The Clarifications to Pre-Bid Queries raised by prospective bidders in response to e-NIT No. CO/SYS/2024/154 dated 15.06.2024.

The pre-bid meeting was held on scheduled date 22.06.2024 in the conference room of Spiritual Growth Center, Katra. Though most of the queries raised by prospective bidders were clarified during the meeting, following Clarifications for some crucial queries are hereby issued. The following Clarification in response to queries raised by prospective bidders shall form an integral part of bid document and it may amount to an amendment of relevant Para/clause of the bid document. Wherever there is a conflict, the provisions herein shall prevail over the relevant Para/clause of the e-NIT/ bid document.

S. No.	Section / Clause Reference	Page no.	Tender Clause description	New Clause Description
1	Section:1 , Clause 1.10	4	The e-tender document should be accompanied by an Earnest Money Deposit (EMD) in the form of CDR/FDR amounting to Rs. 20,00,000/- (Rupees Twenty Lakhs Only) with a validity period of 06 months from any Nationalized / Scheduled Bank, duly pledged in favour of FA/Chief Accounts Officer, Shri Mata Vaishno Devi Shrine Board, Katra. The Earnest Money of the unsuccessful bidder will be returned within 30 days after the award of contract to the successful bidder. The EMD of successful bidder shall be converted to Performance Bank Guarantee. Details to be mentioned in Annexure-B.	The e-tender document should be accompanied by an Earnest Money Deposit (EMD) in the form of CDR/FDR/ Bank Guarantee amounting to Rs. 20,00,000/- (Rupees Twenty Lakhs Only) with a validity period of 06 months from any Nationalized / Scheduled Bank, duly pledged in favour of FA/Chief Accounts Officer, Shri Mata Vaishno Devi Shrine Board, Katra. The Earnest Money of the unsuccessful bidder will be returned within 30 days after the award of contract to the successful bidder. The EMD of successful bidder shall be converted to Performance Bank Guarantee. No exemption to MSME. Details to be mentioned in Annexure-B. Refer Annexure-H for Format of EMD for Bank Guarantee
2	Section:5, Clause 5.3 , S.No. 7	14	Consortium to be allowed: No	Joint Venture to be allowed with maximum 02 members. Lead member to be nominated in the Joint Venture. Consortium of bidders/Joint venture if any, must clearly define role/scope of work of each partner/member. Further, the agreement for Consortium/Joint venture must accompany the Bid and should clearly define the Lead partner who will be the contractor. The Lead Partner must be the partner with the essential experience. The responsibilities of Lead Partner would be as: - Lead Partner will be responsible for execution and completion of work, if awarded, - Lead Partner will coordinate with other members and on behalf of the Consortium/Joint venture - Lead Partner will receive payments for the work executed and be liable and responsible for due and faithful performance of the CONTRACT in all respects. A Consortium/Joint venture must be on a stamp paper duly notarised and will not be subjected to alteration with regard to change in constituting firms/or reorientation of roles. A copy of the Joint Venture (JV) Agreement duly signed by both the members of the JV shall be provided. One Lead member should be nominated. This Authorisation shall be evidenced by submitting a Power of Attorney signed by legally authorised signatories of both the partners. Any changes if proposed by the Consortium to take advantage of certain developments during evaluation stage will render the Bid liable to rejection.
3	Section:5, Clause 5.3 (8)	14	Project Completion: 90 days for complete setup and roll out of the system from the date of issuance of LoA.	Project Completion: 150 days f or complete setup and roll out of the system from the date of issuance of LoA.

4	Section:5, Clause 5.4	14	Penalty: In case of failure of the successful Tenderer to complete the work within 90 days or non-execution of agreement with Shrine Board within 30 days after the issuance of Letter of Intent / Award as stipulated period as per Clause No. 1.13 of this e-NIT, the penalty shall be imposed upon delay as per the following order i) For 1 to 10 days of delay LD should be @ 1% of value of the contract ii) For 11 to 20 days of delay LD should be @ 2% of value of the contract iii) For 21 to 30 days of delay LD should be @ 3% of value of the contract iv) For 31 to 45 days of delay LD should be @ 5% of value of the contract. v) Beyond 45 days of delay Security deposit will be forfeited and department would be free to award remaining work to other agency at the cost of vendor.	Penalty: In case of failure of the successful Tenderer to complete the work within 150 days or non-execution of agreement with Shrine Board within 30 days after the issuance of Letter of Intent / Award as stipulated period as per Clause No. 1.13 of this e-NIT, the penalty shall be imposed upon delay as per the following order i) For 1 to 15 days of delay LD should be @ 1% of value of the contract iii) For 1 to 30 days of delay LD should be @ 2% of value of the contract iii) For 31 to 45 days of delay LD should be @ 4% of value of the contract iv) Beyond 45 days of delay LS security deposit will be forfeited and department would be free to award remaining work to other agency at the cost of vendor.
5	Section:6, Clause 6.1 (i.)	17	Manufacturer Authorization Certificate (MAF) from OEM's for: - i. CCTV Camera ii. Network Video Management Software (NVMS) iii. Network Switch iv. Server v. Workstation vi. UPS	Manufacturer Authorization Certificate (MAF) from OEM's for: - i. CCTV Camera ii. Network Video Management Software (NVMS)
6	Section:6, Clause 6.1 (o)	18	Bidders shall ensure that the NVMS, cameras, and VA are not from the same OEM and are seamlessly integrated.	Bidders shall ensure that the NVMS, cameras, and VA irrespective of the make/OEM including already installed equipment are seamlessly integrated.
7	Section:6, Clause 6.2 (b)	18	The Bidder should submit a certificate of registration under the Companies Act 1956/2013 as amended	The Bidder should submit a certificate of registration under the Companies Act 1956/2013/ MSME Proprietorship Firm under central sales tax act 1956.
8	Section:6, Clause 6.2 (p)	19	The Bidding Firms should have completed CCTV projects having a cumulative value of Rs. 4.00 Crore during the last five financial years. Or Should have completed at least one CCTV project having a minimum value of Rs. 2.00 Crore during the last five financial years. Or The Bidder should have done similar nature of work including a single order consisting of a minimum of 200 IP cameras for a surveillance project with any State/Central Govt./PSUs/Corporate sector in India during the last five years. Copies of experience certificates of the equivalent document in support of satisfactory completion of CCTV installation from clients shall be provided. The experience certificate should be signed by an authorized signatory.	The Bidding Firms should have completed at least one CCTV project having a minimum value of Rs. 8.00 Crore during the last five financial years. Or Should have completed at least two CCTV projects having a minimum value of Rs. 6.00 Crore during the last five financial years. Or Should have completed at least three CCTV projects having a minimum value of Rs. 4.00 Crore during the last five financial years. Also, in addition, the bidder must have setup a CCTV Command & Control Center for a Surveillance System having a minimum of 200 Cameras in the last five years Copies of experience certificates of the equivalent document in support of satisfactory completion of CCTV installation from clients shall be provided. The experience certificate should be signed by an authorized signatory.

