

NOTICE INVITING BUDGETORY OFFERS

Name of Work	NAME OF WORK : “ Providing live streaming of CCTV footage of Gate No1 & 9 to remote desk top/mobile sets”
Date of submission of budgetary quotation	On or Before 17.02.2023 at 11:00 Hrs.
Address for communication:	Executive Engineer (E-HL), Mechanical Engineering Department, Mormugao Port Authority, Electrical Section, 1st Floor, Admin. Building, Headland sada Vasco-de-Gama Goa - 403804
Contact Details	Phone : (0832) 2594241, 2594244 Email : xene.mgpt@gmail.com
Website	www.mptgoa.gov.in

**EXECUTIVE ENGINEER (E-HL)
MORMUGAO PORT AUTHORITY**

MORMUGAO PORT AUTHORITY
ENGINEERING MECHANICAL DEPARTMENT

CME/XEN(E-HL)/M-22/

.2023

Sub: Providing live streaming of CCTV footage of Gate No1 & 9 to
remote desk top/mobile sets

Ref: Budgetary Quotation No. CME/XEN(E-HL)/_____

Mormugao Port Authority intends to carry out the work of “Providing live streaming of CCTV footage of Gate No1 & 9 to remote desk top/mobile sets through a dedicated Broad band connection. As such, kindly furnish the budgetary quotation for the same (Scope of work enclosed as Schedule - 'A' and Price Schedule enclosed as Schedule - 'A1'.

Your budgetary quotation should reach to this office on or before 17.02.2023.

Thanking you,

Yours sincerely,

EXECUTIVE ENGINEER (E-HL)

Technical specification

1.0. General :

Mormugao Port Authority intends to take up the work of providing live streaming of CCTV footage of Gate No1 & 9 to remote desk top/mobile sets through a dedicated Broad band connectivity. The work involves supply, installation, testing and commissioning of complete CCTV surveillance system and transmission of live feed to remote desk top/mobile sets. The entire system will be under guarantee period for a period of 01 years after handing over the system to Port.

2.0 SCOPE OF WORK:

Supply, Installation, testing & commissioning of IP cameras complete with housing and mounting kit and all other accessories Including NETWORK VIDEO RECORDER, POE switches, Junction Boxes, Supply and laying of CAT6, PVC casing capping and providing broad band connectivity with a minimum speed of 10 Mbps to feed the live footage to desk top/mobile sets at MPA/GSPCB.

- i) Supply, Installation testing, commissioning and handing over of 3 numbers of IP cameras(outdoor) 2MP complete with Camera housing and all other accessories including Camera Mounting structures if required
- ii) Supply, Installation, testing, commissioning and handing over 1 number of Network Video Recorder of 4 Channel complete with all accessories including necessary software for sharing the feed to mobile/desktop at remote locations.
- iii) Supply, Installation, testing, commissioning and handing over of 2 nos. of 4 port 100 mbps POE network switch.
- iv) Supply and laying CAT 6 indoor Network Cable through PVC casing capping.
- v) Providing suitable dedicated broad band internet connection by duly ensuring adequate network/range is available in the work domain at both areas under consideration of minimum 10 Mbps with one year subscription plan.
- vi) Configuration of all equipment as necessary including transmission/loading of designated Apps etc. to carry live feed to remote desktop/mobile hand sets and providing 1 year on site support after completion of work.

2.2 STANDARDS and CODES

The Fixed Cameras and Network Video Recorders shall comply with ONVIF standards and shall be UL/CE and FCC Certified. Each Camera shall be supplied along with accessories like Camera mounting GI Fixture with suitable base for Grouting.

2.3 Detailed Technical Specifications:-

(a) IP fixed Bullet Cameras for Outdoor Duty

Total sensor pixels	2 Megapixel
Sensor Type	1/2.7" (+/- 10%), Progressive Scan CMOS,
Lens	Fixed
Frame Rate	25/30fps (1920x1080)
Minimum Illumination(Color/Monochrome)	0.08Lux@F2.0@1/25s
Video functions	Digital zoom
	3DNR(Dynamic Noise Reduction)
	HLC and Backlight Compensation
	ICR (Auto Day night)
IR distance	20 meter
Input Voltage	Dc 12V and PoE with IEEE standard
Ingress Protection	IP66 by default without any adaptation
Video compression	H.264/MJPEG
Streaming Capacity	Two-Stream
Memory	Card of 64GB
ONVIF	ONVIF compliant
Certifications	UL/CE and FCC

Note: Cameras shall be supplied with suitable Power supply and its mounting arrangements as per site conditions i.e. wall, pole mount any with all required accessories & fitments. Each Cameras shall be provided with necessary additional circuits with Ethernet Surge Protectors to protect the units from High Voltages.

2.3.1 Network Video Recorder 4 Channel

The proposed system shall be supplied with 4 channel NVR with necessary software to transmit live feed and shall be ONVIF compliant with following specifications.

