1. Section 4: Qualification, Evaluation and Selection Process

4.1 Eligibility Criteria

The Bidder's competence and capability is proposed to be established by the following parameters. The Bidder should meet all the criteria given in this section.

a. Sole proprietorship, registered partnership firm, public limited company, private limited company or Consortium of any of the above can submit the Bid. The firms and the companies should be registered in India~~& should have valid Electrical Contractor license on the day of submission of the bid.~~

b. The Bidder should have a minimum experience of having satisfactorily completed similar works during last 5 (Five) years period in which the bids are invited should be either of the following:

   i. One similar completed work costing not less than the amount equal to **Rs. 23.50 lacs (Rupees Twenty Three Lacs Fifty thousand only)** or
   ii. Two similar completed works each costing not less than the amount equal to **Rs. 14.70 lacs (Rupees Fourteen Lacs Seventy thousand only)** or
   iii. Three similar completed works each costing not less than the amount equal to **Rs. 11.80 lacs (Rupees eleven Lacs Eighty Thousand only)**

In case of Consortium- *Full value of the work, if done by the same Consortium shall be considered. However, if the qualifying work(s) were done by them in Consortium having different constituents, then the value of work as per their percentage participation in such Consortium shall be considered. This is to be substantiated with documentary evidence.*

c. The Bidder should have minimum **average annual turnover of Rs. 23.50 lacs (Rupees Twenty Three Lacs Fifty thousand only)** in the last 3 (three) Financial Years **(2017-2018, 2018-19, 2019-20)** preceding the Bid Due Date.
In case of Consortium - *The averages annual turnover of Consortium will be based on percentage participation of each member.*

Example: Let member 1 has percentage participation = M and Member 2 has percentage = N, Let the averages annual turnover of member 1 is A and that of member 2 is B, then average annual turnover of Consortium will be = (AM+BN/100)

d. The Bidder should not have been blacklisted/ banned/ declared ineligible for corrupt and fraudulent practices by the Government of India/ any State Government/ Government Agency and Supreme court and contracts have been terminated/ foreclosed by any company / department due to non- fulfilment of Contractual obligation in last 5 (five) financial years.

In case of Consortium: *All Members should provide the Undertaking*

Providing conference room facility, CCTV Camera and Televisions along with sky TVs for newly built NMRC office extension at Ganga Shopping Complex, sector 29, Noida.

NOIDA METRO RAIL CORPORATION LTD

E- Tender No.- NMRC/DGM (RS & E,Ops.)/Conference/2020/100 , Date: 13.10.2020

Ref: -Pre- Bid Meeting held on dated 19.10.2020 at the Conference Room, Noida Metro Rail Corporation (NMRC) Limited, Ganga Shopping Complex, Sector- 29. Noida- 201301.

S.N.	Query Raised By	Clause No. of RFP	Clarification Requested	Clarification/ Amended by NMRC*
1	M/s SGS KRAFT MANAGEMENT PVT. LTD.	Section 6-Technical specifications preferred makes of material	1. The specifications of critical item like cameras, NVR, Televisions, etc. are not given in tender RFP	1. Please follow RFP conditions. 2. The makes mentioned in RFP are preferred makes. However, equivalent makes matching the detailed technical specifications (Annexure A) will also be considered.
			2. The Technical specifications mentioned in the RFP are not generic & only one OEM i.e Impulse is qualifying both the parameters (Technically & Commercially). The specifications have been designed keeping just one OEM for the entire solution ecosystem. The same has been done in other items also like Televisions,	
			3. The makes given lead to restricted OEM being qualified for example make of camera impulse is in B categories when as there three make Avigilon/ Mobotics/Axis are in A Categories and the price difference of them is almost double.	
			4. Entire solution for CCTV Camera and Televisions has been designed based on specifications favoring just one particular OEM.	
2	M/s Arohan Infocare pvt Ltd.	Section 6-Technical specifications preferred makes of material	1. Standardization of make because of higher price variance from company to company. For Eg. There is major price difference between CP Plus and Bosch for the same CCTV camera.	1. Please follow RFP. 2. The makes mentioned in RFP are preferred makes. However, equivalent makes matching the detailed technical specifications (Annexure A) will also be considered.