9	Section:6, Clause 6.2 (q)	19	The Bidder financial ye positive ne Auditor/CA	should have a cumulative turnover of at least ars in the field of IT/ITES/Telecom and Surve t worth in each of the last two financial yea are to be enclosed.	INR 10.00 Crore foi iillance. The Bidder rs. Statutory certific	r the last three should have a cates from the	The Bic three fi have a from th In case least IN and Su	dder inan pos he Ar e of NR 2	should have a cumulative turnover of at lo cial years in the field of IT/ITES/Telecom an itive net worth in each of the last two fina uditor/CA are to be enclosed. Joint Venture, the combined cumulative 0.00 Crore for the last three financial year lance.	east INR 20.00 Cro d Surveillance. The ncial years. Statuto turnover (Both M s in the field of IT ,	re for the last Bidder should ory certificates embers) of at (ITES/Telecom
			d) Techni	cal Evaluation shall be based on the following parameter	ers and associated Weig	htage: Max	d) Tec	hnica	I Evaluation shall be based on the following parameter	rs and associated Weig	htage: Max
1			5.10	Description	Criteria	Points	0.1	140	Description	Criteria	Points
1			1.	Cumulative Turnover in the last three Financial	>30 Crore	10	1.		Cumulative Turnover in the last three Financial	>40 Crore	10
				Years	20 - 30 Crore	1			rears	30 - 40 Crore	/
				C (WI E C C C D II	10 - 20 Crore	4	2			20 - 30 Crore	4
			2.	Contract value: Experience of Service Provider	> 10 Crore	10	2.		Contract value: Experience of Service Provider	> 15 Crore	10
				in executing similar Projects (Completed) with	05-10 Crore	/			in executing similar Projects (Completed) with	12-15 Crore	/
				State / Central Government / PSU departments /	02-05 Crore	4			state / Central Government / PSU departments /	08-12 Crore	4
				Corporate Sector during last three financial years.	- 10	10	-		Corporate Sector during last three financial years.	. 10	10
			3.	Experience of Service Provider in IT / ITES /	> 10 years	10	3.	 I 	Experience of Service Provider in IT / ITES /	> 10 years	10
				Telecom / Security / Safety / Surveillance in number					Telecom / Security / Safety / Surveillance in number		
	Sec. 6; Clause 6.3. Technical Evaluation Criteria			of years with/for State / Central Government / PSU	05 - 10 years	7			of years with/for State / Central Government / PSU	05 - 10 years	7
10		20	departments / Corporate Sector.					lepartments / Corporate Sector.			
	(d)				02 - 05 years	4				02 - 05 years	4
			4	Profile Presentation (Methodology, plan & un	derstanding, Timeline,	20	4		Profile Presentation (Methodology, plan & une	lerstanding, Timeline,	20
				Prestigious Awards etc.).				1	Prestigious Awards etc.).		
				Proof of Concept: Ability to demonstrate the key feature	ares and functionality.			1	Proof of Concept: Ability to demonstrate the key featu	res and functionality.	
				Maximum Total Score	-	50			Maximum Total Score		50
			For qu	alifying in the technical bid, the bidder must score a m	inimum of 35 points of	ut of 50 as	For	r qual	ifving in the technical bid, the bidder must score a mi	nimum of 35 points o	ut of 50 as
			mentioned in the above point matrix table failing which the financial bid shall not be opened and					mentioned in the above point matrix table failing which the financial bid shall not be opened and			
			the sul	the submitted bid shall be rejected.					the submitted bid shall be rejected		
							uic	suon	nued old shall be rejected.		
			Howey	ver, it shall be at the sole discretion of the Chief Executi	ve Officer, SMVDSB to	o lower the	Ho	weve	r, it shall be at the sole discretion of the Chief Executi	ve Officer, SMVDSB to	o lower the
			cut-off	limit suitably in-order to have healthy & sufficient cor	npetition in the financia	d bid.	cut	t-off 1	imit suitably in-order to have healthy & sufficient con	petition in the financia	1 bid.
			Financ	ial bids of the technically qualified bidders shall be o	nanad and the L 1 hidd	ar shall be					
			I mane	an olds of the rechinically quantied oldders shall be of	in the financial hid	de hidden	Fin	lancia	I bids of the technically qualified bidders shall be of	ened and the L-1 bidd	er shall be
			consid	ered for the another of the contract. In case of a the	A feastly all stars and a fel	uie oludei	con	nsider	ed for the allotment of the contract. In case of a the	in the financial bid,	the bidder
			scoring	g more in the technical bid evaluation shall be considered	d for the allothent of th	le contract.	SCO	oring	more in the technical bid evaluation shall be considere	d for the allotment of th	e contract.
							7 2 Est	ablis	hment of Sub-Control Centers at all strategi	c locations viz Bha	wan Bhairon
			7.2 Establis	shment of Sub-Control Centers at all strategi	c locations viz. Bha	awan. Bhairon.	/.2 250				wan, bhanon,
							Sanjich	۱hat,	Himkoti, Adhkuwari, Banganga, Tarakote. R	egular data to be s	tored up to 07
			Sanjichnat,	Himkoti, Adhkuwari, Banganga, Tarakote. Regu	llar data to be stored	a up to 07 days	days fo		ab unit reconnectively of all the compares (Fyint	ing (New Installe	innal Tho sub
			for each ur	it respectively of all the installed cameras. The	sub-control centre	s will have I FD	uays 10	леа	ch unit respectively of all the cameras (Exist	ing + New Installa	lons). The sub-
				in respectively of all the installed califeras. The	e sub-control centre		control	l cen	tres will have LED screens of 50" each		
			screens of !	50" each.							
11	Section 7: Requirement of the Tender (Scope	22	2.2.5.4.1	have at af the main intermeted Co		CC Kataa	7.3 Esta	ablis	hment of the main Integrated Command &	Control Center at S	GC, Katra with
11	of the Successful Tenderer)	23	17.3 Establis	arment of the main integrated Command & (Lontrol Center at S	ыс, каtra with	inctall-	tion	and commissioning of various hardware	componente /-+-	
	of the Successful Tenderer)		installation	and commissioning of various hardware comp	onents (storage sec	urity network	Installa	nion	and commissioning of various hardware	components (sto	age, security,
				and commissioning of various nardware comp	unents (storage, set	ancy, network,	Inetwor	rk. a	nd computers) along with required software	applications, Reg	ilar data to be
			and compu	ters) along with required software application	s. Regular data to b	be stored up to	1	, a			
			20 4000		atos comercial - I		stored	up t	to 30 days of all the installed cameras (Exis	sting + New Instal	ations). Video
			130 days of	all the installed cameras. Video wall for integr	ates command and	control centre	wall for		N/ command and control contro with a disa	av size of 144" dia	Viewing
			with a disol	av size of 144" diagonal			wan io		i v commanu anu controi centre with a disp	ay 5128 01 144 01a	gonal. viewing
				ay size of 1-14 diagonal.			Resolut	tion	to be as per Camera.Recording Resolution:	2 MP at 25 FPS	
							1				
							1				
							1				
			1				1				
							1				

