

VISAKHAPATNAM PORT TRUST  
MECHANICAL & ELECTRICAL ENGINEERING DEPARTMENT

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Tender Notice No.125/2021-22/IM&EE/MOF/FOF/ET/F.77/, Dt.17.03.2022

Sealed quotations are invited for “**Supply, Installation and Commissioning of CCTV network at Dy.Chairman Bunglaw in VPT– Reg**”

**2<sup>ND</sup> Call**

Last Date & Time of receipt of Tender is **24.03.2022 at 15.00 Hrs.** in CME’s Office.

Tender Opening Dt. **24.03.2022 at 16.00 Hrs.**

Estimate put to tender: **Rs.98,000/-** (Excluding GST) (Rupees Ninety Eight thousand only).

**WORK SCHEDULE**

Sl.No.	Description	Qty.	Unit Rate Rs.	Amount Rs.
1.	Supply of IP Based 2MP Fixed 1980 x1080 Pixels Camera along with all accessories as per annexure.	8 Nos.		
2.	Supply of 8 Port PoE Network Switch with 2 Giga Uplink Ports	01 No.		
3.	Supply of 8 CH Standalone NVR with Storage Loaded of 4TB	01 No.		
4.	Supply of 18.5 Monitor with required Accessories	01 No.		
5.	Installation, Commissioning charges (Including cable laying, wall clamping, digging, cement flooring)			
	<b>TOTAL AMOUNT</b>			

(Quoted Rates must be exclusive of GST)

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**Pre-Qualification Criteria:**

1. **TENDER FEES:** Rs.118/- (Rs.100/- + GST @ 18%)
2. **EMD:** **Rs.1,960/-** (Rupees One thousand Nine hundred and sixty only)

The firm has to pay the Tender fees of Rs.118/- and EMD of Rs.1,960/- through RTGS/NEFT/UPI or other online mode of payments and collect the original cash receipts immediately from RE Section, Accounts Department, AOB, Ground Floor.

The Bank Account details to which amount is to be transferred / deposited is furnished below.

Account No.: 30387186900

IFSC No. : SBIN0001740

Account Name: Visakhapatnam Port Trust

Bank Name : State Bank of India

Branch Name: Visakhapatnam Port Branch

**Note:** All the eligible Bidders, who are registered with NSIC / Ministry of MSME are exempted from payment of Tender Documents cost & EMD, subject to fulfilling the following conditions:

- a) The Bidder has to submit the self-certified copy of the Registration Certificate issued by NSIC / Ministry of MSME for the works / services relevant to the "Subject Tender".
- b) The above Registration certificate should have validity on the date of opening of the technical bid.
- c) In case the Registration certificate issued by NSIC / Ministry of MSME is found to be invalid (date expired) or irrelevant works or services i.e. other than the tendered works/services, then the above Registration certificate cannot be considered for exemption of Tender Document Cost and the Bid received will be treated as "Bid submitted without Tender Document Cost", which would attract disqualification under clause No. (1) & (2) of the Pre-qualification criteria.
- d) Copy of "Application for obtaining NSIC / MSME Registration" or pending renewal of NSIC/MSME certificates will not be entertained. Such offers will be treated as Offers received without Tender document cost.
- e) Firm should have Proof of experience in execution of "similar works "having successfully completed in Govt.Depts/Ports/PSUs/ during last 7 years ending last day of the month previous to the one in which application invited should be any one of the followings:

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- i) Three similar completed works each costing not less than the amount equal to 40% of the estimated cost Or
- ii) Two similar completed works each costing not less than the amount equal to 50% of the estimated cost Or
- iii) One similar completed work costing not less than the 80% of the estimated cost.

**Note:** Similar work means “Supply and Installation of CCTV Surveillance network using wired data connectivity” successfully executed in Ports /PSUs/ Projects. Copies of the work orders for the same indicating name of the work, contract no. & date, value of the work, name of the organization etc. along with completion / performance certificates are to be submitted duly notarizing all the documents towards proof.