		2. Scope of server set up for recording of video - In-Premise or over internet.	In premises. Please follow RFP conditions.
		3. Access of CCTV recording through android or Ios app.	Please follow RFP conditions.
		4. Support for service period.	Please follow RFP conditions.
		5. Power supply required for completing electrical work.	Please follow RFP conditions.
		6. Safety and security of supplied goods during the work.	Please follow RFP conditions.
3	M/s RV Solutions Pvt. Ltd	1. There is some clarification needed in PBG and deposit amount, as currently it is showing 20% technically.	Please follow RFP conditions.
		2. Kindly consider LG also for the 32" FULL HD TV as LG already considered for other size Displays. (Point 25 at Page 41 in RFP).	Agreed.
		3. Kindly consider other reputed POPUP Box manufacturer like Kramer and Logic. (Point 21 at Page 41 in RFP).	The makes mentioned in RFP are preferred makes. However, equivalent makes matching the technical specifications will also be considered.
		4. There is some problem in the display size like 50" and 54". Kindly consider the size 49" instead of 50" and 55" instead of 54".(Page 71, S. No. 1 & S. No. 3 in SMART TV).	This may be mutually agreed by Engineer In-charge at the time of execution and on production of OEM certification of non-availability of display sizes of 50" & 55" inches.
		5. The term "pivot display and magic info" is OEM specific. Kindly remove the same. (Page71 S. No.18).	Please follow RFP conditions.

			6. For preparing the document for technical & Commercial document, we need to at least 15 days extension for respective tender submission.	Revised key date schedule has been uploaded on the website.
			7. EMD/Bid processing fee should be exempted for respective category as we have the NSIC cerficate & MSE certificate for "IT services /COMPUTER CONSULTANCY AND COMPUTER FACILITIES MANAGEMENT ACTIVITIES", request to you, please consider our request.	Agreed. The bidder should be registered in appropriate category.
			8. Similar work " for this contract shall be SITC of Audio and/or Video facilties/CCTV/IT services" in any central Govt./State Govt./PSU's or any private limited company of repute, request to you, please consider our request.	Agreed.
4	M/s BROADCAST ENGINEERING CONSULTANTS INDIA LTD	SITC of video conferencing camera	There is no mention of same in BOQ. There is no mention of Specifications.	Please follow RFP conditions. No change in BOQ.
		IP CCTV Solution: NO MENTION OF SPECIFICATIONS. BOQ Line item 2.12, 2.13, 2.15	Detailed Specification is not mentioned in the RFP. Make mentioned of CCTV Impulse is not a standard one. They do not have any office (Sales or Service) in India. Kindly change same to PELCO Inc (US Make), BOSCH for apple to apple comparison. Request not to go with Chinese make brands. Network Video recorder details are not mentioned. Estimated Price of NVR and IP CCTV are on lower side. Video Management/ Recording Management not explained in the RFP.	1. Please follow RFP conditions. 2. The makes mentioned in RFP are preferred makes. However, equivalent makes matching the detailed technical specifications (Annexure A) will also be considered.
		POE based Network switches BOQ line item 2.16	Detailed specification of Switches along with Racks are required	