12	Section 7, Clause 7.8 (vi)	24	The selected Bidder shall do proper earthing and grounding of the entire CCTV Surveillance System. The earthing resistance value shall not be more than 2 ohms.	The selected Bidder shall do proper earthing and grounding of the entire CCTV Surveillance System wherever required. The earthing resistance value shall not be more than 5 ohms.
13	Section 7, Clause 7.10	25	 i) Payment of 40% of the tender price will be released on delivery of material, on pro-rata basis after receipt acknowledgement/ note of goods received at Engineering store Banganga. The payment will be released after the inspection of the received material by the technical team of the Shrine Board and after the production of a certificate by the technical team. ii) Payment of 20% of the tender price to be released on Installation and Commissioning of the entire system. iii) Payment of the balance 20% of the tender price will be subjected to adjustment of any overpayment and completion of work in all respect i.e., Commissioning, testing, handing over and successful operation for a period of one month by staff of the Shrine Board trained by the vendor. Any shortcomings found during this period will be removed by the vendor at his own expense. iv) Payment of 10% after the completion of Defect Liability Period of 01 Year. v) The payment will be made on a quarterly basis every year after satisfactory completion of the jobs for subsequent years for Comprehensive Operation and Maintenance for 05 years. For any deficiency found in the service, up to 05% penalty on the cost of yearly maintenance charges should be imposed on the successful bidder/contractor. vi) After commissioning of the system, bidder would inform the Board in writing for taking over the project by the trained staff for the project. It shall be the responsibility of the Board to take over the system and depute officers for training within one month 	 i) Payment of 40% of the tender price will be released on delivery of material, on prorata basis after receipt acknowledgement/ note of goods received at Engineering store Banganga. The payment will be released after the inspection of the received material by the technical team of the Shrine Board and after the production of a certificate by the technical team. ii) Payment of 30% of the tender price to be released on Installation and Commissioning of the entire system. iii) Payment of the balance 20% of the tender price will be subjected to adjustment of any overpayment and completion of work in all respect i.e., Commissioning, testing, handing over and successful operation for a period of one month by staff of the Shrine Board trained by the vendor. Any shortcomings found during this period will be removed by the vendor at his own expense. iv) Payment of 10% after the completion of Defect Liability Period of 01 Year. v) The payment will be made on a quarterly basis every year after satisfactory completion of the jobs for subsequent years for Comprehensive Operation and Maintenance for 05 years. For any deficiency found in the service, up to 05% penalty on the cost of yearly maintenance charges should be imposed on the successful bidder/contractor. vi) After commissioning of the system, bidder would inform the Board in writing for taking over the project by the trained staff for the project. It shall be the responsibility of the Board to take over the system and depute officers for training within one month
14	Section 7, Clause 7.14 (i)	26	Bidder shall have to set up a store with original stock/spares & accessories (tested / OK) for the installed CCTV Surveillance System separately equivalent to 5% of each equipment & accessories of the same as mentioned in Bill of Quantities as contingency reserve for immediate repair and maintenance/replacement of faulty parts of the system to ensure the seamless functioning of the CCTV Surveillance System (24x7). The Bidder shall maintain stock of 5% reserve/standby throughout the Contract without any extra cost with the proper stock entry of every item/accessory.	Bidder shall have to set up a store with original stock/spares & accessories (tested / OK) for the installed CCTV Surveillance System separately equivalent to 5% of passive & minor items, accessories, CCTV, switches etc of the same as mentioned in Bill of Quantities as contingency reserve for immediate repair and maintenance/replacement of faulty parts of the system to ensure the seamless functioning of the CCTV Surveillance System (24x7). The Bidder shall maintain stock of 5% reserve/standby throughout the Contract without any extra cost with the proper stock entry of every item/accessory. Relaxation for spares of Servers, Storages, Workstations & UPS.

15	Section 7 , Clause 7.20 (x)	28	The Contractor shall ensure that the equipment is in good working condition and is with full configuration while handing over at the end of the contract period. In case of odd hour's failures and emergencies even on holidays and Sunday normal service is to be rendered by the contractor. In case the firm fails to rectify the fault in allowable time (i.e. within 24 Hours) the penalty would be imposed as per the following manner: - (i) For 1 to 3 days, system down time, penalty should be @ Rs.2000 per day (ii) For 4 to 7 days, system down time, penalty should be @ Rs.5000 per day (iii) Beyond 7 days, system down time, penalty should be @ Rs.15000 per day (iv) However, it may be noted that over and above the penalty, during the downtime all the responsibilities will lie on the contractor for any security issues happened due to system down.	The Contractor shall ensure that the equipment is in good working condition and is with full configuration while handing over at the end of the contract period. In case of odd hour's failures and emergencies even on holidays and Sunday normal service is to be rendered by the contractor. In case the firm fails to rectify the fault in allowable time (i.e. within 24 Hours) the penalty would be imposed as per the following manner: - (i) For 1 to 3 days, system down time, penalty should be @ Rs.2000 per day (ii) For 4 to 7 days, system down time, penalty should be @ Rs.5000 per day (iii) Beyond 7 days, system down time, penalty should be @ Rs.15000 per day (iv) However, it may be noted that over and above the penalty, during the downtime all the responsibilities will lie on the contractor for any security issues happened due to system down. (v) Also, No penalty will be imposed for failure of existing Network Backbone
16	Section 7, Clause 7.27	30	The minimum manpower at managerial / supervisory level to be deployed for the monitoring and on-site maintenance of the system 24x7 during the Operation and Maintenance Period. i. Project Manager (Maintenance) : 01 ii. Site Engineer / Technician : 03 The minimum manpower deployed during the O&M period should have adequate qualification and technical expertise in operationalization of CCTV Project. Acceptance of maintenance manpower shall be as per the approval of the Board. All the manpower should have proper dress code, identity card of the firm and must wear all safety equipment required during the execution of work at site. However, minimum manpower shall have to be maintaining at site during the execution / Comprehensive Warranty Period.	The minimum manpower at managerial / supervisory level to be deployed for the monitoring and on-site maintenance of the system 24x7 during the Operation and Maintenance Period. i. Project Manager (Maintenance) : 01 ii. Site Engineer / Technician : 03 The 01 Project Manager will be based in Katra whereas 01 Site Engineer/Technician will be available round the clock. The minimum manpower deployed during the O&M period should have adequate qualification and technical expertise in operationalization of CCTV Project. Acceptance of maintenance manpower shall be as per the approval of the Board. All the manpower should have proper dress code, identity card of the firm and must wear all safety equipment required during the execution of work at site. However, minimum manpower shall have to be maintaining at site during the execution / Comprehensive Warranty Period.
17	Section:8, S.no 5	33	Supply, Installation, Testing & Commissioning of (200 TB SAN each) Storage for 30 days at Integrated Command & Control Centre, Katra and for 7 days Sub Control Centres at (Bhawan, Sanjhichhat, Adhkuwari, Himkoti, Tarakote, Banganga & Bhairo). Detailed Technical Specifications enclosed as Annexure-A (5). Make:- Dell/ HP/ Lenovo Qty - 13 nos.	Supply, Installation, Testing & Commissioning of (200 TB SAN each) Storage for 30 days atCCTV Command & Control Centre, Katra and for 7 days Sub Control Centres at (Bhawan, Sanjhichhat, Adhkuwari, Himkoti, Tarakote, Banganga & Bhairo). Detailed Technical Specifications enclosed as Annexure-A (5). Bidder can propose single storage of higher capacity for Command & Control Centre. Storage is required for all cameras (Existing + New Installations). Make:- Dell/HP Qty - 13 nos.