- 3. Firm has to submit a copy of valid GST registration Certificate & Latest GST 3B return (DEC 2021 or latest)
- 4. Firm has to submit a copy of the Income Tax permanent Account Number
- 5. Firm should be having established office and service centre in connection with service with established materials, testing tool for quick delivery of service in Visakhapatnam-A.P.
- 6. Firm has to submit Annual Financial turnover duly certified by a Chartered Accountant for the last 3 years, ending 31st March of the previous financial year.

(The firms, who are not complying with any one of the above criteria, their tender will be summarily rejected).

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Terms and Conditions:

1. The Contractor has to submit the offer duly superscribing the name of the work on the envelope.
2. According to GST rules, every firm / dealer is liable to be registered, whose turnover exceeds Rs.20 Lakhs for supply of Goods / Services / Executing any work contract.
3. Firm's quoted rate shall be exclusive of GST components.
4. Payment will be made against TAX INVOICE as prescribed under the GST Act / Rules and the supplier / contractor is required to remit GST as per the Govt. Rules and file the details in GSTR1 on or before 10th of the subsequent month to enable VPT to claim input tax credit, otherwise the said tax invoice will be kept pending for payment.
5. Validity of offer should be Three (03) months from the last date of receipt of the offers.
6. Statutory deductions will be made from the bills.
7. Conditional offers will be rejected.
8. The workmanship and materials used in this work shall be guaranteed for a period of 12 months from the date of completion of the work.
9. The work should be completed within **14 days** from the date of site clearance by VPT. The time for completion of the work is the essence of the Contract.
10. The work shall be completed within the stipulated period, failing which a penalty @ ½% will be levied for every week of delay, on the part of the contractor subject to maximum 10% on total contract / executed value.
11. The contractor is required to submit Bank Guarantee for 3% (Three percent) of the contract value towards PG/SD in VPT Pro-forma within 30 days from the issue of w.o. failing which Security deposit will be recovered from the invoices and the amount recovered will be released to the contractor on successful completion of the Guarantee period.

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12. 100% payment will be released on successful delivery of material, installation and commission at site duly inspected and certified by Engineer i/c. **Invoice to be submitted along with certified copies of completed works, video, photos, acknowledgement of IT return for immediate past 02 years, failing which TDS will be deducted as per IT rules in force by Government of India.**
13. The contractor shall comply the requirements of all the ISO systems i.e., QMS, EMS and OSHAS.
14. The contractor should make his own security arrangements till the work is handed over to the department.
15. The contractor is responsible for taking precautionary measures for the safety of lives of men working under him and the responsibility arising due to any mishap during the execution of work, the payment of any compensation etc., lies entirely on the part of the contractor.
16. In case, the performance of the work during the contract period is found not satisfactory, VPT reserved the right to preclose the contract within 15 days notice during the contract period.
17. In case of any clarification, Please contact at phone No. 0891-2873264 / 99482 98305.

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## **UNDERTAKINGS:**

1. The bidders have to give undertakings / documents for the following:
2. The bidder shall give an undertaking that they have submitted genuine documents in support of their credentials and VPT is at liberty to take any action, if documents are found to be not genuine even during the execution period of the work.
3. The bidder shall give an undertaking stating that subject tender terms & conditions, specifications shall be complied in toto contract without any deviation.
4. Black listed/ Suspended firms /existing contractors of VPT whose services are not satisfactory are not eligible. The bidder should submit self-declaration that there are no adverse remarks regarding performance in their earlier contract/assignments.
5. The bidder shall give an undertaking that they have not made any payment or illegal gratification to any person/authority connected with bid process so as to influence the bid process and have not committed any offence under the PC Act in connection with the bid.
6. The bidder shall give an undertaking that they does not have any relationship (direct/indirect) either personal or commercial with any of the existing Trustees of Visakhapatnam Port Trust and also not related to any officer of Visakhapatnam Port Trust or any officer of the rank of Assistant Secretary or above in the Ministry of Shipping, Government of India. The contractor should give a declaration along with his tender about the name of relatives, who are employed as Non-Gazetted officers in this Port Trust.

