



Bid Number/बोली क्रमांक (बिड संख्या): GEM/2024/B/5633051 Dated/दिनांक : 25-11-2024

# Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण		
Bid End Date/Time/बिड बंद होने की तारीख/समय	25-12-2024 17:00:00	
Bid Opening Date/Time/बिंड खुलने की तारीख/समय	25-12-2024 17:30:00	
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	120 (Days)	
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Finance	
Department Name/विभाग का नाम	Department Of Economic Affairs	
Organisation Name/संगठन का नाम	Security Printing And Minting Corporation Of India Limited (spmcil)	
Office Name/कार्यालय का नाम	Janpath	
Total Quantity/कुल मात्रा	10	
Item Category/मद केटेगरी	Server (Q2) , Workstation (Q2)	
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	12 Lakh (s)	
OEM Average Turnover (Last 3 Years)/मूल उपकरण निर्माता का औसत दर्नओवर (गत 3 वर्षों का)		
Years of Past Experience Required for same/similar service/उन्हीं / समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष		
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes	
Startup Exemption for Years Of Experience/अनुभव के वर्षों से स्टार्टअप छ्ट/ and Turnover/ टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है	Yes	
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria, Past Performance, Bidder Turnover, Certificate (Requested in ATC), OEM Authorization Certificate, OEM Annual Turnover, Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer	

Bid Details/बिड विवरण		
Do you want to show documents uploaded by bidders to all bidders participated in bid?/	No	
Past Performance/विगत प्रदर्शन	80 %	
Bid to RA enabled/बिंड से रिवर्स नीलामी सक्रिय किया	No	
Type of Bid/बिंड का प्रकार	Two Packet Bid	
Primary product category	Server	
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	4 Days	
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No	
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation	
Arbitration Clause	No	
Mediation Clause	No	

### EMD Detail/ईएमडी विवरण

Advisory Bank/एडवाईजरी बैंक	Indusind bank
EMD Amount/ईएमडी राशि	60000

# ePBG Detail/ईपीबीजी विवरण

Advisory Bank/एडवाइजरी बैंक	Indusind bank
ePBG Percentage(%)/ईपीबीजी प्रतिशत (%)	5.00
Duration of ePBG required (Months)/ईपीबीजी की अपेक्षित अवधि (महीने).	40

- (a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy./जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज प्रस्तुत करने है। एमएसई केटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।
- (b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

### Beneficiary/लाभार्थी:

Chief General Manager

P.B. NO: 10, IDA Phase-II, Cherlapally, (R.R district), Hyderabad, Telangana, Pin-500051, India. (India Government

Mint, Hyderabad) (India Government Mint, Hyderabad)

### MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes

### MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes

- 1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- 2. If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to their meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- 3. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
- 4. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
- 5. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
- 6. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

OM No.1 4 2021 PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

- 7. Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 OM No.1 4 2021 PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.
- 8. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.
- 9. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 80% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

# Excel Upload Required/एक्सेल में अपलोड किए जाने की आवश्यकता:

Price Schedule Format for FOR SITC FOR UPGRADATION OF EXISTING CCTV SURVILLANCE SYSTEM -  $\underline{1732184260.xlsx}$ 

### Server (5 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

### Technical Specifications/तकनीकी विशिष्टियाँ

\* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य	
Processor	Processor Make	Intel	
	Number of Cores per Processor	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 64, 11, 48, 44, 52, 56, 60, 84, 96, 112, 128 Or higher	
	Processor Base Frequency (GHz)	2.8, 2.9, 3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4, 2.85, 2.95, 3.25, 3.55, 3.85, 4.05, 4.1 Or higher	
Motherboard	Maximum number of Sockets available on Server	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher	

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य	
	Maximum number of Sockets populated with Processors available on Server	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher	
Co Processor / GPU	Availability of Co Processor /GPU	Yes, No Or higher	
Memory	Type of RAM	DDR4 SDRAM with ECC	
SSD Storage	Type of Interface for SSD	SATA, SAS	
HDD Storage	Type of Interface for Hard Disk Drive	SATA, SAS	
RAID	No of RAID Controller Ports	8 Or higher	
	Speed of RAID Controller Ports (Gbps)	12 Or higher	
Ports & Interfaces	Number of Networking Interface Cards (LAN)	2, 3, 4, 5, 6, 7, 8, 1 Or higher	
Ports required in Server  SFP+, 2x50G with SF SFP+, 3 4x10G DAC, 4 4x200G 4x25G		1x1G, 2x10G with SFP+, 2x10G RJ 45, 2x25G with SFP+, 2x25G with Twinax DAC, 2x40G with SFP+, 2x50G with SFP+, 2x50G with Twinax DAC, 2x100G with SFP+, 2x100G with Twinax DAC, 2x200G with SFP+, 2x200G with Twinax DAC, 4x10G with SFP+, 4x10G RJ 45, 4x50G with SFP+, 4x50G with Twinax DAC, 4x100G with SFP+, 4x100G with Twinax DAC, 4x200G with SFP+, 4x200G with Twinax DAC, 2x1G, 4x25G with SFP+, 4x25G with Twinax DAC, 2x40G with Twinax DAC, 4x10G with Twinax DAC, 4x1G	
	Number of Single port FC HBA card	0, 1, 2, 3, 4 Or higher	
	Number of Dual port FC HBA card	0, 1, 2, 3, 4 Or higher	
	Number of Quad port FC HBA card	0, 1, 2, 3, 4 Or higher	
	FC HBA Speed (Gbps)	8, 16, 32, NA Or higher	
	Number of Converged Network Adaptor (CNA)	0, 1, 2, 3, 4 Or higher	
	Number of Ports per CNA card	Dual Port, Quad Port, NA Or higher	
	CNA Port Speed (Gbps)	10, 25, 40, 50, 100, 200, 0 Or higher	
	Length of LC-LC Cable per SFP+ Port (meter)	5, 10, 15, 0 Or higher	
	Length of LC-LC Cable per HBA Port (meter)	5, 10, 15, 0 Or higher	
	Length of LC-LC Cable per CNA Port (meter)	5, 10, 15, 0 Or higher	
Certifications	Certifications/Compliance (OS)	Windows, Red Hat Linux, Suse Linux, Ubuntu, Cent OS	

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य	
Features	Management Features-1	Remoter power On/ Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,, Should have virtual Media support with all required licenses., Remote KVM, Server Health Logging, Out of Band Management	
	Security Features-1	Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server should provide server intrusion detection,, "Malicious Code Free design" (to be certified by OEM)	
Generic	Power Supply Efficiency	Gold, Platinum, Titanium, Bronze Or higher	
Warranty	On Site OEM Warranty (Year)	3, 4, 5, 7 Or higher	

# **Additional Specification Parameters - Server ( 5 pieces )**

Specification Parameter Name	Bid Requirement (Allowed Values)	
Additional Specification Parameters:	Please refer Buyer Added ATC for total Specifications	

<sup>\*</sup> Bidders offering must also comply with the additional specification parameters mentioned above.

# Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	ANU SATYA DURGA HIMABINDU TENTU	500051,India Govt Mint, IDA, Phase-II Cherapally, (R.R district) Hyderabad , Telangana	5	60

# Server (1 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

## \* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification

Specification	Specification Name/विशिष्टि का	Bid Requirement/बिंड के लिए आवश्यक (Allowed
Specification	नाम	Values)/अनुमत मूल्य

## Additional Specification Parameters - Server ( 1 pieces )

Specification Parameter Name	Bid Requirement (Allowed Values)
Additional Specification Parameters:	Please refer Buyer Added ATC for total Specifications

<sup>\*</sup> Bidders offering must also comply with the additional specification parameters mentioned above.

# Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	ANU SATYA DURGA HIMABINDU TENTU	500051,India Govt Mint, IDA, Phase-II Cherapally, (R.R district) Hyderabad , Telangana	1	60

# Workstation (4 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

# Technical Specifications/तकनीकी विशिष्टियाँ

# \* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य	
Туре	Form Factor	Mobile - Standard	
Processor	Processor Make	Intel	
	Processor Generation	NA, 10, 11, 12, 13 Or higher	
	Number of Cores per Processor	4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 64, 36, 56 Or higher	
	Processor Base Frequency (GHz)	2.8, 2.9, 3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4, 4.1, 4.2, 4.3, 5.2 Or higher	

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
	Processor Description	Intel Core i7, Intel Core i9, Intel Xeon E Series, Intel Xeon W Series, Intel Xeon Bronze Series, Intel Xeon Silver Series, Intel Xeon Gold Series, Intel Xeon Platinum Series Or higher
	Processor Number	Intel Core i3-8350K, Intel Core i7-8700, Intel Core i7-8700K, Intel Core i9-7980XE, Intel Core i5-8300H, Intel Core i5-8305G, Intel Core i5-8400H, Intel Core i5-8750H, Intel Core i7-8550H, Intel Core i7-8550H, Intel Core i7-8550H, Intel Core i7-8550U, Intel Core i7-8550U, Intel Core i7-99900K, Intel Core i7-99900K, Intel Core i7-9950K, Intel Core i9-9960X, Intel Core i9-9980KE, Intel Core i9-9980HK, Intel Core i7-8550U, Intel Core i9-9980KE, Intel Core i9-9980HK, Intel Core i7-8550U, Intel Core i9-9980KE, Intel Core i9-9980HK, Intel Core i9-10980HK, Intel Core i9-10400H, Intel Core i9-10980HK, Intel Core i9-10400H, Intel Core i9-10400H, Intel Core i9-10510H, Intel Core i9-1085H, Intel Core i9-10980KE, Intel Core i9-10810H, Intel Core i9-1085H, Intel Core i9-10980KE, Intel Core i9-10940K, Intel Core i9-10980KE, Intel Core i9-10940K, Intel Core i9-10980KE, Intel Core i9-10940K, Intel Core i9-10920K, Intel Core i9-10900K, In
	Number of Sockets populated with the	1, 2 Or higher

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य	
Motherboard	Chipset Number	Intel C246, Intel CM246, Intel C422, Intel C621, Intel C622, Intel C624, Intel X99, Intel X299, Intel HM 175, Integrated, Intel W480, Intel WM490, Intel W580, Intel H570, Intel W680, Intel B660, Intel Q670, Intel W790, Intel C741 Or higher	
Graphics	Graphics Type	Integrated	
	Number of Graphic Cards	0, 1, 2, 3, 4 Or higher	
	Graphic Card Description	NA Or higher	
Operating System	Operating System (Factory Pre-Loaded)	Windows 11 Professional	
Memory	RAM Size (GB)	16, 32, 64, 128, 256, 512, 1024, 2048, 3072, 4096, 48, 96, 192, 384, 768, 1536 Or higher	
	RAM Expandability upto using spare DIMM Slots (GB)	64, 128, 256, 512, 1024, 3072, 4096, 384, 1536, 2048, 768 Or higher	
Primary Storage /Boot Drive	Type of Drives used to populate the internal Bays	PCle	
	RAID for Operating System	NA	
	Capacity of each Drive (GB)	1024, 1200, 1800, 2000, 2048, 4000, 4096, 8000, 6000 Or higher	
Secondary Storage	Type of Drives used to populate the Internal Bays	NA	
	Number of Internal Bays populated with SATA Drive	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Or higher	
	Each SATA Drive Capacity (GB)	500, 1000, 2000, 4000, 8000, 0, 6000 Or higher	
	Total SATA Drive Capacity (GB)	500, 1000, 2000, 4000, 8000, 3000, 5000, 6000, 7000, 9000, 12000, 16000, 20000, 24000, 28000, 32000, 0 Or higher	
	Number of Internal Bays populated with SAS Drive	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Or higher	
	Capacity of each SAS Drive (GB)	300, 600, 900, 1200, 1800, 800, 0, 4000 Or higher	
	Total SAS Drive Capacity (GB)	300, 600, 900, 1200, 1800, 2100, 0, 4000 Or higher	
	Number of Internal Bays populated with SSD Drive	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Or higher	
	Capacity of each SSD Drive (GB)	128, 256, 512, 1024, 2048, 800, 0 Or higher	
	Total SSD Capacity (GB)	128, 256, 384, 512, 768, 1024, 2048, 4096, 0, 5120, 3072 Or higher	
	Number of Internal Bays populated with PCIe Drive	1, 2, 3, 4, 5, 6, 7, 8 Or higher	

Specification Name/विशिष्टि का नाम		Bid Requirement/बिंड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य	
	Capacity of each PCIe Drive (GB)	1024, 2048 Or higher	
	Total PCIe Drive Capacity (GB)	1024, 2048, 4096, 1536, 6144 Or higher	
RAID	Number of RAID Controller Ports	2, 3, 4, 5, 6, 7, 8, 10, 0 Or higher	
	Speed of RAID Controller Ports (Gbps)	6, 12, 0 Or higher	
Connectivity	Number of Ethernet Ports	1, 2, 3, 4, 6 Or higher	
	Wireless Connectivity	Yes, No Or higher	
	If Yes, Type of Wireless Connectivity	Wi-Fi 802.11b/g/n, Wi-Fi 802.11ac, NA, Wi-Fi 6E AX211 BT 5.2, Wi-Fi 6 AX200 & BT 5.2, Wi-Fi 6 AX201 (2x2) and BT 5.2 Or higher	
	Bluetooth Connectivity	Yes, No Or higher	
	If Yes, Version of Bluetooth Available	4, 4.1, 4.2, 5, 0 Or higher	
Display	Display Availability	Integrated	
	Display Size (cm)	35 - 39, 40 - 44, 45 - 49, 49.5 - 53.5, 54 - 56, 58- 61, 63 - 67, 68- 71, 72- 81, 82 - 87, 88 - 93, 94 - 97, 98 - 105, 107 - 110, 111 - 115, 116 - 120, 121 - 125, 126 - 130 Or higher	
	Display Type	Non Touch, Touch Or higher	
	Panel Type	Flat, Curved Or higher	
	Panel Technology	IPS, OLED Or higher	
	Display Resolution (Pixels)	1920x1080, 1920 x 1200, 3200x1800, 3840 x 2160, 2560 x 1080, 2560 x 1440, 2560 x 1600, 3440 x 1440, 3840 x 1600, 5120 x 1440, 7680 x 4320 Or higher	
Power	Redundant Power Supply	Yes, No Or higher	
Warranty	On Site OEM Warranty (Year)	3, 4, 5 Or higher	

# **Additional Specification Parameters - Workstation ( 4 pieces )**

Specification Parameter Name	Bid Requirement (Allowed Values)	
Additional Specification Parameters:	Please refer Buyer Added ATC for total Specifications.	