18	Section:8, S no. 13 & 14	34	 Supply, Installation, Testing and Commissioning of Surge Protector Device (SPD) for Power. Make:- Obo Bettermann+B37 Supply, Installation, Testing and Commissioning of Surge Protector Device (SPD) for Data. Make:- Obo Bettermann+B37 	 Supply, Installation, Testing and Commissioning of Surge Protector Device (SPD) for Power. Make:- Obo Bettermann+B37 / Schneider /ABB Supply, Installation, Testing and Commissioning of Surge Protector Device (SPD) for Data. Make:- Obo Bettermann+B37 / Schneider / ABB
19	Section:8, S.no. 18	34	Supply, Installation, Testing & Commissioning of Cat-6 A UTP Cable (Box- 305 meters) Armoured. The cables are with UV Stabilized PE Jacket and protected from Rodent attacks. RoHS Compliant Make: Molex/Comscope/R&M	Supply, Installation, Testing & Commissioning of Cat-6 A UTP Cable (Box- 305 meters) shielded Armoured. The cables are with UV Stabilized HDPE Jacket and protected from Rodent attacks. RoHS Compliant Make: Molex/Comscope/R&M
20	Section:8, S.no. 19	35	Supply, Installation, Testing & Commissioning of Cat-6 A UTP Cable 3 mtrs Patch Cord. Make: Molex/Comscope/R&M	Supply, Installation, Testing & Commissioning of Cat-6 A UTP shielded Armoured Iockable Cable 1 mtrs Patch Cord. Make: Molex/Comscope/R&M
21	Section:8, S.no 20	35	OFC Patch Cord Make: Molex/Comscope/R&M	Armoured OFC Patch Cord Make: Molex/Comscope/R&M
22	Section:8, S.no 24	35	Supply, Installation, Testing & Commissioning of 42U (600 x 1000 mm) floor mount rack with 4 fans, 12 sockets 5 /15 Amp PDU, Hardware Mounting 4 Cable Manager horizontal and 4 verticals. Make: Valrack/Rittal/APW-President	Supply, Installation, Testing & Commissioning of 42U (1200 x 1000 mm) floor mount rack with 4 fans, 12 sockets 5 /15 Amp PDU, Hardware Mounting 4 Cable Manager horizontal and 4 verticals. Make: Valrack/Rittal/APW-President
23	Section:8, S.no 26	35	Supply, Installation, Testing & Commissioning of 40/33 MM HDPE Pipe for lying of Fiber Optic Cable. Make: Pioneer/Finolex/Molex	Supply, Installation, Testing & Commissioning of 40/33 MM PLB HDPE Pipe for lying of Fiber Optic Cable. Make: Pioneer/Finolex/Molex
24	Section:8, S.no 33	35	Supply, Installation, Testing and Commissioning of 2 KVA Online UPS, with 1-hour Backup with Battery Rack, Battery Interlinks, Battery to UPS DC Cable, SNMP or MODBUS Card as per requirement. Complete in all respect up to entire satisfaction Engineer in charge of works (for outdoor units) Make of UPS: Numeric/APC/Emerson/DELTA/Eaton Make of Battery: EXIDE/Amron/Rocket	Supply, Installation, Testing and Commissioning of 2 KVA Online UPS, with 1-hour Backup with Battery Rack, Battery Interlinks, Battery to UPS DC Cable, SNMP or MODBUS Card as per requirement. Complete in all respect up to entire satisfaction Engineer in charge of works (for outdoor units). UPS & batteries are also required with 5 years warranty. There may be one time replacement of battery bank after 3 years. Make of UPS: Numeric/APC/Emerson/DELTA/Eaton Make of Battery: EXIDE/Amron/Rocket

25	Section:8, S.no 34	35	Supply, Installation, Testing and Commissioning of online 30 KVA UPS (N+N), Three Phase Input / Three Phase Output with 1-hour Backup using 100 Ah x 40 x 1 strings Battery at full load complete Battery MCCB, Battery Terminal Caps, Battery Rack, Battery Interlinks, battery to UPS DC Cable. UPS shall be equipped with Inbuilt Input isolation transformer, Dust Filters, SNMP, MODBUS CARD for Monitoring, LCD display, Paralleling capability, DC Flexible design of 32 to 40 Battery adjustable at site. Minimum AH of battery shall be 100 AH, multiple string of smaller AH battery is not desirable & with 1-hour Backup at full load complete in all respect up to entire satisfaction Engineer in charge of works. (For Integrated Command & Control Center) Make of UPS: Numeric/APC/Emerson/DELTA/Eaton Make of Battery: EXIDE/Amron/Rocket	Supply, Installation, Testing and Commissioning of online 30 KVA UPS (N+N), Three Phase Input / Three Phase Output with 1-hour Backup using 100 Ah x 40 x 1 strings Battery at full load complete Battery MCCB, Battery Terminal Caps, Battery Rack, Battery Interlinks, battery to UPS DC Cable. UPS shall be equipped with Inbuilt Input isolation transformer, Dust Filters, SNMP, MODBUS CARD for Monitoring, LCD display, Paralleling capability, DC Flexible design of 32 to 40 Battery adjustable at site. Minimum AH of battery shall be 100 AH, multiple string of smaller AH battery is not desirable & with 1-hour Backup at full load complete in all respect up to entire satisfaction Engineer in charge of works. (For CCTV Command & Control Center). UPS & batteries are also required with 5 years warranty. There may be one time replacement of battery bank after 3 years Make of UPS: Numeric/APC/Emerson/DELTA/Eaton Make of Battery: EXIDE/Amron/Rocket
26	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 1	38	Image Sensor: 1/2.8 Inch Exmor CMOS Progressive Scan or better	1/2.8 Inch CMOS Progressive Scan or better
27	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 4	38	Compression Standard: H.264 / H.265	Compression Standard: H.265 or latest
28	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 5	38	Lens: 7-280 mm or better	Lower Focal Length limit to be: 4-7 mm Upper Focal Length Limit to be: 130-250 or better
29	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 6	38	Optical Zoom:40x or better	Optical Zoom: 30x or better
30	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 10	38	Tours: minimum 32	Tours: Minimum 04
31	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 11	38	Preset Accuracy: +-0.1°	Preset Accuracy: +-0.2°
32	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 12	38	Pan & Tilt Speed (Manual) : 450° per second for Pan and 320° per second for Tilt	Pan & Tilt Speed (Manual) : 120° per second or better for Pan and 90° per second or better for Tilt
33	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 13	38	Protocol: TCP, HTTP, HTTPS, SNMP, STP, RSTP, SSL.TLS, 802.1x, DNS, ICMP, IP v4 & v6 Remote Administration: Remote configuration and status using web based tool, multicast /unicast.	Protocol: TCP, HTTP, HTTPS, SNMP, RTSP , SSL.TLS, 802.1x, DNS, ICMP, IP v4 & v6 Remote Administration: Remote configuration and status using web based tool, multicast /unicast.
34	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 17	38	Video Streaming : Stream1 & Stream2 Full HD Compression for Stream1 & Stream2 - H.265 / H.264	Video Streaming : Minimum 03 Streams Compression : H.265
35	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 19	38	Tilt Angle : +30° to –90° or better	Tilt Angle : +20° to –90° or better

36	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 20	38	Security: IEEE 802.1x, IP Address Filter Network authentication EAP/TLS AES Encryption minimum 128 keys / Public Key Infrastructure Camera Mac Address should be of same Camera OEM, NDAA Complied	Security: IEEE 802.1x, IP Address Filter Network authentication EAP/TLS AES Encryption minimum 128 keys / Public Key Infrastructure Camera Mac Address should be of same Camera OEM, NDAA or NIST or Better
37	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 22	38	Wide Dynamic Range (WDR):120 dB or better as per IEC 62676	Wide Dynamic Range (WDR):120 dB
38	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 25	38	IP Protection : IP67, NEMA4 and IK10 or better	IP Protection : IP66, NEMA4 and IK10 or better
39	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 27	39	Video Analytics: Camera should have in-built Edge Based Analytics Video Motion Detection, Active Tampering Alarm, Trip Zone, Abandoned Object, Intrusion Detection, Object Removal, Region Entrance Detection, Region Exiting Detection, Object Counting, Auto tracking, analytics on move	Video Analytics: Camera should have in-built Edge Based Analytics Video Motion Detection, Active Tampering Alarm, Trip Zone, Abandoned Object, Intrusion Detection, Object Removal, Region Entrance Detection, Region Exiting Detection, Object Counting, Auto tracking, Crowd Management/Similar analytics on move
40	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 28	39	Event Trigger: Motion Detection, Edge Storage Events, External Input, Time Scheduled, Camera Tampering, Software Alarms.	Event Trigger: Motion Detection, Edge Storage Events, External Input, Time Scheduled, Camera Tampering / Shock Detection , Software Alarms.
41	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 29	39	Power:POE+/High POE Compliant as per IEEE 802.3at Class 4 & 24 VAC to 240 VAC, Power redundancy between PoE and 48 VDC/24 VAC ensures 24-hour, 365-day continuous operation even under unstable power supply situations.	Power:POE+/High POE Compliant. Power redundancy to ensure 24-hour, 365-day continuous operation even under unstable power supply situations.
42	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 30	39	Other features -ONVIF Compatible, SFP Interface	Other features -ONVIF S,G & T Compatible, SFP Interface in camera or accessories
43	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 33	39	Certification: UL (60950), EN & FCC, CUL, CE Shock & Vibration Resistance IEC60068:2-6 & 2- 27) IEC/EN60825-1 UL (60950), EN & FCC, CUL, CE Shock & Vibration Resistance IEC60068:2-6 & 2-27) IEC/EN60825-1	Clause is Deleted
44	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 34	39	IR Illumination:400 meter and better.Camera should have combination of 850nm IR and white LED IR.Camera shall have integrated wiper and Camera shall have vibration and shock proof as per IEC 60068 Camera shall have wind load 200km/h or better and corrosion proof. Robust Image Stabilisation with Gyro Sensor	IR Illumination: 180 meter and better.Camera should have combination of 850nm IR.Camera shall have integrated wiper / Camera shall have vibration and shock proof as per IEC 60068 Camera shall have wind load 200km/h or better and corrosion proof. Robust Image Stabilisation with Gyro Sensor.
45	Annexure-A, PTZ Camera 2 MP (Out Door Application) - Technical Specifications, S.No. 36	39	Pre-installed minimum storage capacity of256 GB or more & support upto minimum 2 TB SD Card. (The camera should have the facility to store the data on SD card and in case of network connection loss, the stored data on SD card should be automatically sent to the storage when network reconnects.)	Pre-installed minimum storage capacity of 256 GB or more& support upto minimum 1 TB SD Card. (The camera should have the facility to store the data on SD card and in case of network connection loss, the stored data on SD card should be automatically sent to the storage when network reconnects.)
46	Annexure-A, Bullet Camera - Technical Specifications, S.No. 6	40	Lens: 3.4 to 10.5 mm or better	Lower Focal Length limit to be: 3mm - 3.4 mm Upper Focal Length Limit to be: 8mm - 10.5mm or better