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## TECHNICAL SPECIFICATIONS

<b>1. 2MP 1980x1080 Pixels Camera Specifications</b>	
<b><u>Feature</u></b>	<b><u>Specifications</u></b>
Image Sensor	1/ 2.7" CMOS Sensor - Progressive scan 2MP or better
Lens	2.8mm (3.6mm optional)
Light Sensitivity	Colour: 0.002 Lux IR Distance: 40 Mts or above
Day/Night	Yes
Power	12VDC, PoE (802.3af) or better
Intelligent Features	Motion Detection, VideoTampering, Voltage Detection, Audio abnormal detection, SD Card error, IP Conflict, Illegal access
<b>Video</b>	
Video Compression	H.265/H.265 Plus or better
Resolution	2 MP (1920 x 1080) or better
Frame Rate	25/30 fps at 2MP or better at full resolution & for all the supported codecs
Image Settings	WideDynamicRange(WDR)120DBorbetter,AutoWhiteBalance, Backlight Compensation, Auto Gain Control
<b>Networking</b>	
Connectivity	10/100Mbps Ethernet
Audio	Audio In & Out
<b>Environmental</b>	
Temperature	-30 <sup>0</sup> to +60 <sup>0</sup> C (Operating)
<b>Mechanical</b>	
IR illuminator	IR Distance: 40Mtrs or above,
Casing	Integrated Outdoor weather proof (SS/Aluminium-suitable for harsh environment)casing withIP67.
Approved Make	Axis, Bosch, CP Plus, Cannon, Panasonic, Pelco, Sony

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<b>2 8 Port Layer 2 Network POE Switch with 2 Giga uplink</b>	
Features	Specifications
Ethernet	8*10/100Mbps PoE ports 2*10/100/1000Mbps ports
Transfer Rate	1000Mbps full Duplex
Network protocol and standard	IEEE802.3i IEEE802.3u IEEE802.3x IEEE802.3ab IEEE802.3af IEEE802.3at
Performance	Bandwidth: 20Gbps(no block)
Frame filtering and Transmission rate	10M port maximum 14,800pps 100M port maximum 148,800pps 1000M port maximum 1,488,000pps
LED Indicator	Power, RESV, LINK/ACT
PoE Pin	1/2/4/5(+), 3/6/7/8(-)
Power Source	Max. output power single port: 30W Max Power supply: 96W
Operating Temperature	0~40°C
Humidity	10%~90%, Non-condensing
Make:	Belden, Cisco, CP-Plus

<b>3 Network Video Recorder with Storage</b>	
Recorder Operating System	8 CH Embedded LINUX operating system
Storage	4 Terabyte Surveillance grade
Compression	H.265+
Processor	Quad Core Embedded Processor
Two way Talk	1Channel Input, 1Channel Output, RCA
User Interface	GUI
Bit Rate	16kbps~20Mbps per channel
Playback	playback simultaneously

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Region Cover	Every channel can set 4 cover regions
Recording Mode	Support manual, Schedule(Regular, MD(Motion Detection),Alarm, IVS), Stop
Backup Way	USB Device/Network
Audio	Two Way Audio/Audio in & Out
Alarm	Connectivity to Alarm Sensor & Output Alarm Triggering
Users	128 Users
Video Output	1 chVGA +1chHDMI
Network Port	1 RJ-45 port (10/100Mbps)
USB Port	2 USB 2.0 ports one on front panel, one on rear panel)
Display	19" Display with wall mount, HDMI & VGA
Cables	HDMI Cable with required length, USB Extension cable
Accessories	Wireless USB Mouse
Operating Temperature	-10°C ~ +55°C
Brands	Axis, Bosch, CP Plus, Cannon, Panasonic, Pelco, Sony

**4 Installation, commissioning charges (including cost and conveyance of all additional materials & accessories, labour charges required for completion of the project as directed by the engineer-in charge)**

Cable & laying	Cat6 Network cable & its laying as required
Conduit	PVC/HDPE/GI/Casing as required with wall clamping, GI Clamps for every 1 metre of 40mm with 2mm Thickness.
Enclosures	Outdoor Enclosures for Camera Connectors as required.
Digging	Digging of Soil/Cement concrete with 3 feet depth, 60MM GI Pipe & Filling with cement concrete M20 or as required.
CCTV Pole	Pole, installation with 3 Feet foundation, flange, & filled with M20 Concrete, Silver painting or as required

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Electrical Accessories	To be arranged from the electrical source to the Load with all required cables, Electrical accessories & Proper Earthing.
Fabrication	Fabrication to be arranged for camera mounting or extensions with treatment & painting.
Service	12 Months of on-site service to be provided for any installation defects. Service to be attended within 6 Hours of the complaint registration.