		warranty Period	Warranty Period is generally 12 to 18 months for CCTV tender. Warranty cannot be open ended as per OEM. Different OEM have different warranty. Hence warranty should be clearly mentioned in the tender	Please follow RFP conditions.
		payment terms Clause 4.11.2 (D)	There is Performance Bank Guarantee of 10% is asked in the tender. Then why additional 10% is being hold till DLP period. Either PBG or 10% payment needs to be asked by NMRC.	Please follow RFP conditions. The performance bank guarantee shall be released after completion certificate issued by Engineer Incharge.
5	M/s LG Electronics India Private Limited	BOQ	**75" 4K UHD LED display,** Brightness: 350 nits Please mention as 75" 4K UHD smart commercial TV Ports- 3 HDMI, USB, LAN, RS232, audio out Inbuilt speaker 20W Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates Warranty- 3 years	1. Please follow RFP conditions. 2. The makes mentioned in RFP are preferred makes. However, equivalent makes matching the detailed technical specifications (Annexure A) will also be considered.
			32" LED Full HD TV, contrast ratio (Typ): 5000:1, Built in magic info Premium, Pivot display, Contrast Ratio: 5000:1 (for VA panel) & 1100:1(for IPS panel). Mentioned brightness as 450nits & above. In place of magic info premium please mentioned built in signage software. Remove this term pivot display as the same is OEM specific.	
			54" 4K UHD LED display with 350 nits brightness, Please mention as 54" & above because industry standard size is 55". Brightness: 400 nits & above Please mention as 55" 4K UHD smart commercial TV Ports- 3 HDMI, USB, LAN, RS232, audio out Inbuilt speaker 20W & warranty- 3 years Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates	

		warranty Period	Warranty Period is generally 12 to 18 months for CCTV tender. Warranty cannot be open ended as per OEM. Different OEM have different warranty. Hence warranty should be clearly mentioned in the tender	Please follow RFP conditions.
5	M/s LG Electronics India Private Limited	payment terms Clause 4.11.2 (D)	There is Performance Bank Guarantee of 10% is asked in the tender. Then why additional 10% is being hold till DLP period. Either PBG or 10% payment needs to be asked by NMRC.	Please follow RFP conditions. The performance bank guarantee shall be released after completion certificate issued by Engineer Incharge.
		BOQ	**75" 4K UHD LED display,** Brightness: 350 nits Please mention as 75" 4K UHD smart commercial TV Ports- 3 HDMI, USB, LAN, RS232, audio out Inbuilt speaker 20W Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates Warranty- 3 years	1. Please follow RFP conditions. 2. The makes mentioned in RFP are preferred makes. However, equivalent makes matching the detailed technical specifications (Annexure A) will also be considered.
			32" LED Full HD TV, contrast ratio (Typ): 5000:1, Built in magic info Premium, Pivot display, Contrast Ratio: 5000:1 (for VA panel) & 1100:1(for IPS panel). Mentioned brightness as 450nits & above. In place of magic info premium please mentioned built in signage software. Remove this term pivot display as the same is OEM specific.	
			54" 4K UHD LED display with 350 nits brightness, Please mention as 54" & above because industry standard size is 55". Brightness: 400 nits & above Please mention as 55" 4K UHD smart commercial TV Ports- 3 HDMI, USB, LAN, RS232, audio out Inbuilt speaker 20W & warranty- 3 years Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates	

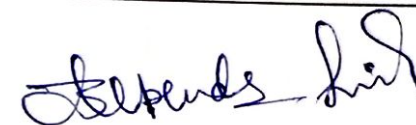| | | | 65" 4K UHD smart TV, Please mention as 65" 4K UHD smart commercial TV
Brightness: 400 nits & above
Ports- 3 HDMI, USB, LAN, RS232, audio out
Inbuilt speaker 20W & warranty- 3 years
Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates | |
| | | | 50" 4K UHD display with 350 nits brightness, Please mention as 49" 4K UHD smart commercial TV
Brightness: 400 nits & above
Ports- 3 HDMI, USB, LAN, RS232, audio out
Inbuilt speaker 20W & warranty- 3 years, Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates | |
| | | | 43" 4K UHD LED Display with 350 nits brightness,
Brightness: 300 nits & above
Please mention as 43" 4K UHD smart commercial TV
Ports- 3 HDMI, USB, LAN, RS232, audio out
Inbuilt speaker 20W
Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates | |

Amit Kumar

AM/AFC

P. C. Thakur

AM/Fin

(Bhupender Singh)

AM/E&M

Place: - Noida.