47	Annexure-A, Bullet Camera - Technical Specifications, S.No. 9	40	Sensitivity @F1.4 or better, 30 IRE or better with ; Colour Mode - 0.4 lux ;	Sensitivity @F1.6 or better, 30 IRE or better with ; Colour Mode - 0.4 lux ;
48	Annexure-A, Bullet Camera - Technical Specifications, S.No. 10	40	Night Mode (Black & White) - 0.15 lux IR Illumination: Minimum 50 m or better; integrated adaptive IR Illumination	Night Mode (Black & White) - 0.15 lux IR Illumination: Minimum 40 m or better; integrated adaptive IR Illumination
49	Annexure-A, Bullet Camera - Technical Specifications, S.No. 12	40	Wide Dynamic Range (WDR):120 dB as per the IEC Standard 62676 or better	Wide Dynamic Range (WDR):120 dB
50	Annexure-A, Bullet Camera - Technical Specifications, S.No. 13	40	Video Streaming:Minimum 03 Video Streams	Minimum 03 Streams, (Compression: H.265 simultaneously or better)
51	Annexure-A, Bullet Camera - Technical Specifications, S.No. 16	40	Edge Storage: Pre-installed minimum storage capacity of 256 GB or more & support upto minimum 2 TB SD Card. (The camera should have the facility to store the data on SD card and in case of network connection loss, the stored data on SD card should be automatically sent to the storage when network reconnects.)	Pre-installed minimum storage capacity of 256 GB or more & support upto minimum 1 TB SD Card. (The camera should have the facility to store the data on SD card and in case of network connection loss, the stored data on SD card should be automatically sent to the storage when network reconnects.)
52	Annexure-A, Bullet Camera - Technical Specifications, S.No. 17	40	IP Protection: IP67 and IK10	IP Protection: IP66 and IK10
53	Annexure-A, Bullet Camera - Technical Specifications, S.No. 19	40	Video Analytics:Camera should have in-built Edge Based Analytics i.e., Video Motion Detection, Camera Tampering Alarm, Trip Zone, Intrusion Detection, Region Entrance Detection, Region Exiting Detection	Video Analytics: Camera should have in-built Edge Based Analytics Video Motion Detection, Active Tampering Alarm/Shock Detection, Trip Zone, Abandoned Object, Intrusion Detection, Object Removal, Region Entrance Detection, Region Exiting Detection, Auto tracking, Crowd Management/Similar analytics on move
54	Annexure-A, Bullet Camera - Technical Specifications, S.No. 22	40	Protocol:TCP, HTTP, HTTPS, SNMP, STP, RSTP, SSL,TLS, 802.1x, DNS, ICMP, IP v4 & v6 Remote Administration: Remote configuration and status using web based tool, multicast / unicast.	Protocol:TCP, HTTP, HTTPS, SNMP, RTSP , SSL,TLS, 802.1x, DNS, ICMP, IP v4 & v6 Remote Administration: Remote configuration and status using web based tool, multicast / unicast.
55	Annexure-A, Bullet Camera - Technical Specifications, S.No. 23	41	Security: IEEE 802.1x, IP Address Filter, Network authentication EAP/TLS, AES Encryption minimum 128 keys Onboard Cyber Security Chip like Trusted Platform Module / Public Key Infrastructure Camera Mac Address should be of same Camera OEM NDAA Complied	Security: IEEE 802.1x, IP Address Filter, Network authentication EAP/TLS, AES Encryption minimum 128 keys Onboard Cyber Security Chip like Trusted Platform Module / Public Key Infrastructure Camera Mac Address should be of same Camera OEM. NDAA or NIST or Better
56	Annexure-A, Bullet Camera - Technical Specifications, S.No. 24	41	Other features:ONVIF Compatible	Other features:ONVIF Profile S,G & T Compatible or better
57	Annexure-A, Bullet Camera - Technical Specifications, S.No. 25	41	Operating Temperature: - 20° to 60° C	Operating Temperature: - 20° to 55° C
58	Annexure-A, Bullet Camera - Technical Specifications, S.No. 27	41	Certification:UL (60950),CUL,CE, EN & FCC	Certification:UL (60950),CE, EN & FCC
59	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 3	42	Frame Rate:30 FFPS	Frame Rate: 30 FPS
60	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 5	42	Lens :3.4 to 10.5 mm or better	Lower Focal Length limit to be: 3mm - 3.4 mm Upper Focal Length Limit to be: 8mm - 10.5mm or better
61	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 9	42	Senstivity: @F1.3 or better, 30 IRE or better Colour Mode - 0.25 lux; Night Mode (Black & White) - 0.05 lux	Senstivity: @F1.6 or better, 30 IRE