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## **DETAILED SCOPE OF WORK**

### **OVERVIEW OF WORK**

Scope of the job is to provide Turnkey Solution that includes but is not limited to supply, installation, implementation, commissioning, training, providing user manual, providing 12 months warranty for the total solution including all hardware, software, materials, services and support etc. for providing a Integrated Video Surveillance System

Annexure. Job also includes all related jobs at controlling office at all the Locations. All necessary cabling / Poles / wiring/ sockets/Outdoor Enclosures and allied infrastructure conforming to respective quality / standard norms are also included in the scope of this job.

#### **3.2. SOLUTION OVERVIEW**

3.2.1 The envisaged Video Surveillance system shall be a IP Based System with distributed architecture having control at the required location. Fixed Day/Night Surveillance Cameras shall be used at all the Locations entry & other strategically important points

3.2.2 A network, comprising an High grade POE switches each and media converters connected with Optical Fiber Cable/Wireless, shall be laid at each Junction for transmission of signal from cameras to the Control Stations. The Main Control Station shall have a Network Video Recorder (with Monitoring & IVA Software) for Video Storage, a monitor, a UPS, a Switch.

3.2.3 The Solution should capture, store, and analyse digital video images to enable central monitoring, increase operational efficiency, reduce liability, minimise risk and secure people & property.

3.2.4 The system should be provided with weather proof outdoor IP Fixed Camera, lens, housing & mountings to capture video which, would be viewed & controlled through the Video Management Software, recorded and stored.

3.2.5 The video management software will be used to configure the video management server, and once installation and setup are complete, the video management recorder should run seamlessly in the background to manage the connections, access and storage. Video management server should receive H.265 or better quality video across the network from Cameras. The server should stream incoming video and audio to a connected storage.

3.2.6 The viewing mode can be controlled remotely by a management system. The Video Management Server, Workstation, Monitors will all be placed at the control room with additional work station at Security Cabin/other areas as envisaged.

3.2.7 Video transmission will be over a wired network.

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3.2.8 Video Surveillance system shall allow event based and motion based alarms and schedule based recording options of locations/events deemed sensitive

3.2.9 The Outdoor cameras shall be housed in IP67 casings. All housings shall be of the same make as that of the camera.

3.2.10 The Server shall make continuous recording of all cameras for 24 hrs x 7 days with hardware should have adequate storage @ 25/50 fps and 1080P for a period of 30 days.

3.2.11 After commissioning the Video surveillance system, the same shall be demonstrated for all its capabilities to the relevant user department to make them familiar with the system on mutually agreed dates.

### 3.3 SPARES

#### 3.3.1 Commissioning Spares:

All commissioning spares required for installation, testing and commissioning of system shall be at bidder's scope.

#### 3.3.2 Warranty Spares:

All spares required for maintaining the complete system during the warranty period of 12 months shall be at bidder's scope. All Software/ Hardware upgrades should be free within this period.

3.3.3 Drawings and Data Requirements to be submitted by Successful Bidder for the complete system. These documents shall have to be submitted by Successful Bidder in three sets after placements of Order.

- Technical Architecture of the proposed system
- Hardware sizing and communication backbone as envisaged prior to commencement of job.
- Part list of all equipment.
- Assembly and Installation details.
- Operation and maintenance manuals.
- Completed Data sheets.
- Material specifications.

Sealed Quotations are to be addressed to:

The Superintendent Engineer (Electronics),  
Mech. & Electrical Engg. Dept.,  
2<sup>nd</sup> Floor, Room No.204, AOB,  
Visakhapatnam Port Trust,  
VISAKHAPATNAM-530035.

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