\* Bidders offering must also comply with the additional specification parameters mentioned above.

# Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	ANU SATYA DURGA HIMABINDU TENTU	500051,India Govt Mint, IDA, Phase-II Cherapally, (R.R district) Hyderabad , Telangana	4	60

### **Buyer added Bid Specific Additional Scope of Work**

S.No.क्र.सं	Document Title	Description	Applicable/रिवर्स प्रभार के अनुसार जीएसटी i.r.o. Items
1	TECHNICAL SPECIFICATIONS AND SCOPE OF WORK FOR SITC FOR UPGRADATION OF EXISTING CCTV SURVILLANCE SYSTEM View	TECHNICAL SPECIFICATIONS AND SCOPE OF WORK FOR SITC FOR UPGRADATION OF EXISTING CCTV SURVILLANCE SYSTEM	Server(5),Server(1),Workstation(4)

The uploaded document only contains Buyer specific Additional Scope of Work and / or Drawings for the bid items added with due approval of Buyer's competent authority. Buyer has certified that these additional scope and drawings are generalized and would not lead to any restrictive bidding.

# Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

### 1. Generic

Actual delivery (and Installation & Commissioning (if covered in scope of supply)) is to be done at following address

India Government Mint, Hyderabad, P.B. NO: 10, IDA Phase-II, Cherlapally, Hyderabad (R.R district), Telangana, Pin-500051, India.

### 2. Generic

Bidders shall quote only those products (Part of Service delivery) in the bid which are not obsolete in the market and has at least 7 years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period.

### 3. Generic

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

#### 4. Generic

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

#### 5. Generic

Installation, Commissioning, Testing, Configuration, Training (if any - which ever is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorised Reseller.

### 6. Generic

IT equipment shall be IPv6 ready from day one.

#### 7. Generic

Malicious Code Certificate:

The seller should upload following certificate in the bid:-

- (a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-
  - (i) Inhibit the desires and designed function of the equipment.
  - (ii) Cause physical damage to the user or equipment during the exploitation.
  - (iii) Tap information resident or transient in the equipment/network.
- (b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

### 8. Generic

### **OPTIONAL SITE VISIT:**

1. The Bidder is advised to visit and examine the installation site and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid. The costs of visiting the site shall be borne by the Bidder.

NIL

- 2. The Bidder representative shall be allowed entry upon consignee premises for such visits, only upon the express conditions that the Bidder will release and indemnify the Buyer and Consignee against all liabilities arising out of such visit including death or injury, loss or damage to property, and any other loss, damage, costs, and expenses incurred as a result of such visit.
- 3. The Bidder shall not be entitled to hold any claim against Buyer for noncompliance due to lack of any kind of pre-requisite information as it is the sole responsibility of the Bidder to obtain all the necessary information with regard to site, surrounding, working conditions, weather etc. on its own before submission of the bid.

### 9. Generic

**Non return of Hard Disk:** As per Buyer organization's Security Policy, Faulty Hard Disk of Servers/Desktop Computers/ Laptops etc. will not be returned back to the OEM/supplier against warranty replacement.

### 10. Generic

**Manufacturer Authorization:** Wherever Authorised Distributors/service providers are submitting the bid, Authorisation Form /Certificate with OEM/Original Service Provider details such as name, designation,

address, e-mail Id and Phone No. required to be furnished along with the bid

#### 11. Generic

Scope of supply includes Training: Number of employees to be trained

4

, Place for Training India Government Mint, Hyderabad and Duration of training 2 days.

#### 12. Generic

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

#### 13. Generic

The Buyer has an existing set up / inventory of similar products. The offered / supplied product must be compatible with existing system. The bidder has to ensure Compatibility of the supplied items or shall have to include in the supply the necessary hardware / software to make them compatible at no extra cost to the buyer. The details of items with which compatibility is required are as under:

Includes all components

## 14. Generic

The successful bidder has to supply all essential accessories required for the successful installation and commissioning of the goods supplied. Besides standard accessories as per normal industry practice, following accessories must be part of supply and cost should be included in bid price:

ALL COMPONENTS

.

### 15. Generic

- 1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.
- 2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.
- 3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/ sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

#### 16. Generic

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

### 17. Generic

While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the

screenshot of GST portal confirming payment of GST.

### 18. Service & Support

Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.

#### 19. Service & Support

Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

#### 20. Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

### 21. Warranty

Warranty period of the supplied products shall be 3 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

### 22. Warranty

Over and above the normal Warranty terms as per GeM GTC, the successful bidder / OEM shall have to provide Comprehensive Warranty during the entire Standard warranty period as per contract. : The comprehensive warranty shall be covering the following scope

### ALL COMPONENTS

(Upload an undertaking with the bid confirming compliance by the bidder if Bidder is taking onus of this compliance. In case OEM is taking onus of this compliance, OEM undertaking is to be uploaded along with Bidder undertaking)

### 23. Warranty

Successful bidder will have to ensure that adequate number of dedicated technical service personals / engineers are designated / deployed for attending to the Service Request in a time bound manner and for ensuring Timely Servicing / rectification of defects during warranty period, as per Service level agreement indicated in the relevant clause of the bid.

### 24. Warranty

Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 3 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imberse the cost of such service / rectification to the Buyer.

### 25. Forms of EMD and PBG

Bidders can also submit the EMD with Account Payee Demand Draft in favour of

India Government Mint, Hyderabad (A Unit of SPMCIL) payable at

Hyderabad

Bidder has to upload scanned copy / proof of the DD along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

#### 26. Forms of EMD and PBG

Bidders can also submit the EMD with Fixed Deposit Receipt made out or pledged in the name of A/C

India Government Mint, Hyderabad (A Unit of SPMCIL)

. The bank should certify on it that the deposit can be withdrawn only on the demand or with the sanction of the pledgee. For release of EMD, the FDR will be released in the favour of the bidder by the Buyer after making endorsement on the back of the FDR duly signed and stamped along with covering letter. Bidder has to upload scanned copy/ proof of the FDR along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date/ Bid Opening date

#### 27. Forms of EMD and PBG

Bidders can also submit the EMD with Banker's Cheque in favour of

India Government Mint, Hyderabad (A Unit of SPMCIL)

payable at

Hyderabad

Bidder has to upload scanned copy / proof of the BC along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

#### 28. Forms of EMD and PBG

Bidders can also submit the EMD with Payment online through RTGS  $\!\!\!/$  internet banking in Beneficiary name

INDIA GOVERNMENT MINT (A UNIT OF SPMCIL) -COLLECTION A/C

Account No.

201003484303

IFSC Code

INDB0000004

Bank Name

INDUSIND BANK

Branch address

0004 - HYDERABAD

Bidder to indicate bid number and name of bidding entity in the transaction details field at the time of online transfer. Bidder has to upload scanned copy / proof of the Online Payment Transfer along with bid.

### 29. Forms of EMD and PBG

Successful Bidder can submit the Performance Security in the form of Account Payee Demand Draft also (besides PBG which is allowed as per GeM GTC). DD should be made in favour of

India Government Mint, Hyderabad (A Unit of SPMCIL)

payable at

Hyderabad

. After award of contract, Successful Bidder can upload scanned copy of the DD in place of PBG and has to ensure delivery of hard copy to the original DD to the Buyer within 15 days of award of contract.

## 30. Forms of EMD and PBG

Successful Bidder can submit the Performance Security in the form of Fixed Deposit Receipt also (besides PBG which is allowed as per GeM GTC). FDR should be made out or pledged in the name of

India Government Mint, Hyderabad(A Unit of SPMCIL)

A/C (Name of the Seller). The bank should certify on it that the deposit can be withdrawn only on the demand or with the sanction of the pledgee. For release of Security Deposit, the FDR will be released in favour of bidder by the Buyer after making endorsement on the back of the FDR duly signed and stamped

along with covering letter. Successful Bidder has to upload scanned copy of the FDR document in place of PBG and has to ensure delivery of hard copy of Original FDR to the Buyer within 15 days of award of contract.

#### 31. Forms of EMD and PBG

Successful Bidder can submit the Performance Security in the form of Payment online through RTGS / internet banking also (besides PBG which is allowed as per GeM GTC). On-line payment shall be in Beneficiary name

INDIA GOVERNMENT MINT (A UNIT OF SPMCIL) -COLLECTION A/C

Account No.

201003484303

IFSC Code

INDB0000004

Bank Name

INDUSIND BANK

Branch address

0004 - HYDERABAD

. Successful Bidder to indicate Contract number and name of Seller entity in the transaction details field at the time of on-line transfer. Bidder has to upload scanned copy / proof of the Online Payment Transfer in place of PBG within 15 days of award of contract.

#### 32. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

I. <u>TECHNICAL SPECIFICATIONS AND SCOPE OF WORK FOR SITC FOR UPGRADATION OF EXISTI NG CCTV SURVILLANCE SYSTEM:</u>

#### A. PREAMBLE:-

INDIA GOVERNMENT MINT, HYDERABAD ('IGM, HYDERABAD') A UNIT OF SPMCIL IS ENGAGED IN MANUFACTURING OF CIRCULATION COINS, COMMEMORATIVE COINS, AND MEDALS. THE ORGANIZATION PROPOSES FOR "UPGRADATION OF EXISTING CCTV SURVILLANCE SYSTEM IN IG M, HYDERABAD. THIS PROPOSAL INCLUDES FIXING SERVERS AS PER REQUIREMENT, USING EXI STING/ NEW/ COMBINATION OF EXISTING AND NEW INFRASTRUCTURE LIKE OFC BACK BONE, IT INFRASTRUCTURE SUPPLYING OF VMS APPLICATION SOFTWARE. THE DESIGN OF IP CCTV SYST EM MAY CONSIDER OFC BACK BONE, UTP CABLES AND PASSIVE COMPONENTS AND PROVIDIN G ADDITIONAL NETWORKING INFRASTRUCTURE WHEREVER REQUIRED AND DESIGN COMPLETEL Y INDEPENDENT IP CCTV SYSTEM TO FULFIL SCOPE OF WORK AND TO ENSURE FAST, STABLE, R ELIABLE AND ROBUST PERFORMANCE. THE TASK WOULD BE EXECUTED BY UNDERSTANDING THE COMPANY'S SCOPE OF WORK FOR IMPLEMENTING THE NEW SOLUTION BY THE SYSTEM INT EGRATOR/OEM/OEM INTEGRATOR INCLUDING DESIGN, SUPPLY, INSTALLATION & COMMISSIONI NG ON A TURNKEY BASIS, TRAINING OF COMPANY'S OFFICIALS, HANDING OVER ETC.

- **B. EXISTING SYSTEM DESCRIPTION:-**
- 1. THERE ARE APPROX. 89 NOS. IP CAMERAS INSTALLED AT VARIOUS LOCATIONS.
- 2. THESE CAMERAS ARE CONNECTED TO FIELD SWITCHES.
- 3. FIELD SWITCHES ARE CONNECTED TO CORE SWITCHES THROUGH OFC BACKBONE.
- 4. VMS SERVER, RECORDING SERVERS, CORE SWITCHES AND NAS STORAGE ARE INSTALLED AT CCTV CONTROL ROOM.
- 5. RECORDING OF EXISTING 89 CAMERAS IS STORED AT EXISTING NAS STORAGE FOR 90 DAYS.