62	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 12	42	Wide Dynamic Range (WDR):120 dB or better (as per the IEC Standard 62676)	Wide Dynamic Range (WDR):120 dB
63	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 13	42	Video Streaming (Quad streaming fully configurable and Bidder to ensure minimum 2 streams shall be configure at camera high resolution and fps):Minimum 03 Video Streams	Minimum 03 Streams (Compression: H.265 simultaneously or better)
64	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 16	42	Edge storage: Pre-installed minimum storage capacity of 256 GB or more& support upto minimum 2 TB SD Card. (The camera should have the facility to store the data on SD card and in case of network connection loss, the stored data on SD card should be automatically sent to the storage when network reconnects.)	Edge storage: Pre-installed minimum storage capacity of 256 GB or more& support upto minimum 1 TB SD Card. (The camera should have the facility to store the data on SD card and in case of network connection loss, the stored data on SD card should be automatically sent to the storage when network reconnects.)
65	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 17	42	IP Protection: IP66 and IK10	IP Protection: IP52 and IK10 (at complete indoor location) IP Protection: IP66 and IK10 (at complete outdoor location)
66	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 21	42	Power: PoE Compliant as per IEEE 802.3at Class 4 & 12 V DC	Power: PoE Compliant. Power redundancy to ensure 24-hour, 365-day continuous operation even under unstable power supply situations.
67	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 22	42	Protocol: TCP, HTTP, HTTPS, SNMP, STP, RSTP, SSL,TLS, 802.1x,DNS, ICMP, IP v4 & v6 Remote Administration: Remote configuration and status using web based tool, multicast / unicast.	Protocol: TCP, HTTP, HTTPS, SNMP, RTSP , SSL,TLS, 802.1x,DNS, ICMP, IP v4 & v6 Remote Administration: Remote configuration and status using web based tool, multicast / unicast.
68	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 23	43	Security : IEEE 802.1x, IP Address Filter Network authentication EAP/TLS AES Encryption minimum 128 keys Onboard Cyber Security Chip like Trusted Platform Module/ Public Key Infrastructure Camera Mac Address should be of same Camera OEM NDAA Complied	Security : IEEE 802.1x, IP Address Filter Network authentication EAP/TLS AES Encryption minimum 128 keys Onboard Cyber Security Chip like Trusted Platform Module/ Public Key Infrastructure Camera Mac Address should be of same Camera OEM BIS Complied. NDAA or NIST or Better.
69	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 25	43	Operating Temperature: - 20° to 55° C	Operating Temperature: 0° to 50 ° ^C
70	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 26	43	Operating Humidity :Upto 90% RH (non-condensable)	Operating Humidity :Upto 85 % RH (non-condendsable)
71	Annexure-A, Fixed Dome Camera (Indoor)- Technical Specifications, S.No. 27	43	Certification : UL (60950),CUL,CE, EN & FCC	Certification : UL (60950),CE, EN & FCC
72	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 1	44	Make: Dell/HP/Lenovo	Make: Dell/HP
73	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 2	44	The OEM for the proposed server must be in Leaders quadrant in the last two Gartner's report of "Magic Quadrant for Modular Servers" & should have been one of the top three server vendors (by market share revenue in IDC or Gartner report) in any of the previous 2 quarters	Clause is Deleted
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74	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 3	44	Chipset: Lewisburg PCH Intel C621	Chipset:Intel® C741 series chipset or latest
75	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 5	44	Two Intel® Xeon® Scalable processors, 20 cores per processor (CPU @2.5 Ghz or better)	Two Intel® Xeon® Scalable processors, 24 cores per processor (CPU @2.0 Ghz or better)
76	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 6	44	24 DDR4 DIMM slots RDIMMS& LR DIMMS supporting speeds up to 2666MT/s. Optionally support up to 12 DIMM & 12 NVDIMM	24 DDR4 DIMM slots RDIMMS& LR DIMMS supporting speeds up to 4400MT/s.
77	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 8	44	Front drive bays: Up to 16 x 2.5" SAS/SATA/SSD, , Up to 8 x 3.5" SAS/SATA,	Front drive bays: Up to 16 x 2.5" SAS/SATA/SSD or Up to 8 x 3.5" SAS/SATA,
78	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 12	44	Up to 8x PCIe Gen3 Slots	Support Up to 8x PCIe Gen5 Slots
79	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 13	44	Upto 3 DW and 6 SW GPU cards	Upto 3 DW or 6 SW GPU cards
80	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 17	44	Dual SD Module slots supporting redundant configuration	Clause is DELETED
81	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 18	44	Support for integration with Microsoft System Center, VMware vCenter, BMC Software	Support for integration with Microsoft System Center, VMware vCenter
82	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 19	44	Real-time power meter, graphing, thresholds, alerts & capping with historical power counters. Temperature monitoring & graphing	Real-time power meter, graphing, thresholds, alerts with historical power counters. Temperature monitoring & graphing
83	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 22	45	Virtual IO management / stateless computing	Clause is DELETED
84	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 23	45	Should display system ID, status information and system error code followed by descriptive text. LCD background should light up in different colours during normal system operation & error conditions	Should display system ID, status information and system error code followed by descriptive text. LCD/LED background should light up in different colours during normal system operation & error conditions
85	Annexure-A, VMS Servers - Hardware Technical Specifications, S.No. 25 point 3	45	Should provide effective protection, reliable detection & rapid recovery using: - Silicon-based Hardware Root of Trust - Signed firmware updates - Secure default passwords - Configuration and firmware drift detection - Persistent event logging including user activity - Secure alerting - Automatic BIOS recovery - Rapid OS recovery - System erase	Should provide effective protection, reliable detection & rapid recovery using: - Silicon-based Hardware Root of Trust - Signed firmware updates - Secure default passwords - Configuration and firmware drift detection - Persistent event logging including user activity - Secure alerting - BIOS recovery - OS recovery - System erase

86	Section:9, Annexure-A, 5. SAN Storage Specifications, S.No. 2	46	Spindle Flexibility: The array should support the following spindles: 300GB, 600GB, 900, 1.2TB or above; 10K/ 15K RPM 1TB, 2TB, 3TB & 4TB 7K RPM NL SAS. It should support SLC and MLC / eMLC SSD drives. Mix and match of different type of spindles should be supported behind the same pair of controllers.	The array should support SAS/ SATA/ SSD drives upto 24TB capacity. Mix and match of different type of spindles should be supported behind the same pair of controllers.
87	Annexure-A, 5. SAN Storage Specifications, S.No. 3	46	Array Architecture : The array should be equipped with N+N(with minimum of 2 array controllers each with quad core processor) Nos. of array controllers for better performance redundancy. - The storage system should be provided with 32GB Cache Memory - The storage system should be configured with 4 x 10Gb iSCSI Ports across controller & 2 * 16 Gbps FC ports per controller - The storage system should support minimum 4 x 6Gbps back-end each of 6 Gbps or above without performing any controller upgrades - The SAN must support synchronous, asynchronous replication. Further, the replication must be bi-directional to support multiple replication options.	The array should be equipped with N+N/1 (with minimum of 2 array controllers) for better performance redundancy. - The storage system should be provided with 24 GB Cache Memory or better. - The storage system should be configured with 4x 10Gbps iSCSI ports or 4x 16G FC ports per controller. - The storage system should support minimum 2 x 12Gbps back-end ports without performing any controller upgrades. - The SAN must support Asynchronous replication.
88	Annexure-A, 5. SAN Storage Specifications, S.No. 4, Array Features (If any of the features mentioned requires license the same should be included as part of the BOM):	46	 ¹- Intelligently restripe data as disks are added to optimize performance. The Storage to include licenses for Snapshots/ Virtual disk copy & Thin Provisioning The SAN must allow RAID levels to be changed on the fly without taking down the server to which the volume is attached. The SAN must allow any LUN provided to a system configured with both types of server connectivity (fiber channel or iSCSI) and must be capable of mapping volumes from one connectivity type to the other without changing or copying the data. The storage system must support intelligent reduplication and compression for better storage efficiency and lower TCO. The storage system must support snapshot for production copies with capability to migrate snap data to lower cost tier and thin capabilities to lower cost. The storage system must support workload optimization by moving highly active data to performance tier like SSD and stale data to capacity tier like SAS/NL-SAS disks. Applications benefit from striping across multiple spindles. The array must support subsystem based striping across at least 30 spindles for enhanced performance. The striping and storage administrator should be given control and flexibility of data layout in the array. This should be inbuilt into the storage and should not require any host based volume manager. 	Clause is Deleted
89	Annexure-A, 5. SAN Storage Specifications, S.No. 6, Storage Scalability	47	The array should be scalable to a minimum of 190 disks of the offered configuration of the disk count behind the same controller pair by adding the appropriate number of spindles and disk shelves	The array should be scalable to a minimum of 120 disks (which may further be increased as per the solution requirement) of the offered configuration of the disk count behind the same controller pair by adding the appropriate number of spindles and disk shelves
90	Annexure-A, 5. SAN Storage Specifications, S.No. 9, ,OS Support	47	Industry leading Operating System platforms including: Windows Server® 2016 or latest Sun Solaris®, HP-UX®, LENOVO-AIX®, Linux® 2.6 and above, RHEL-5®, VMware®, Hyper-V®.	Industry leading Operating System platforms including: Windows Server [®] 2016 or latest Sun Solaris [®] , HP-UX [®] , Linux [®] 2.6 and above, RHEL-5 [®] , VMware [®] .
91	Annexure-A, 5. SAN Storage Specifications, S.No. 16 ,Data-in-place upgrade	48	Must support data-in-place upgrade of existing storage controllers to a future generation controller.	Optionally support data-in-place upgrade of existing storage controllers to a future generation controller.