Note: -The above amendments/clarification shall supersede all the respective provisions in Tender Documents.

TECHNICAL SPECIFICATION

Technical Specification of Access PoE Switch

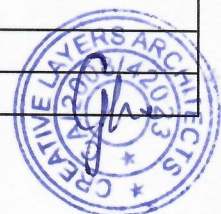| S. No.	Detailed Technical Specifications
A	Solution Requirement
	The Switch should support non-blocking Layer 2 switching and Layer 3 routing
	These switches should support stacking/VC
B	Hardware and Interface Requirement
	Minimum 24 x 10/100/1000 Base-T PoE+ and 4 x 10G ports.
	1 U Rack mountable and should provide stacking of minimum 4 switches with maximum 80 Gbps of dedicated stacking/ equivalent bandwidth
	The Switch should have 2GB DRAM and 2GB internal Flash
	128 Gbps or higher Backplane capacity and minimum 95 Mpps of forwarding rate
	Should support Non-blocking hardware architecture
	All interfaces should provide wire speed forwarding for both Fiber and copper modules
	Support for at least 4000 VLANs & 16k MAC address
C	Layer2 & Layer 3 Features
	It should support IGMP snooping v1,v2 & v3
	It should have static IP routing from Day 1 and should be upgradable to support OSPF/OSPFv3 and PIM
	Switch should support 8 hardware queues per port
	Dynamic Host Configuration Protocol (DHCP) snooping
	Switch should support LLDP capabilities
	Should support IP Source Guard , DAI and IPv6 Security feature like IPv6 RA Guard and IPv6 Neighbour Discovery Inspection
	Should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3).
	Switch needs to have console port for administration & management
	Management using CLI, GUI using Web interface should be supported
	FTP/TFTP for upgrading the operating System
	Should support Energy Efficient Ethernet
	IEEE 802.1x support
	IEEE 802.1D Spanning-Tree Protocol
	IEEE 802.1p class-of-service (CoS) prioritization
	IEEE 802.1Q VLAN
	IEEE 802.3 10BASE-T specification
	IEEE 802.3u 100BASE-TX specification
D	Manageability
	Switch should able to support management via CLI, Web interface

		SNMP v1,v2,v3
		Switch should be manageable through both IPv4 & IPv6.
	E	Safety & Compliances
		Switch Should be Common Criteria/NDPP/NDcPP certified
		Switch should be IPv6 Logo Certified
		Switch should be UL-UL60950-1,FCC Part 15, VCCI Class A, EN 55022, EN 55024, EN 300386, CAN/CSA 22.2 No.60950-1, Reduction of Hazardous Substances (ROHS) 6 certified

TECHNICAL SPECIFICATIONS

IP CCTV Surveillance System

Technical Specification of Dome Camera

S.No	Features	Specifications
1	Form Factor	Bullet
2	Certification	UL,CE,FCC
3	Housing	IP66
4	System Compatibility	ONVIF profile S & G
5	Max Resolution	3 MP (2592×1944)
6	Image sensor	1/2.8" or larger
7	Min-illumination	Color 0.05lux @ F1.2(AGC ON) ; B/W 0 lux @ IR ON
8	Focal Length	3.6mm fixed focal
9	Shutter Speed	1/5 s ~ 1 / 100,000 s
10	Slow Shutter	Supported
11	Min Stream	Quad stream , each stream should support H.265+ compression
12	Frame Rate	Main stream upto 3MP@25fps , substream upto 2MP@25fps , third and fourth stream upto VGA@25fps
13	Digital Zoom	should have the capability to digitaly zoomed in web browser by selcting the area using mouse
14	ROI	Should Support ROI
15	WDR	Digital WDR
16	IR	Inbuilt IR Leds with IR distance upto 30 mtrs
17	Day & Night	IR cut filter with auto switch
18	Day / Night Switch	Auto / Schedule / Triggered by Alarm In
19	Noise Reduction	2D / 3D DNR
20	Video Compression	H.265+ ,H.265 ,H.264+ H.264