6. LIVE DISPLAY OF THESE IP CAMERAS IS AVAILABLE AT CCTV CONTROL ROOM.

#### C. SCOPE OF WORK:-

SCOPE OF WORK SHALL INCLUDE DESIGNING & INTEGRATION OF EXISTING CAMERAS, SUPPLYING, INSTALLATION OF NEW SERVERS, WORKSTATIONS, VIDEO MANAGEMENT APPLICATION AND OTHER RELATED ACCESSORIES TO COMPLETE THE INFRASTRUCTURE UP GRADATION WITHOUT DISTURBING THE EXISTING IP SYSTEM FUNCTIONING.

- 1. BOM IS ONLY INDICATIVE AND DERIVED FOR FIVE (NOS) SERVERS, FOUR (NOS) WORKSTATIO N, 1 (NOS) 8-BAY NAS (NETWORK ATTACHED STORAGE) & UPGRADATION OF EXISTING MILEST ONE XPROTECT VIDEO MANAGEMENT APPLICATION USING EXISTING OFC BACK BONE. THE SCO PE INCLUDES RECORDING OF ALL CAMERAS {SYSTEM SHALL BE CAPABLE TO CATER 200 CAME RAS} WHICH MUST BE DISPLAYED IN CLIENT/ WORKSTATION PC HAVING RESPECTIVE APPLICA TIONS RUNNING.
- 2. THE OBJECTIVE SHALL BE TO PROVIDE HIGH DEGREE OF DIGITAL VIDEO SURVEILLANCE TO T HE PREMISE BY UPTO 200 NOS. IP (INTERNET PROTOCOL) BASED CAMERAS. THE PURPOSE IS T O MONITOR THE ENTIRE AREA AND TO RECORD, STORE AND RETRIEVE THE EVENTS, WHENEVER REQUIRED. IT IS ALSO ESSENTIAL TO HAVE RECORDED VIDEO RECORDING OF ALL CAMERAS TO BE STORED FOR A MINIMUM PERIOD OF 90 DAYS TO FACILITATE INVESTIGATIONS OF A REPORTED CASE OR EVENT AND FAIL OVER SERVER SHOULD KEEP 7 TO 10 DAYS STORAGE.
- 3. THE SUCCESSFUL BIDDER HAS TO PROVIDE COMPLETE SUPPORT WHICH INCLUDES SERVERS , WORK STATION, EXISTING STORAGE (NAS), VMS, EXISTING LAYER 2/LAYER 3 SWITCHES, EXIS TING NETWORK BACKBONE & OTHER RELATED COMPONENTS TO RUN THE EXISTING CCTV SUR VEILLANCE SYSTEM SMOOTHLY.
- 4. SUPPLIED VMS SYSTEM SHALL ABLE TO PERFORM WITH ALL THE HIGH-RESOLUTION CAMERA (MINIMUM 200) CONTINUOUS RECORDINGS FOR A PERIOD OF MINIMUM 90 DAYS @ 25 FPS AT 720P RESOLUTION OR BETTER QUALITY USING SUITABLE COMPRESSION TECHNIQUES H.265 FO R ALL CAMERAS.
- 5. THE STORAGE SYSTEM SHALL BE HAVING MINIMUM:
- a. NETWORK VIDEO RECORDING SERVER SHOULD CONFIGURE WITH EXISTING NAS STORAGE TO RETAIN THE FOOTAGES.
- **b. MINIMUM THROUGHPUT OF EACH SERVER SHALL HAVE 1100 MBPS OR BETTER.**
- 6. STORAGE, SERVER, WORKSTATION AND VIDEO PANEL WILL BE INSTALLED IN THE EXISTING C CTV CONTROL ROOM.

- 7. SYSTEM SHALL USE VIDEO SIGNALS FROM VARIOUS TYPES OF INDOOR/OUTDOOR COLOUR H D CAMERAS (IP BASED) INSTALLED AT DIFFERENT LOCATIONS, PROCESS THEM FOR VIEWING O N WORKSTATIONS/EXISTING AT CENTRAL CONTROL ROOM, LOCAL CONTROL ROOMS AND SIMU LTANEOUSLY RECORD ALL THE CAMERAS AFTER COMPRESSION USING H.264 / H.265 STANDAR D AND STREAMED OVER THE IP NETWORK AT 720 P RESOLUTION WITH 25FPS FRAME RATE. THE PICTURE QUALITY OF RECORDED REPLAY SHOULD BE AS CLEAR AS LIVE VIDEO WITHOUT ANY LOSS OF FRAME. PTZ CONTROLLERS/ JOY STICK SHALL BE USED FOR PAN, TILT, ZOOM, AND OT HER FUNCTIONS OF PTZ CAMERAS.
- 8. ALL CAMERA RECORDINGS SHALL HAVE CAMERA ID & LOCATION/AREA OF RECORDING AS W ELL AS DATE/TIME STAMP SHALL BE PROGRAMMABLE BY THE SYSTEM ADMINISTRATOR WITH U SER ID & PASSWORD. ALSO, SYSTEM MUST HAVE PROVISION TO CREATE MULTIPLE USER ID IN DIFFERENT LEVELS ( LIKE POWER USER, FULL ADMIN, SEARCH ONLY, LIVE + SEARCH, LIVE ONL Y ) WITH RESTRICTED ACCESS BY PROVIDING SELECTIVE PRIVILEGES LIKE LIVE MONITORING, R ECORDED FOOTAGE VIEWING, ADD / DELETE CAMERA, CONFIGURE AND SYSTEM ADMINISTRATO R.
- 9. THE LIVE VIDEO, RECORDING & REPLAY SHOULD BE SMOOTH & CONTINUOUS WITHOUT ANY SLUGGISHNESS.
- 10. SYSTEM SHALL HAVE THE FACILITY OF VIEWING, RECORDING & REPLAY, BACKUP/ TRANSMI SSION AND REMOTE ACCESS SIMULTANEOUSLY. THE OFFERED SYSTEM SHALL HAVE FACILITY TO EXPORT THE DESIRED PORTION OF CLIPPING (FROM A DESIRED DATE/TIME TO ANOTHER DESIRED DATE/TIME) ON DVD OR PEN DRIVE. VIEWING OF THIS RECORDING SHALL BE POSSIBLE ON ANY STANDARD PC USING STANDARD SOFTWARE LIKE WINDOWS MEDIA PLAYER ETC. EXPORT FILE FORMATS SUPPORTED: .EXE, .AVI, .PS, .MOV, OR ANY NATIVE FILE FORMAT. THE VMS STANDALONE PLAYER SHALL BE ABLE TO AUTHENTICATE THAT THE VIDEO HAS NOT BEEN TAMPER ED WITH USING A KEYED HASH MESSAGE AUTHENTICATION CODE.
- 11. ALL THE WORKSTATIONS IN LAN SHOULD BE PROVIDED WITH SOFTWARE TO VIEW AND CONTROL THE CAMERAS AND RETRIEVE THE RECORDED VIDEO IMAGES FROM THE RECORDING SERVER SEAMLESSLY. THE IP CCTV SYSTEM SHOULD BE COMPATIBLE TO WORK IN LAN ENVIRONMENT FOR OFFICE NETWORKING OF IP CCTV SYSTEM.
- 12. THE SYSTEM SHOULD BE DESIGNED IN SUCH A MANNER THAT OPERATIONAL DATA IS NOT L OST IN CASE OF ANY FAILURE OF EQUIPMENT OR COMMUNICATION NETWORK AND SHALL DESI GN AN EFFECTIVE NETWORK TO PROVIDE 100% UPTIME FOR THE ENTIRE LINK. CCTV RECORDIN G SYSTEM SHOULD HAVE FAILOVER MECHANISM.
- 13. IT MUST BE POSSIBLE TO REMOVE ONE OF THE REDUNDANT SYSTEMS FOR MAINTENANCE WITHOUT INTERRUPTING OPERATION AND UPON ITS REINSTATEMENT, AUTOMATICALLY RE-SYN CHRONIZE AGAIN WITHOUT INTERRUPTION TO SYSTEM OPERATION.

- 14. THE PROPOSED SOLUTION SHOULD BE ABLE TO GENERATE VARIOUS STANDARD/ CUSTOMIZ ED REPORTS FOR EVENT ANALYSIS / REPORTING PURPOSES.
- 15. NETWORK VIDEO RECORDING SERVER SHALL HAVE PROVISION TO SHOWCASE DIFFERENT A NALYTICS WHICH ARE BASED ON CAMERA EDGE AND SERVER BASED.
- 16. SYSTEM SHOULD HAVE FACILITY TO EXPORT IN CSV AND EXCEL AND IPEG.
- 17. THE FUNCTIONAL REQUIREMENT IS ONLY INDICATIVE. THE BIDDER SHALL QUOTE THE LATE ST TECHNOLOGY SYSTEM AVAILABLE AT THE TIME OF SUBMITTING THE BID. THE BIDDER SHALL PROPOSE THE MOST SUITABLE ECONOMICAL INTEGRATED SYSTEM SOLUTIONS.
- 18. LATEST REVISION OF ALL APPLICABLE IE RULES AND OTHER REGULATIONS SHALL BE FOLL OWED AND COMPLY WITH ALL THE SAFETY STATUTORY REQUIREMENTS WHILE EXECUTING THIS WORK.
- 19. THE CCTV SERVERS SHOULD HAVE THE CAPACITY OF FUNCTIONING ON 24X7 DAYS BASIS IN INDIAN CONDITIONS AND SHOULD PROVIDE THE FAILURE OVER CONDITION.
- 20. THE BIDDER WILL HAVE TO PROVIDE ALL SOFTWARE UPDATES, RELEASES, VERSION UPGRA DES, NEW VERSIONS ETC. WITHIN 30 DAYS OF THEIR AVAILABILITY AT NO ADDITIONAL COST D URING THE PERPETUAL LICENCE PERIOD.
- 21. THE OEM OF MAJOR ITEMS (LIKE CAMERA, SERVERS, WORKSTATION. VIDEO MANAGEMENT SERVERS, SWITCHES ETC.) ITS SISTER CONCERNS, OR ANY OF ITS GROUP COMPANY OR SUBSI DIARY SHOULD NOT HAVE BEEN BLACKLISTED IN LAST 10 YEARS BY ANY MINISTRY UNDER GOV ERNMENT OF INDIA OR BY GOVERNMENT OF ANY STATE IN INDIA OR ANY OF THE GOVERNMENT T PSUS AS ON TENDER FLOATING DATE.
- 22. THE SOURCE CODE OF VIDEO MANAGEMENT SOFTWARE SHOULD NOT RESIDE IN ANY COUN TRY SHARING LAND BORDER WITH INDIA. UNDERTAKING SIGNED BY AUTHORIZED SIGNATORY REGARDING THE SOURCE CODE.
- 23. IN ORDER TO OPTIMIZE THE MEMORY, WHILE RECORDING, VIDEO SHALL BE COMPRESSED USING H.264 / H.265 STANDARD AND STREAMED OVER THE IP NETWORK.
- 24. ALL SOFTWARE LICENSES SHOULD BE IN THE NAME OF INDIA GOVERNMENT MINT, HYDERA BAD.
- 25. THE RECORDING SERVERS SHALL BE ABLE TO SUPPORT ALL CAMERAS AT 25 FRAMES PER S

ECONDS AND 720P RESOLUTION WHILE MAINTAINING LESS THAN 70% LOAD ON EACH NETWOR K VIDEO RECORDING SERVER.

- 26. THE SYSTEM SHALL BE BASED ON THE LATEST IN SOFTWARE PROGRAMMING TECHNOLOGY. THE SOFTWARE SHOULD BE COMPATIBLE WITH WINDOWS OPERATING SYSTEMS (WINDOWS 11/LINUX UBUNTU /WINDOWS SERVER 2022 OR LATER VERSIONS) AND SHOULD BE USER FRIENDLY. THE SYSTEM SHALL ALLOW OPERATION WITH PC VIA CLIENT MODULE.
- 27. INDIVIDUAL COMPONENT FAILURES WITHOUT AFFECTING THE WHOLE SYSTEM OF VIDEO VIEWING AND RECORDING WILL BE AS PER THE SEVERITY LEVELS DEFINED BELOW
- I. SEVERE (S1): CALLS THAT CAN HAVE SEVERE IMPACT ON BUSINESS AFFECTING IP CCTV SYST EM AT LARGE, WITHOUT LOSS OF VIEW AND WHOLE IP CCTV SYSTEM DATA LOSS, FALLS UNDE R THIS CATEGORY. E.G. NAS STORAGE NOT AVAILABLE (BUT DATA AVAILABLE AT NVRS), L3 S WITCH ISSUES (STAND/ BY L3 SWITCH MUST TAKE OVER), NVR DOWN (BUT DIRECT RECORDING IN SAN AND VIEWING CONTINUES) ETC.
- II. ESSENTIAL (S2): CALLS THAT CAN HAVE ESSENTIAL IMPACT ON THE IP CCTV SYSTEM AFFECT ING INDIVIDUAL COMPONENT OR SERVICE, BUT DO NOT IMPACT IP CCTV FUNCTIONING AND LO SS OF VIDEO DATA AS A WHOLE SYSTEM, AND HAVE PARTIAL LOSS OF VIEWING OR RECORDIN G A PARTICULAR SECTION/AREA FALL UNDER THIS CATEGORY. E.G. OS/ APPLICATION FUNCTIO NING, OFC NETWORK ISSUES, REDUNDANT SERVER ISSUES, L2 SWITCH ISSUES, VIRUS, HARD D ISK CRASHES ETC.,
- III. NORMAL (S3): CALLS THAT DO NOT HAVE MUCH IMPACT ON THE IP CCTV SYSTEM AS A WHO LE BUT ONE OR MORE LOW LEVEL COMPONENTS FAILURE THAT RESULT IN PARTIAL LOSS OF R ECORDING/ VIEWING FOR A SPECIFIC CAMERA OR VIEW FALL UNDER THIS CATEGORY. E.G. IP CAMERA ISSUES, L1 SWITCH CAT6 CABLE ISSUES ETC.

