTURER FOR LOW VOLTAGE (LV) SYSTEMS	Sr.no 20 : Access Control & Time Attendance Software Application ; BOSCH, IDCUBE, MATRIX	<p>Kindly Include SCHNEIDER ELECTRIC in the same.</p> <p>Suggested Makes: Access Control & Time Attendance Software Application ; BOSCH, IDCUBE, MATRIX, SCHNEIDER ELECTRIC</p>	NIT Conditions shall prevail