No of Channels supported	4 channels
Power Input	12DC, 5A
Support Image Format	H.264/MJPEG

Max number of cameras	4
Supported browser	OS windows 7/8/10
ALARM	Input- 32, Output - 4
External storage	USB port
Output	2 HDMI port
Network Interface	2 number of 10M/100M/1000M
ONVIF	ONVIF compliant
Certifications	UL/CE and FCC

NVR Shall be supplied with suitable video management software for parallel monitoring on PC, recorded images if required shall be downloaded in PC also. NVR shall support external storage device also for future expansion of storage systems. The system shall be supplied with power cord, Audio/Video cables, necessary software etc.

2.3.2. Supply and installation of 4 Port POE network switch

Supply and Installation of 4- port GbE Fast and Smart Managed PoE Switch with 100 Mbps Ethernet PoE Ports, 2 combo (RJ-45/SFP), PoE ports 130 watt or better, Switching 20 Gbs or better, Operating Temperature- 0 degree centigrade to 50 degree centigrade or better.

2.3.3. Supply and laying of CAT-6 cable

Supply and Laying of CAT-6 indoor type UTP weather proof cable suitable for indoor/outdoor cameras (CCTVs), CAT 6 UTP Cable Transmission frequency of 250 MHz (Minimum).

2.3.4. Supply and laying of Casing capping

Supply and Laying of PVC casing capping of suitable size to be fixed on wall (including with saddle, Gitti at sufficient distance with junction box, bend etc.). Cost is inclusive of the laying cost of CAT-6.

2.3.5. Miscellaneous Items

Misc items, like saddles, fitting materials, screws, nuts, fasteners, jointers, sealants, RJ45, accessories, 3 core 1.5 sq.mm PVC flexible wire, 2 nos. 5A switch socket combined etc as required for the total commissioning, to be provided by the Contractor to commission the system successfully.

2.3.6. Fiber Broadband connection with one year subscription:

The Contractor shall make necessary arrangement to obtain a new fiber broadband connection with one year subscription under company name with minimum 10Mbps

bandwidth speed in order to feed the live footage of proposed 3 nos. cameras. The broad band modem and other to be commissioned at Administrative Office, Headland, Sada.

The new Broadband connection comprising of modem and associated components, fiber & power cable, etc shall have to be arranged by Contractor.

The contractor shall follow up and coordinate with Internet service provider for new connection and commissioning the same. All charges required for new broadband connections with one year subscription will have to be paid by the Contractor.

2.3.7. Remote Viewing facility

The Contractor shall make arrangement so that live streaming of 3 nos. cameras shall be made available on web browser and on desktop/Mobile to designated 03 nos. of Mormugao Port officials at Goa including third party officials. Minimum 03 Nos. of users shall be able to view live remote streaming simultaneously on monitor/Mobile.

The Contractor shall suitably train the Port's officials as mentioned above, to view the live streaming of cameras.

2.3.10 System Overview/ General Features:

- System capable to work for Day & Night operations (Automatic)
- All such locations where mounting structures and related accessories are required should be provided by the contractor within the cost quoted. Site survey should be undertaken.
- All equipment's should be suitable for 24 Hours duty cycle.
- All required equipment's mentioned/not-mentioned but required for smooth running of system is to be in outdoor weatherproof enclosure.
- **Viewing features:**
 - Adjust brightness, Contrast, Saturation & hue for a clearer view
 - Support digital zoom in to view specific areas

2.3.8. INSTALLATION & COMMISSIONING

1. The Contractor shall carry the work as per the BOQ.
2. The Contractor shall commence and complete the work within 15 days from date of issue of LOA to the satisfaction of the Chief Mechanical Engineer or his

representative. Necessary scaffolding and safety measures for entire erection shall be done by the contractor.

3. The Cameras, NVR and all the other equipments supplied shall be installed, tested, commissioned and handed over. The special tools instruments needed for regular servicing / maintenance working shall be supplied free of cost by the Contractor. All the materials required for the installation and commissioning at site including the materials for civil works required for Installation and commissioning of camera mounting structures shall be supplied by the Contractor. Misc items, like saddles, fitting materials, switch, sockets, screws, nuts, fasteners, jointers, sealants, accessories, etc as required to run the system included in quote.
 4. The work should be carried out with utmost precaution not to disrupt existing CCTV system in any way.
 5. The installation of the various equipment's shall be carried as per the site conditions and as directed by the EIC. The Contractor shall carry out the works in co-ordination with the on-going AMC Contractor.
 6. Special care may be taken to prevent any damage to the Port's property during installation and commissioning. The workmanship shall be neat, clean and elegant/ aesthetic in appearance and painting of brackets etc. to be done with Marine paint to withstand saline atmosphere prevailing in the area.
 7. All the quantities indicated in the price schedule/BoQ are indicative. However, the work shall be carried out as per site conditions. Payment will be released as per actual executed quantities after completion of work.
 8. **Technical brochures/ data sheets of Cameras, and NVR should be submitted with the tender specifically for models the tenderer intends to supply. Note:** Change in the location of cameras will be at the discretion of the Engineer.
 9. Power and water will be provided by the Port on free of cost.
3. **Manuals, Drawings**
- On completion of the work the Contractor shall supply 3 sets of operation and maintenance manuals after commissioning. The soft copy of all the As built drawings and manuals should also be provided which shall include General arrangement with principal details, Schematic line diagrams (SLD) , and any other special features implemented in the system.