**TABLE - 01 (SERVICE CLASSIFICATION)** 

- I. SEVERITY LEVEL RESPONSE TIME(SLRT): TIME WITHIN WHICH THE CONTRACTOR SHOULD RES POND)
- II. RESOLUTION TIME (RT): TIME WITHIN WHICH THE CONTRACTOR SHOULD BRING THE SERVIC E BACK TO NORMAL WORKING CONDITION.
- III. QUARTERLY UPTIME COMMITMENT IN PERCENTAGE(QPC): AT ANY POINT OF TIME, THE BELO W QUARTERLY UPTIME COMMITMENT SHOULD BE MAINTAINED:

**SEVERITY SLRT RT QPC** 

- **S1 1 HOUR 4 HOURS 99.50% 99.00%**
- **S2 1 HOUR 4 HOURS 95.00% 95.00%**
- **S3 4 HOURS 16 HOURS 95.00% 95.00%**

**PENALTY CLAUSE:-**

AN AMOUNT OF RS.400/- PER CAMERA PER DAY WILL BE PENALIZED TO VENDOR FOR NON FUN CTIONING OF SURVEILLANCE SYSTEM. HOWEVER, NO PENALTY WILL BE IMPOSED IF THE FAILU RE IS ON ACCOUNT OF INDIA GOVERNMENT MINT, HYDERABAD SIDE.

### **D. OTHER REQUIREMENTS**

- 1. SUPPLY, INSTALLATION AND COMMISSIONING: SUPPLY, INSTALLATION, COMMISSIONING AN D PROVING OF PERFORMANCE TO BE CARRIED OUT BY THE SUPPLIER AT INDIA GOVERNMENT MINT, HYDERABAD SITE WITHIN STIPULATED PERIOD TO THE SATISFACTION OF INDIA GOVERN MENT MINT, HYDERABAD.
- 2. SPARES AND SERVICE SUPPORT: SUPPLIER SHALL ATTEND PERIODICAL AND BREAKDOWN M AINTENANCE OF THE SYSTEM DURING THE WARRANTY PERIOD WITHOUT ANY ADDITIONAL COS T. ALSO, THE BIDDER SHALL ENSURE SPARE SUPPORT FOR MINIMUM OF EIGHT YEARS FROM T HE FAC DATE. NON AVAILABILITY OF SPARES/STANDBY UNITS/COMPONENTS WILL NOT BE ACC EPTED AS A REASON FOR WAIVING OF PENALTY TOWARDS DELAY IN RENDERING PROMPT SER VICE. FOR ENSURING PROMPT SERVICE, MINIMUM REQUIRED SPARES/STANDBY UNITS SHALL BE MAINTAINED AT SITE DURING WARRANTY PERIOD. AFTER USE OF ANY SUCH SPARE UNIT/CAR DS ETC., THE SAME SHALL BE REPLENISHED AT THE EARLIEST.
- 3. SOFTWARE LICENSE: ALL SOFTWARE (OPERATING AND APPLICATION) LICENSES FOR LIFETIM E SHOULD BE IN THE NAME OF INDIA GOVERNMENT MINT, HYDERABAD AND SHALL BE UPGRAD ED AT FREE OF COST AS & WHEN NEW VERSIONS ARE RELEASED.
- 4. TRAINING TO USER: BIDDER SHALL IMPART PROPER TRAINING TO THE USERS AND TECHNICAL TEAM FOR TROUBLE FREE OPERATION AND MAINTENANCE OF THE SYSTEM.
- 5. BIDDER SHOULD HAVE AT LEAST ONE OR MORE CERTIFIED VIDEO MANAGEMENT SERVER EN GINEER.
- 6. TOOLS AND TACKLES: ALL TOOLS & TACKLES, EQUIPMENT AND OTHER REQUIRED FACILITIES FOR UN-LOADING, SHIFTING OF EQUIPMENT TO THE WORKPLACE AND ERECTION & COMMISSIO NING OF THE SYSTEM SHALL BE ARRANGED BY THE BIDDER/VENDOR/CONTRACTOR.
- 7. THE BIDDER MUST PROVIDE A VALID CERTIFICATE OF AUTHORIZATION (MAF) FOR PROVIDIN G AFTER SALES SERVICE FOR ALL THE THIRD-PARTY EQUIPMENT / SYSTEMS SUPPLIED FROM T HE OEM. THE CERTIFICATE SHOULD BE IN THE LETTER HEAD OF OEM ISSUED ON THE NAME OF BIDDER AND CURRENTLY VALID.
- 8. MANUFACTURER AUTHORISATION (MAF) FOR SOFTWARE, SERVER AND WORKSTATION IS A MUST TO ACCOMPANY THE BID DOCUMENT.
- 9. MODIFICATIONS: BIDDER SHALL AGREE FOR ANY MINOR MODIFICATIONS IN SYSTEM UP-GRA

DATION (WITHOUT HAVING ANY ADDITIONAL FINANCIAL IMPLICATIONS) TO MATCH WITH SPECI FIC REQUIREMENT OF INDIA GOVERNMENT MINT, HYDERABAD.

- 10. OEM OF VMS SHOULD NOT HAVE ANY TYPE CONTROL IN VMS SOFTWARE.
- E. FINAL ACCEPTANCE TEST (FAT) AND FINAL ACCEPTANCE CERTIFICATE (FAC):

THE UPGRADED SYSTEM SHALL BE TESTED FOR 15 MAN DAYS IN REAL WORKING ENVIRONMEN T AND FINAL ACCEPTANCE CERTIFICATE (FAC) WILL BE ISSUED BASED ON SATISFACTORY PERFORMANCE DURING FAT.

FAT SHALL INCLUDE BUT NOT RESTRICT TO THE FOLLOWING TESTS:

- 1) TESTING OF FAILOVER OF RECORDING SERVERS.
- 2) TESTING OF HARD DISC FAILURE IN RAID 5/6 CONFIGURATION OF STORAGE.
- 3) CHECKING OF RECORDING, PLAYBACK & OTHER VARIOUS FEATURES RANDOMLY
- 4) CHECKING OF RECORDING, REPLAY VIDEO QUALITY, FRAME RATE ETC. TO ENSURE SMOOTH & CONTINUOUS VIDEO WITHOUT ANY JERKS.
- 5) CHECKING OF ALL SOFTWARE IN SERVER & CLIENT HAS BEEN INSTALLED CORRECTLY & RUN NING WITHOUT ANY BUG/ERROR.
- 6) TESTING OF THE FUNCTIONALITY OF THE VMS FEATURES INCLUDING RECORDING, RETRIEVA L OF RECORDINGS ETC,
- 7) TESTING OF CAMERA EDGE RECORDING DURING FAILURE OF NETWORK/CAMERA SERVERS ETC.
- 8) ANY OTHER TEST NECESSARY / RELEVANT FOR FULL FUNCTIONING OF THE SYSTEM.

**VIDEO MANAGEMENT SOFTWARE: SITC OF EXISTING VMS UPGRADATION- 1 SET** 

- THE SI MUST UPGRADE EXISTING VMS VERSION TO LATEST VERSION OF MILESTONE XPROTECT WITH BELOW SCOPE OF WORK ENSURING ALL THE PREREQUISITES FOR THE SYSTE M
- BEFORE UPGRADATION SI MUST ENSURE THAT SYSTEM REQUIREMENTS FOR UPGRADE ARE IN PLACE.
- EXISTING CONFIGURATION BACKUP FROM THE MANAGEMENT SERVER AND DB MUST BE TAKE N BEFORE PROCEEDING FOR UPGRADATION.
- AFTER CONFIGURATION BACKUP, MANAGEMENT AND DATABASE SERVER MUST BE UPGRADE D AND ENSURED WHETHER ALL THE SERVICES ARE RUNNING PROPERLY.
- ONCE MANAGEMENT SERVER IS UP AND RUNNING, ALL THE RECORDING SERVERS MUST BE U PGRADED ONE BY ONE AND DURING RECORDING SERVER UPGRADATION SWITCH THE RECORDING SERVER OPERATIONS TO FAILOVER RECORDING SERVER.
- FAILOVER RECORDING SERVER MUST BE UPGRADED TO LATEST VERSION AFTER COMPLETING

RECORDING SERVER'S UPGRADATION.

- CLIENT APPLICATIONS INSTALLED ON ALL MACHINES SHOULD BE UPGRADED TO LATEST VER SION.
- AFTER COMPLETE UPGRADATION, ENSURE MILESTONE RELATED SERVICES IN ALL SERVERS & CONNECTED CAMERAS IN VMS ARE WORKING NORMALLY AS PER THE CONFIGURATIONS MADE BEFORE UPGRADE.

#### F. GENERAL

- a. THE VIDEO MANAGEMENT SYSTEM SHALL BE A FULLY DISTRIBUTED SOLUTION, DESIGNED FO R LIMITLESS MULTI-SITE AND MULTIPLE SERVER INSTALLATIONS REQUIRING 24/7 SURVEILLAN CE WITH SUPPORT FOR DEVICES FROM DIFFERENT VENDORS. THE VIDEO MANAGEMENT SYSTE M SHALL OFFER CENTRALIZED MANAGEMENT OF ALL DEVICES, SERVERS AND USERS AND MUST EMPOWER A FLEXIBLE RULE-BASED SYSTEM DRIVEN BY SCHEDULES AND EVENTS.
- b. VMS SHALL SUPPORT IP CAMERAS (ALL THE FEATURES & FUNCTIONALITIES) FROM AT LEAST FIFTY (50) MAJOR CAMERA BRANDS WITH API LEVEL INTEGRATION. DOCUMENTARY EVIDENCE HAVING MAKE DETAIL SHOULD BE MANDATORILY SUBMITTED.
- c. THE VMS APPLICATION SHALL SUPPORT ALL THE FEATURES & FUNCTIONALITIES OF THE OFF ERED CAMERAS. DOCUMENTARY PROOF SHOULD BE SUBMITTED FOR SAME.
- d. THE OFFERED VMS SHOULD HAVE INTEGRATION WITH 10000+ CAMERA MODELS AT API LEVE L. DOCUMENTARY EVIDENCE HAVING CAMERA MAKE AND MODEL DETAIL SHOULD BE MANDATO RILY SUBMITTED.
- e. VMS SHALL HAVE API BASED INTEGRATION WITH THE MAJOR CAMERA VENDORS IN ORDER T O SUPPORT FEATURES SUCH AS, UP TO 3 MULTI-STREAMS, SD CARD STORAGE SYNC, CAMERA BASED EDGE ANALYTICS SUPPORT, CAMERA I/O SUPPORT, CAMERA AUDIO SUPPORT,ETC.
- f. TO ENSURE OPENNESS, VMS, CAMERAS AND VA SHOULD NOT BE FROM THE SAME MANUFAC TURER BUT SHOULD BE TIGHTLY INTEGRATED ON API LEVEL.
- g. VMS SHALL SUPPORT INSTALLATION AND ABILITY TO RUN ON VIRTUALIZED WINDOWS SERV ERS
- h. VMS MANUFACTURER SHALL PROVIDE THEIR SDK (OR ANY OTHER INTEGRATION MEANS) LIB RARIES AND DOCUMENTATION) TO ENSURE A SEAMLESS INTEGRATION WITH ANY OTHER SYSTE M
- i. VMS SHALL BE OPEN TO ANY STANDARD STORAGE TECHNOLOGIES INTEGRATION.
- j. VMS SHALL BE OPEN TO ANY VIDEO WALL SYSTEM INTEGRATION.
- k. VMS SHOULD HAVE THE POSSIBILITY TO INTEGRATE THIRD PARTY VIDEO ANALYTICS SYSTE MS.
- I. VMS SHOULD CONSIST OF ONLY BASE LICENSE AND CHANNEL LICENSES. VMS SHOULD BE PR OVIDED WITH UNLIMITED NUMBER OF FAILOVER SERVERS AND FAILOVER CAMERA LICENSES.
- m. THE SYSTEM SHALL ACT AS AN SNMP AGENT WHICH CAN GENERATE AN SNMP TRAP AS A RE SULT OF RULE ACTIVATION IN ADDITION TO OTHER EXISTING RULE ACTIONS.