92	Annexure-A, 5. SAN Storage Specifications, S.No. 17 ,Information Life Cycle Management	48	Data must be automatically moved in a Bi-Directional manner in all the tiers available and also should support Tiering among SLC and MLC SSD drives	Data must be automatically moved in a Bi-Directional manner in all the tiers available and also should support Tiering among SLC and MLC SSD drives / Tiering among SAS, NL- SAS and SSD drives
93	Annexure-A, 5. SAN Storage Specifications, S.No. 19, OEM Turnover	48	Should be 10,000 crores minimum in India and should have minimum 50 support staff on their direct payroll.	Should be 500 crores minimum in India and should have minimum 50 support staff on their direct payroll.
94	Annexure-A, 6. Video Management Software (VMS) – Technical Specifications , S.No. 17	49	The offered video management system should have integration with Video Wall	The offered video management system should be compatible and seamlessly integrated with Video Wall
95	Annexure-A, 6. Video Management Software (VMS) – Technical Specifications , S.No.50	51	VMS Software Make: Bosch/Milestone/Pelco/Axis/Mobotix/Avigilon.	Make: Bosch/Pelco/Axis/Mobotix/Avigilon/Milestone/ Mirasys.
96	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications, S.no. 1	52	Dual x Intel Xeon Gold 6242 2.8GHz, 16Cores, 22MB Cache or Higher	14th Gen or latest Intel Core i7 processor with 20 cores, 2.1 GHz to 5.4 GHz Turbo or better
97	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications, S.no. 3	52	128GB 2666MHz DDR4 ECC RDIMM memory or higher	32GB DDR5 ECC Dual Channel RAM or better
98	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications, S.no. 4	52	24 DIMM Slots, (12 DIMMs per CPU) or higher	4 DIMM slots for upto 128GB DDR5 RAM
99	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications, S.no. 5	52	The System should be scalable up to 3TB 2666MHz DDR4 ECC memory of higher	The System should be scalable up to 128GB 4400 MT/s DDR5 ECC
100	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications, S.no. 6	52	Hard Disk Drive Bays - 4 Internal	Hard Disk Drive Bays - 3 Internal or more
101	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications, S.no. 8	52	Minimum (4) Slots of PCle x16 or more	Minimum (3) PCIe Slots or more
102	Annexure-A, 7. Workstation for Viewing with Monitors – Technical Specifications , S.no. 12	52	I/O Ports: Front: 2 – USB 3.1 Type A 2 – USB 3.1 Type C 1 – Universal Audio Jack Rear: 6 – USB 3.1 Type A 1 – Serial 2 – RJ45 Network 1 –Audio Line out 1 – Audio Line in/Microphone 1- Thunderbolt	I/O Ports: Front: 2 – USB 3.1 Type A 2 – USB 3.1 Type C 1 – Universal Audio Jack Rear: 4 – USB 3.2 Type A 2 - USB 3.2 Type A 1 – Serial 2 – RJ45 Network 1 – Audio Line out 1 – Audio Line in/Microphone 1 - Thunderbolt

103	Annexure-A, 8. Video Wall for Main Command & Control Centre - Technical Specifications , S.no. 4	54	Power Supply - Minimum 1400W, 90% efficient (80PLUS Gold Certified) Power Supply	Power Supply - Minimum 1000W
104	Annexure-A, 11. Network Management Software (NMS) for 150 Nodes – Technical Specifications , S.no. 1	60	The NMS shall ensure a single-pane-of-glass interface to the entire network for the management of Switches & Wi-Fi AP's	The NMS shall ensure a single-pane-of-glass interface to the entire network for the management of Switches.
105	Annexure-B, S.no. 11	62	Document/Work Order certifying that the Bidder is in operation in the Video Surveillance domain in last 5 years as on date of bid submission	Document/Work Order certifying that the Bidder is in operation in the IT/ITES/Telecom and Surveillance domain in last 5 years as on date of bid submission
106	Annexure-B, S.no. 12	62	ITR and Profit and Loss Statement for the last three Financial Years viz. 19-20, 20-21& 21-22.	ITR and Profit and Loss Statement for the last three Financial Years viz. 21-22, 22-23 & 23-24 .
107	Annexure-B, S.no. 13	62	Turnover Certificate by the CA for the last three Financial Years viz. 19-20, 20-21 & 21-22	Turnover Certificate by the CA for the last three Financial Years viz. 21-22, 22-23 & 23-24 .
108	Annexure-B, S.no. 14	62	Nertworth certificate by the CA for the last three Financial Years viz. 19-20, 20-21& 21-22 certifying that Bidder is not suffered any financial loss for more than one year during the last three (03) years ending on the 31st March of the previous year and Nertworth is not negative on 31st March and also not eroded by more than 30% (thirty percent) in the last three years, ending on 31st March.	Networth certificate by the CA for the last three Financial Years viz. 21-22, 22-23 & 23- 24 certifying that Bidder is not suffered any financial loss for more than one year during the last three (03) years ending on the 31st March of the previous year and Nertworth is not negative on 31st March and also not eroded by more than 30% (thirty percent) in the last three years, ending on 31st March.
109	Annexure-B, S.no. 18	62	CMMI Level 3 or above, ISO 9001, ISO 27001 and ISO 20000	Relevant ISO Certifications
110	Annexure-B, S.no. 15	62	Work order consisting of minimum of 250 IP cameras for a surveillance project with any State/Central Govt/PSUs/Corporate Sector in India during the last 03 years (FY 19-20, 20- 21& 21-22)	The Bidding Firms should have completed at least one CCTV project having a minimum value of Rs. 8.00 Crore during the last five financial years. Or Should have completed at least two CCTV projects having a minimum value of Rs. 6.00 Crore during the last five financial years. Or Should have completed at least three CCTV projects having a minimum value of Rs. 4.00 Crore during the last five financial years. Also, in addition, the bidder must have setup a CCTV Command & Control Center for a Surveillance System having a minimum of 200 Cameras in the last five years. Copies of experience certificates of the equivalent document in support of satisfactory completion of CCTV installation from clients shall be provided. The experience certificate should be signed by an authorized signatory.
111	Annexure-B, S.no. 20	63	All documents as asked in the Clause No. 25 (d) of the e-NIT for calculation of points in the table matrix	All documents as asked in the Clause No. 6.3 (c) of the e-NIT for calculation of points as per the new table matrix