2.4. TESTS

Relevant CE or UL certificate and ONVIF standards for Cameras and NVR etc shall be submitted along with materials to the satisfaction of the Chief Mechanical Engineer or his representative, failing which the materials will be rejected by Port.

2.5. GUARANTEE

The installation shall be guaranteed for 12 months from the date of acceptance and free maintenance shall be done during the guarantee period.

2.6. MAINTENANCE DURING GUARANTEE PERIOD.

1. The contractor shall provide one-year guarantee for the equipment's installed. The maintenance during guarantee period shall include replacement of all defective components of the system including the cameras.
2. During the one year guarantee period, the Port shall not bear any charges incurred by the contractor for deputing the skilled manpower or materials to carry out any form of repairs.
3. The Contractor shall arrange his own tools and tackles including ladder for carrying out the works during the installation and guarantee period.
4. During warranty period if any of the equipment supplied by the Contractor i.e camera, NVR etc. are found defective /Damaged, same has to be replaced by the Contractor at their cost. Therefore Bidders shall assess the environmental conditions, wind speed etc in respect to the supply of quality of equipment's and workman ship so as to ensure continual stability in running of system successfully. The bidder shall maintain basic inventory of required spares for upkeep of the CCTV Camera Surveillance systems during the warranty period.
5. In case need arises, the technicians should be present after office hours and during holidays without any cost and liability to the Port. The tenderer shall provide contact telephone number/ mobile and E-mail address to also register complaints at his office.

2.7. PENALTY CLAUSE

The fault should be attended within 24 hrs. from receipt of complaint from Port, failing which an amount of Rs. 200/- per day will be deducted from security deposit/ support charges as penalty until the fault is restored & camera/system is recommissioned..

2.8. Other Conditions:

- 1) The Contractor is required to offer rates as per Port's format "Schedule-A1" without fail and indicate taxes and duties if any applicable. Port will not produce Form C or D.
- 2) Technical and Commercial conditions shall be clearly furnished in the quotation. The offer shall indicate the make and model of the equipment and shall accompany with the relevant technical leaflet.
- 3) The rate should be quoted as per unit.
- 4) The rate quoted should be maintained till the completion of supply and no upward price revision will be agreed to.
- 5) GATE PASS: Necessary Entry Permits shall be obtained by the Contractor on chargeable basis.
- 6) The Contractor must comply with the Safety aspects as governed by the relevant edition of Indian Electricity Rules and Industrial Safety, the contractor shall be responsible for overall safety.
- 7) ADDITION & DELETIONS: CME reserves the right to add or delete the above mentioned quantities of CCTV cameras by around 10% of the quantity during the currency of the contract and his decision is final and binding upon the contractor.
- 8) The Tenderer shall inspect the site and assess the requirement before furnishing their offered.

Schedule - 'A1'.

PRICE SCHEDULE (BILL OF QUANTITIES)

Sr No	Description	HSN/ SAC Code	Unit	Qty	Rate (Rs)	Amount (Rs)
1.	Supply, Installation, testing and commissioning of IP based bullet 2MP outdoor type Camera as per technical specification at Schedule - 'A'					
	a) Supply		No.	3		
	b) Installation, testing and commissioning		No.	3		
2	Supply, Installation, testing and commissioning of Network Video Recorder of minimum 4 Channel as per technical specification at Schedule - 'A'					

	a) Supply		No.	1			
	b) Installation, testing and commissioning		No.	1			
3	Supply, installation , Testing & Commissioning of 4 Port 100 Mbps POE Switch as per technical specification at Schedule-'A'						
	a)Supply		Nos.	2			
	b)Installation, Testing and Commissioning		Nos.	2			
4	Supply & laying of CAT 6 Indoor Cable with suitable size casing capping as per Technical specification at schedule-A.		Mtr	100			
5	Providing fibre broadband connection with one year subscription as per Technical specification at schedule-A		LS	1			
6	Configuration of all equipment, supervision and relevant documentation		LS	1			
	TOTAL AMOUNT (in Fig.) (Exclusive of GST)						

Total (In Words)

Rupees _____ only.

Date:

Signature:

Place:

Name:

Address:

Office Seal of firm

Note: 1.The offered rates shall be exclusive of GST.