- n. THE SYSTEM SHALL BE ABLE TO UTILIZE MICROSOFT WINDOWS SNMP SERVICE FOR TRIGGERING OF SNMP TRAPS
- o. THE VMS SHOULD HAVE THE FEATURE TO RECORD CLIENT WORKSTATION SCREENS FOR MO NITORING & TO PROVIDE AN ACCOUNT OF FRAUDULENT ACTIVITIES BY CAPTURING SCREEN RE CORDINGS OF ACTIVITIES/TRANSACTIONS.
- p. THE VMS SHOULD BE MANDATORY PROVIDED WITH 200 NUMBERS OF CLIENT LICENSES. IN C ASE OF ADDITIONAL LICENSES REQUIRED IT MUST BE FREE OF COST.
- q. THE VMS SHOULD HAVE THE FEATURE OF PRIVACY MASKING TO CONCEAL CERTAIN PARTS OF THE IMAGE, BOTH IN LIVE AND PLAYBACK VIDEO AND IN EXPORTED MATERIAL. IT SHOULD SUPPORT PERMANENT MASKS AND LIFTABLE MASKS THAT CAN BE LIFTED AND MANAGED WITH USER CREDENTIALS. MASKING LEVEL SHOULD BE ADJUSTABLE AND SHOULD RANGE BETWEEN 'LIGHT BLUR' TO 'SOLID GREY'.
- r. THE VMS SHOULD SUPPORT VIDEO DATA GROOMING FEATURE TO ENABLES REDUCTION OF VIDEO RECORDING DATA SIZE BY REDUCING THE FRAME RATE OF THE VIDEO DATA.
- s. VMS SHOULD SUPPORT SCALABLE VIDEO QUALITY RECORDING TO RECORD HIGH-QUALITY VIDEO TO EDGE STORAGE, WHILE A LOW-QUALITY REFERENCE VIDEO STREAM CAN BE RECORDED CENTRALLY IN THE RECORDING SERVERS
- t. THE VMS SYSTEM SHALL BE A SCALABLE CLIENT SERVER ARCHITECTURE BUILT USING WELL KNOWN OPERATING SYSTEMS
- u. THE VMS SYSTEM SHALL ENABLE RECORDING TO BE DONE AT THE AGGREGATION SITES AND SHALL ALLOW THE LOCAL CONTROL CENTER TO IMPORT SELECTED VIDEO'S ON DEMAND.
- v. TO FACILITATE THE VMS SYSTEM ARCHITECTURE, THE BIDDER SHALL ENSURE THAT SUFFICIENT CAPACITY IS DESIGNED INTO THE DATA COMMUNICATIONS & TELECOMMUNICATIONS INFRASTRUCTURE TO DELIVER THE REQUIRED FUNCTIONALITY, ALONG WITH THE ABILITY TO ALLOCATE AND RESERVE RESOURCES (INCLUDING BANDWIDTH).
- w. THE RECORDING SERVER SHALL HAVE THE ABILITY TO HANDLE VIDEO MOTION DETECTION O N NVIDIA GPU TO OPTIMIZE THE SERVER REQUIREMENT.
- x. THE VMS DATA COMMUNICATIONS AND TELECOMMUNICATIONS NETWORK SHALL USE A SUIT ABLE TRANSPORT MEDIUM AND ASSOCIATED CABLING AND DATA TRANSMISSION INFRASTRUCTURE THAT WILL SUPPORT REAL-TIME VIDEO DISPLAY OF CAMERAS AT THE NOMI NATED OPERATIONS CENTRES. THE TYPE OF TRANSMISSION NETWORK SHALL BE DETERMINED BY THE BIDDER.
- y. THE VMS SYSTEM SHALL BE COMPATIBLE TO SINGLE AND MULTIPLE PROCESSOR SERVERS. THE SERVER PROCESSOR & HARDWARE SHALL BE OPTIMIZED IN ALL CASES.
- z. THE VMS SYSTEM SHALL CLUSTER THE PROCESSING & MEMORY LOAD ACROSS SEVERAL MA CHINES. THE FAILURE OF ANY ONE SERVER IN THE SOLUTION SHALL NOT CAUSE A FAILURE IN THE ENTIRE SYSTEM.
- aa. THE VMS SYSTEM DEVICE DRIVERS SHALL BE STORED SEPARATELY TO THE CENTRAL CORE APPLICATION TO ENSURE ANY INSTABILITY IN 3RD PARTY SDKS DO NOT AFFECT THE CORE APPLICATION.
- bb. THE VMS MANAGEMENT SERVER SHALL BE ABLE TO INTELLIGENTLY SCAN AN IP NETWORK FOR NEW DEVICES (CAMERAS OR SERVERS) ALONG WITH AUTOMATIC MODEL DETECTION.

CC. NETWORK INFRASTRUCTURE AND INSTALLATION ARE THE RESPONSIBILITY OF THE BIDDER. NETWORK COMPONENTS BOTH ACTIVE AND PASSIVE REQUIRED FOR THE SUCCESSFUL IMPLEM ENTATION OF THE VIDEO SURVEILLANCE DETAILED IN THIS TENDER SHALL BE PROVIDED BY THE BIDDER. THE NETWORK INFRASTRUCTURE SHALL MEET THE STREAMING REQUIREMENT OF THE PROJECT WITHOUT ANY BOTTLENECKS. THE NETWORK INFRASTRUCTURE SHALL SUPPORT UDP MULTICAST, UDP UNICAST AND TCP TRANSMISSION.

dd. THE VMS SYSTEM SHALL PROVIDE AN INTEGRATED SECURE, SCALABLE AND EASILY ACCESS IBLE SOFTWARE-BASED SOLUTION FOR THE MANAGEMENT OF THE EXISTING & FUTURE PHYSIC AL SECURITY INFRASTRUCTURE

ee. THE VMS SYSTEM SHALL PROVIDE A POWERFUL AND EFFICIENT MANAGEMENT INTERFACE F OR ALL THE SECURITY SYSTEMS ACROSS ALL MONITORED SITES.

THE VIDEO MANAGEMENT SYSTEM SHALL CONTAIN RECORDING SERVERS USED FOR RECORDIN G VIDEO FEEDS AND FOR COMMUNICATING WITH CAMERAS AND OTHER DEVICES. THE RECORDING SERVERS SHALL PROCESS THE RECORDINGS AND PLAYBACK THE VIDEO STREAMS.

ff. THE VIDEO MANAGEMENT SYSTEM SHALL INCLUDE A FEDERATED ARCHITECTURE ALLOWING CLIENTS ON THE HOST SYSTEM WITH THE RIGHT USER RIGHTS TO VIEW VIDEO SOURCES BELO NGING TO MULTIPLE INDEPENDENT VIDEO MANAGEMENT SYSTEMS SIMULTANEOUSLY, AS IF TH EY WERE ON THE VIDEO MANAGEMENT SYSTEM SHALL CONTAIN A MANAGEMENT SERVER THAT SHALL BE THE CENTRAL MANAGER OF THE SYSTEM AND CONTROL RECORDING SERVERS, CAME RAS, DEVICES AND USERS. THE MANAGEMENT SERVER SHALL HANDLE THE INITIAL CLIENT LOG IN, SYSTEM CONFIGURATION AND LOGGING.

gg. THE MANAGEMENT SERVER SHALL ALLOW ACCESS TO A SYSTEM MANAGER FROM WHERE T HE ADMINISTRATOR CAN CONFIGURE AND MANAGE ALL SERVERS, CAMERAS AND USERS.

hh. THE SYSTEM SHALL ALLOW THE MANAGEMENT SERVER TO BE INSTALLED ON MULTIPLE SE RVERS WITHIN A CLUSTER OF SERVERS ENSURING THAT ANOTHER SERVER IN THE CLUSTER AU TOMATICALLY TAKES OVER IN CASE THE FIRST SERVER FAILS.

ii. VMS SHOULD HAVE THE CAPABILITY TO INTEGRATE WITH 3RD PARTY ACCESS CONTROL SYS TEMS.

jj. THE VMS SYSTEM SHALL SUPPORT DEVICE FIRMWARE UPGRADE OF SINGLE AND MULTIPLE D EVICES IN BULK FROM WITHIN THE MANAGEMENT INTERFACE

kk. THE VIDEO MANAGEMENT SYSTEM SHALL ALLOW AN UNLIMITED NUMBER OF CAMERAS TO BE CONNECTED TO EACH RECORDING SERVER AND AN UNLIMITED NUMBER OF RECORDING SER VERS TO BE CONNECTED TO EACH MANAGEMENT SERVER ACROSS MULTIPLE SITES, IF REQUIRE D.

II. THE VIDEO MANAGEMENT SYSTEM SHALL SUPPORT HIGH AVAILABILITY OF RECORDING SERVERS. A FAILOVER OPTION SHALL PROVIDE STANDBY SUPPORT FOR RECORDING SERVERS WITH AUTOMATIC SYNCHRONIZATION TO ENSURE MAXIMUM UPTIME AND MINIMUM RISK OF L OST DATA.

mm. THE VIDEO MANAGEMENT SYSTEM SHALL SUPPORT A VERSATILE RULE SYSTEM INCLUDING SCHEDULED OR EVENT-DRIVEN ACTIONS WITH NUMEROUS OPTIONS INCLUDING SUPPORT TO TIME PROFILES.

nn. THE VIDEO MANAGEMENT SYSTEM SHALL SUPPORT MICROSOFT WINDOWS 7, MICROSOFT WINDOWS SERVER 2008 R2 STD OR HIGHER, MICROSOFT WINDOWS SERVER 2012 R2 STD OR

HIGHER, MICROSOFT WINDOWS 8.1 (BUSINESS/ENTERPRISE/ULTIMATE) AND MICROSOFT WIND OWS 10 (BUSINESS/ENTERPRISE/ULTIMATE) WITH THE LATEST PATCHES AND SERVICE PACKS I NSTALLED. THE SYSTEM MUST USE DIRECTX AND .NET FRAMEWORK.

00. VMS SHOULD BE FULL MEMBER OF ONVIF OR AFFILIATE TO PARENT COMPANY OR CONTRIBUTING MEMBERSHIP LEVEL

pp. FIPS 140-2 COMPLIANT MODE: THE VMS HAS THE ABILITY TO OPERATE IN A FIPS 140-2 CO MPLIANT MODE.

qq. VMS OEM MUST BE GDPR COMPLIANT

rr. THE VIDEO MANAGEMENT SYSTEM SOFTWARE SHALL INCLUDE MULTICAST AND MULTI-STRE AMING SUPPORT.

ss. THE VIDEO MANAGEMENT SYSTEM SHALL INCLUDE AUTOMATIC CAMERA DISCOVERY.

tt. THE VIDEO MANAGEMENT SYSTEM SHALL INCORPORATE INTUITIVE MAP FUNCTIONS ALLOWING FOR MULTI-LAYERED MAP ENVIRONMENT. THE MAP FUNCTIONALITY SHALL ALLOW FOR THE INTERACTIVE CONTROL OF THE COMPLETE SURVEILLANCE SYSTEM, AT-A-GLANCE OVERVIEW OF SYSTEM INTEGRITY, AND SEAMLESS DRAG-AND-DROP INTEGRATION WITH VIDEO WALL MODULE OPTION.

uu. THE VIDEO MANAGEMENT SYSTEM SHALL SUPPORT 56-BIT ENCRYPTION OF VIDEO FOR EXP ORT PURPOSES. THE 56-BIT ENCRYPTION SHALL MEET THE REQUIREMENTS ON EXPORT LIMITS FOR ENCRYPTION.

vv. THE VIDEO MANAGEMENT SYSTEM SHALL SUPPORT FULL TWO-WAY AUDIO BETWEEN CLIEN TS AND REMOTE DEVICES. TWO-WAY AUDIO INTEGRATION SHALL SUPPORT THE FOLLOWING FE ATURES AND FUNCTIONS:

ww. THE VIDEO MANAGEMENT SYSTEM SOFTWARE SHALL PROVIDE FAST EVIDENCE EXPORT BY EXPORTING IN VIDEO TO VARIOUS FORMATS, INCLUDING VIDEO FROM MULTIPLE CAMERAS IN ENCRYPTED NATIVE DATABASE FORMAT WITH AN INCLUDED VIEWER.