112	Annexure-F,Video Analytics usecases mentioned in Remarks column	67 to 73	ORS, IDS, FRS, ANPR, Head Count and Crowd Management Video Analytics are required at varioius locations	ORS, IDS, FRS, ANPR, Head Count and Crowd Manegment Video Analytics are required at various locations For VA Server, bidders to consider same or higher specs as given for VMS server along with appropriate GPU as required by the VA software OEM. All Video Management Servers, Video Recording Servers and Video Analytics Servers to be quoted in 1 set under the BOQ S.No.4.
113	Section 8: Indicative Bill Of Quantities, S.no. 4	33	Supply, Installation, Testing & Commissioning of Servers (VMS) shall support minimum 1000 cameras. (Bidder to submit the detailed architecture of Servers) Detailed Technical Specifications enclosed as Annexure-A (4) Make:- Dell/HP/LENOVO	Supply, Installation, Testing & Commissioning of Servers (VMS) shall support minimum 1000 cameras. (Bidder to submit the detailed architecture of Servers) Detailed Technical Specifications enclosed as Annexure-A (4) Make:- Dell/HP
114	Section 1, Clause 1.7	4	The Comprehensive Operation and Maintenance is also required for the 05 years which shall begin after the end of Defect Liability period.	The Comprehensive Operation and Maintenance is also required for the 05 years which shall begin after the end of Defect Liability period. And The project should be sustainable in nature and shall provide the services for the next 10 years. The SI liability period as concerned to project is 06 Years.
115	Annexure A(8) Video Walll	54	Approved Make of Display: Samsung/LG/Panasonic Brightness: Minimum 700 Cd / m ² or better Contrast Ratio: 3000:1 or better Conditions for Operations: 10°C- 40°C, Humidity: 10%-80% Power consumption: Less than 270 Watt (Normal Mode) Heat Dissipation: Less than 950 BTU / h (Typical Mode) Bezel Width (mm): 0.8mm (Even) (All Four Sides) Bezel Width (mm): 1.7mm (Even) (All Four Sides) Ports: DVI-D, DP, HDMI as Inputs and DP 1.2 Output Certifications for Display: UL, FCC, BIS (Proof of each certificate to be attached) Mounting Bracket: Video Wall Mounting Bracket of VESA (600 * 400 (mm)) of B Tech, Chief, Pearless make. The bracket should support Push Pull mechanism. Life Span: 50,000 hours (5 to 6 years) System: Modular 15 slot (minimum) frame design with 2 ports on each card	Approved Make of Display: Samsung/LG/Panasonic/Delta Brightness: Minimum 500 Cd / m ² or better IP Rating: IP 5X Contrast Ratio: 1000:1 or better Conditions for Operations: 05°C- 40°C, Humidity: 10%-80% Power consumption: Less than 270 Watt (Normal Mode) Heat Dissipation: Less than 950 BTU / h (Typical Mode) Bezel Width (mm): Not greater than 1.5 mm all 04 sides Bezel to Bezel Width (mm): Not greater than 2mm (Even) (All Four Sides) Ports: DVI-D, DP, HDMI & RS-232C as Inputs and DP 1.2, RS-232C , Audio as Output Certifications for Display: UL, FCC, BIS (Proof of each certificate to be attached) Mounting Bracket: Video Wall Mounting Bracket of VESA (600 * 400 (mm)) of B Tech, Chief, Pearless make. The bracket should support Push Pull mechanism. Life Span: 50,000 hours minimum System: Modular 10 slot (minimum) frame design with 4 ports on each card
116	Section 6. Clause 6.1 (m)	18	Undertaking from Network Video Management Software (NVMS) that NVMS is FIPS 140-2 compliant & same shall be demonstrated if required.	Undertaking from Network Video Management Software (NVMS) that NVMS is FIPS 140- 2 or OWASP compliant & same shall be demonstrated if required.
117	Section 6, Clause 6.2 (i)	18	NVMS (Centralized Software) should have the capability of being scalable and can add up to 1000 Cameras (For Viewing and recording). An undertaking by Bidder in this regard is to be submitted.	NVMS (Centralized Software) should have the capability of being scalable and can add up to 1000 Cameras (For Viewing and recording). An undertaking by Bidder in this regard is to be submitted. The VMS Software should be S,G,T & M compliant
118	Annexure-A, 6. Video Management Software (VMS) – Technical Specifications , S.No. 16	49	The VMS shall support the Open Network Video Interface Forum (ONVIF) compliant Cameras and devices & shall support deep level integration of minimum 6000 camera models & same shall be available on VMS OEM global website.	The VMS shall support the Open Network Video Interface Forum (ONVIF) compliant Cameras and devices & shall support deep level integration of minimum 6000 camera models & same shall be available on VMS OEM global website. VMS software should be S,G,T & M compliant

119	New Clause	Country of Origin	The The Vendor has to provide the Country of Origin for each product mentioned in the BOQ on OEM Letter Head specific to our tender No. Co/Sys/2024/154 dated 15.06.2024
120	New Clause	Blacklisting	Bidder to submit on OEM letter head (from OEMs of CCTV, NVMS, Network Switches, Servers & Workstations) that the OEM is not blacklisted or debarred by any State/Central Govt/PSUs/Corporate Sector in India during the last 03 years

FA/Chief Accounts Officer SMVD Shrine Board Katra J&K - 182301

Dear Sir,

We **"Name of the Bank and HQ Address"** hereby refer to the tender for "Installation of robust CCTV Surveillance" between the Shri Mata Vaishno Shrine Board, Katra as purchaser and "Name of the Bidder with address" as bidder providing in substance for the provision for "Robust IP CCTV Surveillance System" as particularized in said tender, to which specific reference is made. Under the terms of said tender, the bidder is required to provide a bank guarantee in a form acceptable to the purchaser for the amount of **Rs. 20,00,000/- (Rupees Twenty Lakhs only)** on account of EMD.

In view of the foregoing and pursuant to the terms of the said tender, which tender is referred to and made a part thereof as fully and to the same extent as if copied at length hereon, we hereby absolutely and unconditionally guarantee to the purchaser, performance of the terms and conditions of the said tender. The guarantee shall be construed as an absolute, unconditional and direct guarantee of the performance of the tender without regard to the validity, regularity or enforceability of any obligation of the parties to the tender.

The purchaser shall be entitled to enforce this guarantee without being obliged to resort initially to any other security or to any other remedy to enforce any of the obligations herein guaranteed any shall pursue any or all of its remedies at one or at different times. Upon default of the tender, we agree to pay to the purchaser on demand and without demur the sum of **Rs. 20,00,000/-** (**Rupees Twenty Lakhs only**) or any part thereof, upon presentation of a written statement by the purchaser that the amount of said demand represents damages due from the bidder to the purchaser by virtue of breach of performance by the bidder under the terms of the aforesaid tender. The determination of the fact of breach and the amount of damages sustained and or liability under the guarantee shall be in the sole discretion of the purchaser whose decision shall be conclusive and binding on the guarantor.

It is mutually agreed that the purchaser shall have the fullest liberty without affecting in any manner our obligation hereunder with or without our consent to vary any of the terms of the said tender or to extend the time for performance by the bidder, from time to time any of the powers exercisable by the purchaser against the tender and either to forebear or on force any of the terms and conditions relating to the said tender and we shall not be relieved from our liability by reasons of any variation of any extension being granted to the tender or for any forbearance act or commission on the part of the purchaser or any indulgence by the purchaser to the bidder or by any such matter or thing whatsoever which under the law relating to the sureties would but for this provision have effect of so relieving our obligation.

This guarantee is confirmed and irrevocable and shall remain in effect until **"22.01.2025"** and such extended periods which shall be mutually agreed to. We hereby expressly waive notice of any said extension of the time for performance and alternation or change in any of the terms and conditions of the said tender.

Notwithstanding anything contained herein:

- 1. Our liability under this Performance Bank Guarantee shall not exceed **Rs. 20,00,000/-** (Rupees Twenty Lakhs only).
- 2. This Bank Guarantee shall be valid upto "**22.01.2025**" with claim period same as of expiry period.
- 3. We are liable to pay the guarantee amount or any part thereof under the Bank Guarantee only and only if you serve upon us a written claim or demand on or before "22.10.2024" including claim period.
- 4. This Bank Guarantee shall be effective only when the Bank Guarantee massage is transmitted by the issuing bank through SFMS to and written to that effect is issued by the beneficiary.
- 5. This letter forms an integral part of the Original Guarantee referred to above and may kept attached thereto.

Very truly yours,

(Authorized Signatory of the Bank)