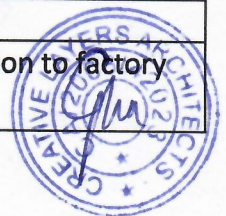| 21	Bit Rate	256K ~ 8M
22	Image setting	Rotate Mode, Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser
23	Edge analytics	Motion Detection, Perimeter Intrusion, Line Crossing, Stationary Object, Pedestrian detection, Face detection (deep learning) ,Cross counting
24	Protocols	TCP / IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour
25	Security	Flash-prevention, heartbeat, mirror, password protection, privacy mask, IP address filtering
26	Privacy masks	Should support atleast 4 privacy masks
27	Factory default	Should have the option of setting the configuration to factory default except network settings.
28	Firmware upgrade	Firmware upgrade shall be done through web browser
29	Remote Update	Camera IP and firmware should be upgradable through the device search tool/Software without directly logging in to the camera. Firmware should also be upgradable through web browser
30	Power	POE / 12 V DC
31	Defog Mode	Should support Defog mode
32	Power Consumption	Max. 7 W with IR cut filter on
33	Operating Temperature	-30 °C ~ 60 °C, Humidity 95% or less
34	user accounts	should support 1 admin and 6 user accounts
35	Mobile Surveillance	Support mobile surveillance through app on android and i-phone

Technical Specification of Bullet Camera

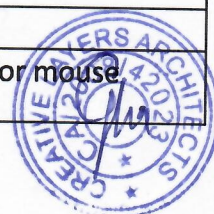| S.No	Features	Specifications
1	Form Factor	Dome
2	Certification	UL,CE,FCC
3	Weather Protection	IP 66 or better
4	System Compatibility	ONVIF profile S & G
5	Max Resolution	3 MP (2592×1944)
6	Image sensor	1/2.8" or larger
7	Min-illumination	Color 0.05lux @ F1.2(AGC ON) ; B/W 0 lux @ IR ON
8	Focal Length	3.6mm fixed focal
9	Shutter Speed	1/5 s ~ 1 / 100,000 s
10	Slow Shutter	Supported
11	Min Stream	Quad stream , each stream should support H.265+ compression
12	Frame Rate	Main stream upto 3MP@25fps , substream upto 2MP@25fps , third and fourth stream upto VGA@25fps
13	Digital Zoom	should have the capability to digitally zoomed in web browser by selecting the area using mouse
14	ROI	Should Support ROI
15	WDR	Digital WDR
16	IR	Inbuilt IR Leds with IR distance up to 30 mtrs
17	Day & Night	IR cut filter with auto switch
18	Day / Night Switch	Auto / Schedule / Triggered by Alarm In
19	Noise Reduction	2D / 3D DNR
20	Video Compression	H.265+ ,H.265 ,H.264+ H.264
21	Bit Rate	256K ~ 8M
22	Image setting	Rotate Mode, Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser
23	Edge analytics	Motion Detection, Perimeter Intrusion, Line Crossing, Stationary Object, Pedestrian detection, Face detection (deep learning) ,Cross counting
24	Protocols	TCP / IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour
25	Security	Flash-prevention, heartbeat, mirror, password protection, privacy mask, IP address filtering
26	Privacy masks	Should support at least 4 privacy masks
27	Factory default	Should have the option of setting the configuration to factory default except network settings.