XX. THE VIDEO MANAGEMENT SYSTEM SHALL SHOW FULL AWARENESS OF THE SYSTEM THROUGH AUDIT LOGS AND SHOWS USER ACTIVITY THROUGH COMPREHENSIVE LOGS.

yy. THE VIDEO MANAGEMENT SYSTEM SHALL INCLUDE SUPPORT FOR A FRAME WORK DATA MO DULE DESIGNED TO INTEGRATE MULTIPLE THIRD PARTY VIDEO CONTENT ANALYSIS (VCA) SOLU TIONS SEAMLESSLY INTO CLIENT VIEWER ENVIRONMENTS.

VMS SHOULD SUPPORT ONVIF S, G, T, Q & M PROFILE SUPPORTED BY IP DEVICES

AAA. THE VMS SOFTWARE MUST BE POSSIBLE TO INTEGRATE WITH NVRS.

BBB. ARCHIVED RECORDINGS FOR PREDEFINED DAYS SHOULD BE DELETED AUTOMATICALLY A FTER RETENTION PERIOD FROM THE CENTRAL STORAGE AS PER FIFO POLICY.

ccc. IN CASE OF NON-AVAILABILITY OF WAN LINK, VIDEO RECORDING SERVER SHALL SAVE MIN IMUM RESOLUTION OF 800 X 600 DATA INTERNAL TO SERVER FOR UP TO 7 DAYS TO AVOID DA TA LOSS, ONCE THE LINK IS ESTABLISHED THE ARCHIVING SHOULD HAPPEN COMPLETELY.

A. EDGE STORAGE

- 1. EDGE STORAGE SHALL SECURE THAT WHEN A LOST OR BROKEN CONNECTION IS BACK UP, T HE DATA STORED ON THE CAMERA'S INTERNAL STORAGE SHALL BE RETRIEVED AND STORED IN THE MEDIA DATABASE.
- 2. EDGE STORAGE SHALL SECURE THAT AFTER RECOVERY FROM A MALFUNCTION IT SHALL BE POSSIBLE TO PLAY BACK AND VIEW THE VIDEO, AND AUDIO RECORDED BY THE DEVICE, WHILE THE MALFUNCTION PERSISTED

#### **B. BOOKMARKING**

1. A BOOKMARKING FEATURE SHOULD BE INCLUDED IN THE VIDEO MANAGEMENT SYSTEM, ALL OWING THE CLIENT VIEWER USERS TO MARK INCIDENTS ON LIVE AND/OR PLAYBACK VIDEO ST REAMS.

#### C. OPTIMIZED VIDEO ARCHIVING

- 1. ADMINISTRATORS SHOULD BE ABLE TO SELECT A STORAGE CONTAINER FOR EACH DEVICE A ND MOVE A DEVICE FROM ONE STORAGE CONTAINER TO ANOTHER OR MOVE ALL RECORDINGS INCLUSIVE ARCHIVES TO THE NEW STORAGE CONTAINER, OR DELETE THEM ALL.
- 2. ADMINISTRATORS SHOULD BE PROVIDED WITH AN OVERVIEW OF THE DEFINED STORAGE CO NTAINERS, THEIR ARCHIVES WITH PATH, AND FREE AND USED SPACE ON THE DRIVES FOR EAC H DEVICE, INCLUDING THE USED STORAGE SPACE IN THE RECORDING DATABASE, AND IN ARCH IVES
- 3. VIDEO MANAGEMENT SOFTWARE SHALL ALSO HAVE ABILITY TO OPTIMIZE BANDWIDTH REQUIREMENT ON CLOUD BASED STORAGE SOLUTION BY RECORDING AT LOCAL SITE RECORDING SERVER FOR AT LEAST 24 HOURS AND ARCHIVE TO CLOUD ON SCHEDULE BASIS FROM DIFFERENT RECORDING SERVERS AT DIFFERENT TIME PROFILE IN ORDER TO UTILIZE MINIMUM BANDWIDT H.

### D. FAILOVER SUPPORT

- 1. THE SYSTEM SHALL SUPPORT AUTOMATIC FAILOVER FOR RECORDING SERVERS. THIS FUNCT IONALITY MUST BE ACCOMPLISHED BY A FAILOVER SERVER THAT SHALL WORK AS A STANDBY UNIT, WHICH TAKES OVER IN THE EVENT THAT ONE OF A GROUP OF DESIGNATED RECORDING SERVERS FAILS. RECORDINGS SHALL BE SYNCHRONIZED BACK TO THE ORIGINAL RECORDING S ERVER ONCE IT IS BACK ONLINE.
- 2. THE SYSTEM SHALL SUPPORT MULTIPLE FAILOVER SERVERS FOR A GROUP OF RECORDING S ERVERS.
- 3. THE SYSTEM SHALL PROVIDE MONITORING OF ALL FAILOVER SERVERS FROM THE GRAPHICA L ALARM MANAGEMENT MODULE.
- 4. THE SYSTEM SHALL PROVIDE SEAMLESS ACCESS TO RECORDINGS ON THE FAILOVER SERVER FOR ALL CLIENTS THROUGH THE SAME CLIENT VIEWS ONCE THE SERVICES ARE FULLY STARTED

## E. MULTICAST SUPPORT

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- 1. THE SYSTEM SHALL SUPPORT MULTICASTING OF VIDEO FEEDS TO CLIENT WORKSTATIONS IN ORDER TO CONSERVE NETWORK RESOURCES. MULTICASTING SHOULD BE ENABLED FROM THE RECORDING SERVERS AND NOT DIRECTLY FROM THE CAMERAS. THUS THE IGMP NETWORK WO ULD BE NECESSARY ONLY FOR THE SWITCHES WHERE SERVER AND CLIENTS ARE CONNECTED.
- 2. MULTICASTING SHALL SEND A SINGLE STREAM OF VIDEO TO MULTIPLE CLIENTS, WHERE THE STREAM MAY BE DECODED AND DISPLAYED ON ALL CLIENTS SIMULTANEOUSLY. THIS FUNCTIO NALITY SHALL SUPPORT VIRTUAL MATRIX CONFIGURATIONS.
- 3. THE INFRASTRUCTURE PROVIDED FOR THE SYSTEM SHALL SUPPORT INTERNET GROUP MAN AGEMENT PROTOCOL (IGMP) FOR EACH REMOTE NETWORK.
- 4. THE SYSTEM SHALL AUTOMATICALLY SWITCH TO UNICAST, IF THE CLIENT FAILS TO CONNEC T TO THE MULTICAST STREAM.

#### F. MULTI-STREAMING SUPPORT

- 1. THE RECORDING SERVER MUST ACCEPT, DISPLAY AND RECORD INDIVIDUAL STREAMS OF VIDEO FROM EACH CAMERA THAT SUPPORTS IT, FOR EXAMPLE, DISPLAY A STREAM IN H.264 F ORMAT AND RECORD ANOTHER STREAM IN MPEG4 FORMAT. THE INTENT OF THIS FUNCTIONALI TY SHALL BE PROVIDING INDEPENDENT STREAMS OF VIDEO FROM THE CAMERA TO THE SERVE R WITH DIFFERENT RESOLUTION, ENCODING AND FRAME RATE.
- 2. MULTI-STREAMING SUPPORT SHALL ALLOW THE SYSTEM TO BE CONFIGURED WITH H.264 WI TH A HIGH FRAME RATE FOR LIVE VIEWING AND SHALL ALLOW THE SYSTEM TO BE CONFIGURE D WITH HIGH RESOLUTION H.264 AT LOW FRAME RATES FOR RECORDING AND PLAYBACK.
- 3. THE SYSTEM SHALL ALLOW RECORDED VIDEO TO BE RECORDED AT 8FPS.

### **G. SNMP SUPPORT**

- 1. THE SYSTEM SHALL ACT AS AN SNMP AGENT WHICH CAN GENERATE AN SNMP TRAP AS A RE SULT OF RULE ACTIVATION IN ADDITION TO OTHER EXISTING RULE ACTIONS.
- 2. THE SYSTEM SHALL BE ABLE TO UTILIZE MICROSOFT WINDOWS SNMP SERVICE FOR TRIGGERING OF SNMP TRAPS.

### H. NAT FIREWALL SUPPORT:

- 1. THE SYSTEM SHALL SUPPORT PORT FORWARDING, WHICH MUST ALLOW CLIENTS FROM OUT SIDE OF A NETWORK ADDRESS TRANSLATION (NAT) FIREWALL TO CONNECT TO RECORDING SE RVERS WITHOUT USING A VPN.
- 2. EACH RECORDING SERVER SHALL BE MAPPED TO A SPECIFIC PORT AND THIS PORT MUST BE FORWARDED THROUGH THE FIREWALL TO THE RECORDING SERVER'S INTERNAL IP ADDRESS.

#### I. MANAGEMENT SERVER REDUNDANCY:

THE MANAGEMENT SERVER SHALL PROVIDE A RESILIENT SYSTEM SOLUTION BASED ON WINDO WS SERVER CLUSTERING AND NATIVE, TO SECURE MAXIMUM UPTIME.

### J. CENTRALIZED SEARCH:

THE SYSTEM SHALL HAVE DEDICATED TAB FOR SEARCHING RECORDING SEQUENCES, BOOKMAR KS, EVENTS, MOTION, ALARMS. THESE SEARCH CATEGORIES CAN BE COMBINED, ALSO WITH TH IRD PARTY SEARCH AGENT PLUGINS. SAVE SEARCH TEMPLATES. VISUALIZE LOCATION OF SEAR CH RESULT. INTEGRATES WITH TECHNOLOGY PARTNER SOLUTIONS

#### K. MOTION DETECTION

- 1. THE SYSTEM SHOULD HAVE BUILT-IN, REAL-TIME, CAMERA-INDEPENDENT MOTION DETECTION WITH THE ABILITY TO GENERATE MOTION METADATA FOR SMART SEARCH.
- 2. THE SYSTEM SHOULD ALSO SUPPORT MOTION-BASED RECORDING FEATURE.

#### L. ALARMS SUPPORT

- 1. THE ALARM SUPPORT SHALL ALLOW FOR CONTINUOUS MONITORING OF THE OPERATIONAL STATUS AND EVENT-TRIGGERED ALARMS FROM SERVERS, CAMERAS AND OTHER DEVICES.
- 2. THE ALARM SUPPORT SHALL PROVIDE A REAL-TIME OVERVIEW OF ALARM STATUS, OR TECH NICAL PROBLEMS, WHILE ALLOWING FOR IMMEDIATE VISUAL VERIFICATION AND TROUBLESHO OTING.

### M. MATRIX FUNCTIONALITY

- 1. THE SYSTEM SHALL INCLUDE AN INTEGRATED MATRIX SOLUTION FOR DISTRIBUTING VIDEO T O ANY COMPUTER WITH THE CLIENT VIEWER INSTALLED. A COMPUTER ON WHICH THE MATRIX-TRIGGERED IMAGES CAN BE SHOWN MUST BE KNOWN AS A MATRIX RECIPIENT.
- 2. THE CLIENT VIEWER SHALL PROVIDE REMOTE USERS WITH A COMPREHENSIVE SUITE OF FEATURES:
- a. IT SHALL BE POSSIBLE TO VIEW LIVE VIDEO FROM CAMERAS ON THE SURVEILLANCE SYSTEM FROM 1 TO 100 PER VIEW.
- b. IT SHALL BE POSSIBLE TO PLAYBACK RECORDINGS FROM CAMERAS ON THE SURVEILLANCE SYSTEM, WITH A SELECTION OF ADVANCED NAVIGATION TOOLS, INCLUDING AN INTUITIVE TIME LINE BROWSER.
- c. IT SHALL BE POSSIBLE TO CREATE AND SWITCH BETWEEN AN UNLIMITED NUMBER OF VIEWS , EACH ABLE TO DISPLAY VIDEO FROM UP TO 100 CAMERAS FROM MULTIPLE SERVERS AT A TI ME. THE SYSTEM SHALL ALLOW VIEWS TO BE CREATED WHICH ARE ONLY ACCESSIBLE TO THE USER, OR TO GROUPS OF USERS BASED ON 37 DIFFERENT LAYOUTS OPTIMIZED FOR 4:3, 4:3 P ORTRAIT, 16:9 AND 16:9 PORTRAIT DISPLAY RATIOS.
- d. IT SHALL BE POSSIBLE TO ACCESS VIEWS OF CAMERAS ON ANY PC WITH A CLIENT VIEWER A PPLICATION INSTALLED.
- e. IT SHALL BE POSSIBLE TO USE MULTIPLE SCREENS AS WELL AS FLOATING WINDOWS FOR DI SPLAYING DIFFERENT VIEWS SIMULTANEOUSLY.

- f. IT SHALL BE POSSIBLE TO QUICKLY SUBSTITUTING ONE, OR MORE OF A VIEW'S CAMERAS WI TH OTHER CAMERAS.
- g. IT SHALL BE POSSIBLE TO VIEW IMAGES FROM SEVERAL CAMERAS IN SEQUENCE IN A SINGL E CAMERA POSITION IN A VIEW A SO CALLED CAROUSEL.
- h. IT SHALL BE POSSIBLE TO VIEW VIDEO FROM SELECTED CAMERAS IN GREATER MAGNIFICATI ON AND/OR HIGHER QUALITY IN A DESIGNATED HOTSPOT.
- i. IT SHALL BE POSSIBLE TO RECEIVE AND SEND VIDEO THROUGH THE MATRIX FUNCTIONALITY.
- j. IT SHALL BE POSSIBLE TO INCLUDE HTML PAGES AND STATIC IMAGES (FOR EXAMPLE, MAPS, OR PHOTOS) IN VIEWS.
- k. IT SHALL BE POSSIBLE TO CONTROL PTZ CAMERAS.
- I. IT SHALL BE POSSIBLE TO USE DIGITAL ZOOM ON LIVE AS WELL AS RECORDED VIDEO.
- m. IT SHALL BE POSSIBLE TO ACTIVATE MANUALLY TRIGGERED EVENTS.
- n. IT SHALL BE POSSIBLE TO ACTIVATE EXTERNAL OUTPUTS (E. G. LIGHTS AND SIRENS).
- o. IT SHALL BE POSSIBLE TO USE SOUND NOTIFICATIONS FOR ATTRACTING ATTENTION TO DET ECTED MOTION.
- p. IT SHALL BE POSSIBLE TO GET QUICK OVERVIEW OF SEQUENCES WITH DETECTED MOTION.
- q. IT SHALL BE POSSIBLE TO GET QUICK OVERVIEWS OF ALERTS.
- r. IT SHALL BE POSSIBLE TO QUICKLY SEARCH SELECTED AREAS OF VIDEO RECORDING FOR MO TION.
- s. IT SHALL BE POSSIBLE TO SKIP GAPS DURING PLAYBACK OF RECORDINGS.
- t. IT SHALL BE POSSIBLE TO CONFIGURE AND USE SEVERAL DIFFERENT JOYSTICKS.
- u. IT SHALL BE POSSIBLE TO PRINT IMAGES, WITH OPTIONAL COMMENTS.
- v. IT SHALL BE POSSIBLE TO COPY IMAGES FOR SUBSEQUENT PASTING INTO WORD PROCESSO RS, EMAIL, ETC.
- w. IT SHALL BE POSSIBLE TO EXPORT RECORDING (FOR EXAMPLE, FOR USE AS EVIDENCE) IN A VI. IPEG AND DATABASE FORMATS.
- x. IT SHALL BE POSSIBLE TO USE PRE-CONFIGURED AS WELL AS CUSTOMIZABLE KEYBOARD SH ORTCUTS TO SPEED UP COMMON ACTIONS.
- y. IT SHALL BE POSSIBLE TO INSERT OVERLAY BUTTONS, FOR EXAMPLE, FOR ACTIVATION OF S PEAKERS, EVENTS, OUTPUTS, MOVEMENT OF CAMERAS ETC.
- z. IT SHALL BE POSSIBLE TO USE A SEQUENCE FUNCTION THAT LISTS THUMBNAIL IMAGES REP RESENTING RECORDED SEQUENCES FROM AN INDIVIDUAL CAMERA OR ALL CAMERAS IN A VIEW
- aa. IT SHALL BE POSSIBLE TO USE A FORCED PLAYBACK MODE ALLOWING THE USER TO PLAYB ACK RECORDED VIDEO FROM INSIDE THE 'LIVE' MODE WHILE VIEWING 'LIVE' VIDEO.
- bb. THE CLIENT VIEWER SHALL SUPPORT THE USE OF 3-AXIS USB JOYSTICKS FOR CONTROL OF PAN, TILT, ZOOM AND AUXILIARY CAMERA FUNCTIONS.

- cc. THE CLIENT SHOULD SUPPORT MULTIPLE LANGUAGES INCLUDING ENGLISH & HINDI LANGU AGE
- dd. THE CLIENT VIEWER SHALL SUPPORT THE USE OF MULTIMEDIA CONTROL DEVICES, WHICH ARE CAPABLE OF EMULATING KEYSTROKES, FOR THE EFFICIENT REVIEW OF RECORDED VIDEO.
- ee. THE CLIENT VIEWER SHALL SUPPORT THE USE OF KEYBOARD SHORTCUTS FOR CONTROL OF STANDARD FEATURES. IT SHALL ALLOW THE USER TO PROGRAM NUMERICAL KEYBOARD SHORTCUTS FOR CAMERA VIEWS. THE SHORTCUT NUMBER SHALL BE DISPLAYED WITH THE VIEW DESCRIPTION IN THE LIVE AND PLAYBACK DISPLAYS. THE SHORTCUT SHALL ALLOW THE USER TO CHANGE VIEWS WITH 2 TO 3 KEYBOARD ENTRIES.
- ff. THE CLIENT VIEWER SHALL SUPPORT GPU BASED VIDEO DECODING TO IMPROVE VIDEO REN DERING PERFORMANCE AND UP TO 75% REDUCTION IN CPU LOAD OF THE WORKSTATION RUN NING CLIENT SOFTWARE. THE USE OF GPU BASED VIDEO RENDERING SHALL ALSO MAKE CLIEN T READY FOR 4K/UHD CAMERA TECHNOLOGY.
- gg. VMS SYSTEM SHOULD SUPPORT TO MANAGE DEVICE PASSWORD ON ONE OR MULTIPLE DE VICES FROM WITHIN THE VMS CLIENT
- hh. THE CLIENT VIEWER SHALL HAVE THE CAPABILITY TO RECEIVE MULTICAST STREAMS. THE C LIENT VIEWER SHALL HAVE THE CAPABILITY TO DETECT IF THE NETWORK BECOMES UNRELIABLE AND TO AUTOMATICALLY SWITCH TO UNICAST TO ENSURE THAT THE OPERATOR I S ABLE TO RECEIVE VIDEO.
- ii. THE OPERATOR SHALL HAVE THE ABILITY TO USE DIGITAL ZOOM WHERE THE ZOOMING IS PE RFORMED IN THE IMAGE ONLY ON ANY NUMBER OF CAMERAS SIMULTANEOUSLY. THIS FUNCTI ONALITY SHALL BE THE DEFAULT FOR FIXED CAMERAS. THE USE OF DIGITAL ZOOM SHALL HAV E NO EFFECT ON RECORDING, OR OTHER USERS.

### N. MAP FUNCTIONS

- 1. BUILT-IN MAP FUNCTION IN THE CLIENT VIEWER SHALL PROVIDE AN INTUITIVE OVERVIEW OF THE SYSTEM AND SHALL OFFER INTEGRATED ACCESS TO ALL SYSTEM COMPONENTS.
- 2. MAP FUNCTION SHALL BE ABLE TO USE STANDARD GRAPHICAL FILE FORMATS INCLUDING: J PG, GIF, PNG, TIF, ETC.
- 3. IT SHALL BE POSSIBLE TO USE ANY NUMBER OF LAYERED MAPS, AND IT SHALL BE POSSIBLE TO EASILY DRAG-AND-DROP AND POINT-AND-CLICK DEFINITION OF CAMERAS, SERVERS, MICRO PHONES, SPEAKERS, I/O DEVICES, HOT-ZONES, AND PTZ CAMERA PRESETS.
- 4. HOT ZONES SHALL BE ALLOWED FOR INTUITIVE NAVIGATION BETWEEN DIFFERENT MAP LEV ELS.
- 5. MAP FUNCTION SHALL SUPPORT INSTANT CAMERA PREVIEW WHEN MOVING THE MOUSE POI NTER OVER A SPECIFIC CAMERA.
- 6. MAP FUNCTION SHALL SUPPORT CENTRAL OVERVIEW OF THE SURVEILLANCE SYSTEM VIA AN ALARM LIST CONTAINING ALARM INDICATORS OF HIGH, MEDIUM OR LOW PRIORITIZED ALARMS . FURTHERMORE THE ALARMS SHALL BE CATEGORIZED BY THE FOLLOWING STATES; NEW, IN P ROGRESS, ON HOLD, OR CLOSED. ALARMS MUST BE POSSIBLE TO ACKNOWLEDGE BY RIGHT-CL ICKING ELEMENTS ON MAPS.

#### O. REMOTE CLIENT VIEWER

- 1. THE WEB-BASED REMOTE CLIENT VIEWER SHALL OFFER LIVE VIEW OF UP TO 16 CAMERAS, I NCLUDING PTZ CONTROL WITH JOYSTICK, FISHEYE (360 DEGREES) CAMERAS AND EVENT/OUTP UT ACTIVATION. THE PLAYBACK FUNCTION SHALL GIVE THE USER CONCURRENT PLAYBACK OF UP TO 16 RECORDED VIDEOS WITH DATE, ALERT SEQUENCE, OR TIME SEARCHING.
- 2. THE WEB-BASED REMOTE CLIENT VIEWER SHALL OFFER QUICK OVERVIEWS OF SEQUENCES WITH DETECTED MOTION.
- 3. THE WEB-BASED REMOTE CLIENT VIEWER SHALL BE ABLE TO GENERATE AND EXPORT EVIDE NCE IN AVI (MOVIE CLIP) AND JPG (STILL IMAGE) FORMATS.
- 4. THE SYSTEM SHALL SUPPORT THE USE OF SEPARATE NETWORKS, VLANS, OR SWITCHES FOR CONNECTING THE CAMERAS TO THE RECORDING SERVERS PROVIDING PHYSICAL NETWOR K SEPARATION FROM THE CLIENTS AND FACILITATE THE USE OF STATIC IP ADDRESSES FOR THE DEVICES.
- 5. THE SYSTEM SHALL SUPPORT H.264,H.265, MPEG-4 (PART 2), MPEG-4 ASP, MXPEG, AND MJ PEG COMPRESSION FORMATS FOR ALL ANALOG CAMERAS CONNECTED TO ENCODERS, AND ALL IP CAMERAS CONNECTED TO THE SYSTEM.
- 6. THE RECORDING SERVER SHALL UTILIZE HIGH PERFORMANCE ISCSI, SCSI, SAS AND SSD DIS K DRIVES FOR ONLINE RECORDING STORAGE AND SHALL ALLOW THE USE OF LOWER COST SAT A DRIVES FOR THE RAID ARRAYS FOR ONLINE ARCHIVE STORAGE. USE OF ONLINE ARCHIVING SHALL ENSURE THAT DATA ALWAYS IS READILY AVAILABLE. USE OF TAPE-BACKUP SYSTEMS S HALL NOT BE ACCEPTABLE.
- 7. THE SYSTEM SHALL ALLOW THE FRAME RATE, BIT RATE AND RESOLUTION OF EACH CAMERA TO BE CONFIGURED INDEPENDENTLY FOR RECORDING. THE SYSTEM SHALL ALLOW THE USER T O CONFIGURE GROUPS OF CAMERAS WITH THE SAME FRAME RATE, BIT RATE AND RESOLUTION FOR EFFICIENT SET-UP OF MULTIPLE CAMERAS SIMULTANEOUSLY.
- 8. THE RECORDING SERVER(S) SHALL HAVE THE ABILITY TO SUPPORT MULTIPLE NETWORK INT ERFACE CARDS (NIC) AND SHALL SUPPORT CONNECTION TO THE CAMERAS ON A NETWORK SEP ARATE FROM THE CLIENT VIEWER. MANAGEMENT SERVER AND SYSTEM MANAGER.
- 9. THE RECORDING SERVER SHALL HAVE THE ABILITY TO ACCEPT THE FULL FRAME RATE SUPPL IED BY THE CAMERAS, WHILE RECORDING A LOWER FRAME RATE YET STILL SHALL MAKE THE HIGHER FRAME RATE AVAILABLE TO THE CLIENTS FOR LIVE VIEWING.
- 10. THE VMS SHOULD BE MANDATORY PROVIDED WITH UNLIMITED NUMBER OF CLIENT LICENS ES. IN CASE OF ADDITIONAL LICENSES REQUIRED, EXTRA COST NEEDS TO BE CONSIDERED.
- 11. 3RD PARTY SYSTEM INTEGRATION
- 12. ACCESS CONTROL SHOULD BE INTEGRATED THRU VMS ACCESS CONTROL MODULE OR THRU SDK/API INTEGRATION.
- 13. FAS SYSTEM TO BE INTEGRATED THRU API/SDK OR THRU BACNET OVER IP PROTOCOL PLUG IN WITH VMS
- 14. BMS SYSTEM TO BE INTEGRATED THRU API/SDK OR THRU BACNET OVER IP PROTOCOL PLU GIN WITH VMS
- 15. VMS MANUFACTURER SHALL PROVIDE THEIR SDK WITHOUT ANY ADDITIONAL CHARGES (OR

ANY OTHER INTEGRATION MEANS) LIBRARIES AND DOCUMENTATION) TO ENSURE A SEAMLESS INTEGRATION WITH ANY OTHER SYSTEM.