28	Firmware upgrade	Firmware upgrade shall be done through web browser
29	Remote Update	Camera IP and firmware should be upgradable through the device search tool/Software without directly logging in to the camera. Firmware should also be upgradable through web browser
30	Power	POE / 12 V DC
31	Defog Mode	Should support Defog mode
32	Power Consumption	Max. 7 W with IR cut filter on
33	Operating Temperature	-30 °C ~ 60 °C, Humidity 95% or less
34	User accounts	should support 1 admin and 6 user accounts
35	Mobile Surveillance	Support mobile surveillance through app on android and i-phone

Technical Specification of 32 Channel NVR

S.No	Features	Specifications
1	NVR	32 Channel NVR
2	Recording bandwidth	Max 640Mbps
3	Recording Resolution	8MP (4K), 5MP, 3MP ,2MP(1080P),1.3MP(960P),1.0MP(720P)
4	Display Split	1/4/6/8/9/10/13/14/16/17/19/22/25/32/36
5	live/Playback performance	4K: 4ch real-time , 4MP: 8ch real-time , 3MP: 10ch real-time , 2MP: 16ch real-time
6	Playback	Max 8ch playback
7	Output Interface	1 HDMI (up to 4K), 1 VGA
8	Display Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080,2560*1440, 3840*2160
9	Alarm Input/out	16ch in / 4ch out
10	Ethernet	RJ-45 port (1000M)
11	Smart Phone	iOS, Android
12	Internal HDD	8 SATA HDDs, each HDD up to 8TB support RAID 0/1/3/5/10/JBOD/CLONE
13	RS485	1 X RS485
14	e-SATA	1 X e-SATA
15	Line in	1 X Line in
16	USB	1x3.0 USB for backup/upgrade , 2x 2.0 USB for mouse

17	AI-Registered quantity	10000
18	AI-Maximum captured quantity	200,000 faces
19	ONVIF	ONVIF profile S & G
20	Power Supply	AC 110~240V
21	Certification	UL,CE,FCC

Technical Specification of 75" 4K UHD smart commercial TV

S.No	Features	Specifications
1	Type	75" 4K UHD smart commercial TV
2	Brightness	350 nits and above
3	Ports	3 HDMI, USB, LAN, RS232, audio out
4	Inbuilt speaker	20W
5	Other specification	Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS template
6	Warranty	3 years

Technical Specification of 32" LED Full HD TV

S.No	Features	Specifications
1	Type	75" 4K UHD smart commercial TV
2	Brightness	350 nits and above
3	Ports	3 HDMI, USB, LAN, RS232, audio out
4	Contrast ratio	5000:1 (for VA panel) & 1100:1(for IPS panel).
5	Other specification	Built in signage software
6	Warranty	3 years

Technical Specification of 55" 4K UHD LED display

S.No	Features	Specifications
1	Type	55" 4K UHD smart commercial TV
2	Brightness	350 nits and above
3	Ports	3 HDMI, USB, LAN, RS232, audio out
4	Inbuilt speaker	20W
5	Other specification	Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates
6	Warranty	3 years

Technical Specification of 65" 4K UHD smart TV

S.No	Features	Specifications
1	Type	65" 4K UHD smart commercial TV
2	Brightness	350 nits and above
3	Ports	3 HDMI, USB, LAN, RS232, audio out
4	Inbuilt speaker	20W
5	Other specification	Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates
6	Warranty	3 years

Technical Specification of 49" 4K UHD smart TV

S.No	Features	Specifications
1	Type	49" 4K UHD smart commercial TV
2	Brightness	350 nits and above
3	Ports	3 HDMI, USB, LAN, RS232, audio out
4	Inbuilt speaker	20W
5	Other specification	Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates
6	Warranty	3 years

Technical Specification of 43" 4K UHD smart TV

S.No	Features	Specifications
1	Type	43" 4K UHD smart commercial TV
2	Brightness	350 nits and above
3	Ports	3 HDMI, USB, LAN, RS232, audio out
4	Inbuilt speaker	20W
5	Other specification	Inbuilt wifi, inbuilt browser, inbuilt screen share, inbuilt CMS templates
6	Warranty	3 years