- P. REMOTE MOBILE APP
- 1. INTEGRATED MOBILE APPLICATION TO MONITOR OVERALL CCTV SYSTEM AND FOR REQUIRED COORDINATION DURING EMERGENCY
- 2. MOBILE CLIENT SUPPORT NATIVE MOBILE APP FOR SMARTPHONE OR TABLET USERS, FOR EASY ACCESS TO LIVE AND PLAYBACK OF CAMERAS, AND TO ACTIVATE SYSTEM EVENTS AND O UTPUTS. ADDITIONALLY, FOR USE AS A REMOTE RECORDING DEVICE BY USING THE MOBILE DE VICE'S BUILT-IN CAMERA, WHEREBY VIDEO FROM THE DEVICE'S CAMERA IS STREAMED BACK TO THE VMS AND RECORDED LIKE A STANDARD CAMERA.
- 3. SUPPORT SMART CONNECT: EASY CONFIGURATION OF INTERNET ACCESS TO THE MOBILE SE RVER BY AUTOMATIC CONFIGURATION OF FIREWALLS AND INTERNET ROUTERS VIA UPNP, WIT H VERIFICATION OF CONFIGURATION AND OPERATION OF INTERNET CONNECTION, WITH OPTIO N TO EMAIL CONNECTION DETAILS TO MOBILE CLIENT USERS. INCLUDES AUTOMATIC MOBILE S ERVER ON LAN VIA UPNP.
- 4. SHALL SUPPORT ANDROID AS WELL AS APPLE IOS SOFTWARE, WITH RESPECTIVE SMART PHONES
- 5. PROVIDE MOBILE CLIENT CAPABILITY FOR MOBILE DEVICE USERS TO USE THEIR MOBILE DEVICE CAMERAS AS CAMERAS IN THE VMS

### **TECHNICAL SPECIFICATION OF SUPPLYING OF SERVER:**

- 2 X INTEL XEON SILVER (3RD GEN., 2.8GHZ, 8CORE) PROCESSOR. DUAL PROCESSOR SCALABL
- 1 X 32GB RDIMM, 3200MT/S, DUAL RANK (16 DIMM SLOTS SUPPORTS UP TO 1TB)
- 2 X 480GB SSD SATA READ INTENSIVE 6GBPS 512 2.5IN HOT-PLUG AG DRIVE, 1 DWPD (FRON T DRIVE BAYS: UP TO 8 X 3.5" SAS/SATA HDD MAX 168TB)
- IN-BUILT PERC H755 SAS FRONT RAID CONTROLLER.
- ON-BOARD BROADCOM 5720 QUAD PORT 1GB LOM
- NO DVD WRITER
- IDRAC9, ENTERPRISE 15G
- 1 X DUAL, HOT-PLUG, PSU (1+1), 1400, MIXED MODE
- WARRANTY: 3 YEARS
- WIRELESS KEYBOARD & WIRELESS MOUSE, NO MONITOR
- MS WINDOWS SERVER STANDARD 2022
- RECOMMENDED MAKES: HP/DELL/ OR EQUIVALENT

#### **TECHNICAL SPECIFICATION OF WORKSTATION:**

- INTEL CORE 17-11700 OR BETTER
- 32 GB RAM
- 256GB SSD
- 1 TB SATA
- WINDOWS 10 PRO OR LATEST
- NVIDIA 4GB T400 GRAPHICS
- WIRELESS KEYBOARD & WIRELESS MOUSE, NO MONITOR
- WARRANTY: 3 YEARS
- RECOMMENDED MAKES:-HP/ DELL / LENOVO/HCL OR EQUIVALENT

#### **TECHNICAL SPECIFICATION OF BACK-UP SERVER (NAS):**

- QUAD CORE -2.1 GHZ CPU WITH AES-NI ENCRYPTION ENGINE.
- USABLE 80TB NAS STORAGE.
- 4GB DDR4 MEMORY PRE-INSTALLED, EXPANDABLE UP TO 32 GB.
- SUPERIOR SEQUENTIAL THROUGHPUT AT OVER 2,045 MB/S READING AND 656 MB/S WRITING.
- BOOST IOPS PERFORMANCE WITH M.2 NVME/SATA SSD CACHE THROUGH OPTIONAL M2D18 A DAPTER CARD.
- FOUR GIGABIT LAN PORTS (RJ-45) WITH FAILOVER AND LINK AGGREGATION SUPPORT, OPTIO NAL 10GBE ADD ON CARD PROVIDES HIGH SPEED DATA TRANSFER RATE.
- SCALABLE UP TO 18 DRIVES WITH TWO EXPANSION UNIT DX517 TO MEET HIGH CAPACITY DE MANDS.

#### **LICENSES AND PERMITS:**

WHEREVER APPLICABLE, THE SUCCESSFUL BIDDER SHALL ENSURE HIMSELF AND ALSO SATISFY THE CHIEF GENERAL MANAGER, SECURITY PRINTING MINTING CORPORATION OF INDIA LIMITED, UNIT INDIA GOVERNMENT MINT, HYDERABAD THAT THE SUCCESSFUL BIDDER POSSESSES THE LEGAL LICENSE/PERMIT TO USE A PARTICULAR PRODUCT/ PROCESS/ DESIGN/ PATENT. THE SUCCESSFUL BIDDER SHALL BE HELD RESPONSIBLE FOR ALL THE CIVIL/ CRIMINAL AND TORTUOUS CONSEQUENCES ARISING FROM ANY CLAIM FROM ANY THIRD PARTY IN THIS REGARD.

### **INSTALLATION, COMMISSIONING AND FINAL ACCEPTANCE:**

- a) INSTALLATION, COMMISSIONING AND PROVING OF PERFORMANCE TO BE CARRIED OUT BY T HE SUPPLIER AT INDIA GOVERNMENT MINT, HYDERABAD WITHIN STIPULATED TIME AND TO THE SATISFACTION OF USER.
- b) INDIA GOVERNMENT MINT, HYDERABAD WILL CONDUCT ACCEPTANCE TEST OF THE DELIVER ED MACHINE/SYSTEM IN THE PRESENCE OF THE ENGINEERS FROM THE SUCCESSFUL BIDDER AS PER THE QUALITY CONTROL REQUIREMENTS GIVEN IN THE FAT NORMS.

### **WARRANTY CLAUSE:**

- a) THE SUPPLIER SHOULD SUBMIT THE WARRANTEE CERTIFICATE THAT THE GOODS SUPPLIED UNDER THE CONTRACT ARE NEW, UNUSED OF THE MOST RECENT OR CURRENT MODELS AND INCORPORATE ALL RECENT IMPROVEMENTS IN DESIGN AND MATERIAL UNLESS PROVIDED O THERWISE IN THE CONTRACT.
- b) THE SUPPLIER FURTHER WARRANTS THAT, ALL THE GOODS AND WORK SUPPLIED UNDER THIS CONTRACT SHALL HAVE NO DEFECT IN DESIGN, MATERIALS OR WORKMANSHIP OR FROM ANY ACT OR OMISSION OF THE SUPPLIER THAT MAY DEVELOP UNDER NORMAL USE OF THE SUPPLIED GOODS IN THE CONDITIONS PREVAILING IN THE COUNTRY OF FINAL DESTINATION.
- c) THIS WARRANTY SHALL REMAIN VALID FOR 36 MONTHS FROM THE DATE OF FINAL
- d) ACCEPTANCE CERTIFICATE. THE PURCHASER SHALL PROMPTLY NOTIFY THE SUPPLIER IN WR ITING OF ANY CLAIMS ARISING OUT UNDER THIS WARRANTY.
- e) UPON RECEIPT OF SUCH NOTICE, THE SUPPLIER SHALL REPAIR OR REPLACE THE DEFECTIVE GOODS OR PARTS THEREOF WITHOUT COST TO THE PURCHASER IMMEDIATELY.
- f) IF THE SUPPLIER HAVING BEEN NOTIFIED FAILS TO TAKE REMEDIAL MEASURE OR RECTIFY T HE DEFECT WITHIN THE PERIOD SPECIFIED, THE PURCHASER MAY PROCEED TO TAKE SUCH ACTION AS MAY BE NECESSARY, AT THE SUPPLIER'S RISK AND EXPENSE WITHOUT PREJUDIC E OR ANY OTHER RIGHTS, WHICH THE PURCHASER MAY HAVE AGAINST THE SUPPLIER UNDE R THE CONTRACT.

### **FINAL ACCEPTANCE TEST (FAT):**

AFTER SUCCESSFUL COMPLETION OF FAT, FINAL ACCEPTANCE CERTIFICATE (FAC) WILL BE ISS UED.

### II. PAYMENT TERMS:

100% PAYMENT WILL BE MADE WITHIN 30 DAYS AFTER ISSUE OF FINAL ACCEPTANCE CERTIFICATE (FAC).

### III. ELIGIBILITY CRITERIA OR PRE- QUALIFICATION CRITERIA:

## 1. **EXPERIENCE & PAST PERFORMANCE:**

THE BIDDER (MANUFACTURER OR PRINCIPAL OF AUTHORIZED REPRESENTATIVE - HEREINA FTER REFERRED SIMPLY AS 'THE BIDDER') SHALL BE A MANUFACTURER/SUPPLIER THAT HA S REGULARLY FOR AT LEAST THE LAST THREE YEARS SUCCESSFULLY EXECUTED SIMILAR P ROJECT INVOLVING SERVERS, WORK STATIONS & NETWORK ATTACHED STORAGE (NAS) SE RVERS WITH THE SAME OR HIGHER SPECIFICATIONS OF AT LEAST ONE NUMBER IN LAST FI VE YEARS ENDING ON 31.03.2024. AT LEAST ONE NUMBER OF THE PROJECT EXECUTED SH OULD BE IN SUCCESSFUL OPERATION FOR AT LEAST ONE YEAR ON THE DATE OF BID OPENING.

NOTE: FOR MSES AND START-UPS (REGISTERED FOR THE TENDERED ITEM) ALL EXPERIENC E & PAST PERFORMANCE CRITERIA SHALL BE EXEMPTED. SUBJECT TO TECHNICAL AND QUA LITY COMPLIANCE.

### 2. CAPABILITY EQUIPMENT & MANUFACTURING FACILITIES:

THE BIDDER MUST HAVE AN ANNUAL CAPACITY TO MANUFACTURE/ SUPPLY AT LEAST ONE NO OF SIMILAR PROJECT INVOLVING SERVERS, WORK STATIONS & NETWORK ATTACHED ST ORAGE (NAS) SERVERS WITH THE SAME OR HIGHER SPECIFICATIONS.

#### 3. FINANCIAL STANDING:

- i. THE AVERAGE ANNUAL FINANCIAL TURNOVER OF THE BIDDER FIRM (MANUFACTURER OR PRINCIPAL OF AUTHORIZED DEALER) DURING THE LAST THREE YEARS, ENDING ON 31.03.2024, SHOULD BE MINIMUM OF RS. 12 LAKHS AS PER THE ANNUAL REPORT (AUDI TED BALANCE SHEET AND PROFIT & LOSS ACCOUNT) OF THE RELEVANT PERIOD, DULY A UTHENTICATED BY A CHARTERED ACCOUNTANT/ COST ACCOUNTANT IN INDIA.
- ii. THE NET WORTH OF THE FIRM SHOULD NOT

- a) BE NEGATIVE ON 31.03.2024 AND
- b) HAVE ERODED BY MORE THAN 30% IN THE LAST THREE YEARS, ENDING ON 31.03.20 24.

NOTE: FOR MSES AND START-UPS (REGISTERED FOR THE TENDERED ITEM) ALL FINANCIAL CRITERIA SHALL BE EXEMPTED. SUBJECT TO TECHNICAL AND QUALITY COMPLIANCE.

# IV. GENERAL INSTRUCTIONS TO THE TENDERER (GIT) & GENERAL CONDITIONS OF THE CONT RACT (GCC):

THE FOLLOWING ARE INTEGRAL PART OF THIS GEM BID DOCUMENT. BIDDERS HAVE TO UP LOAD DULY SIGNED GENERAL INSTRUCTIONS TO THE TENDERER (GIT) & GENERAL CONDITIONS OF THE CONTRACT (GCC) AS A TOKEN OF ACCEPTANCE OF ALL THE TERMS AND CONDITIONS.

https://spmcil.com/uploaddocument/GIT3.0.pdf

https://spmcil.com/uploaddocument/GCC3.0.pdf

# Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

- 1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
- 2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
- 3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
- 4. Creating BoQ bid for single item.
- 5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
- 6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
- 7. Floating / creation of work contracts as Custom Bids in Services.
- 8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for <u>attached categories</u>, trials are allowed as per approved procurement policy of the buyer nodal Ministries)
- 9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
- 10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
- 11. Creating bid for items from irrelevant categories.
- 12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
- 13. Reference of conditions published on any external site or reference to external documents/clauses.
- 14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

## This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

---Thank You/धन्यवाद---