

Tender Document

For

**Rate Contract for Supply and Installation
of
Closed Circuit Television System (CCTV)
and
Public Address System (PAS)
(Tender no. MPSEDC/MKT/2011/195)**

(All pages of this document except for Commercial-bid to be submitted in original duly signed on each page along with the technical bid envelope. The Commercial bid in original is to be enclosed in a separate sealed envelope)

M.P. State Electronics Development Corporation Ltd.

147, Zone-I, M.P. Nagar, Bhopal-462011 (M.P.)
Ph. No. 0755-2769816, Fax No. : 0755-2769824
www.mpsedc.com

Technical Bid

INVITATION FOR BIDS

1. Addl. Chief General Manager, MPSEDC Ltd., Bhopal invites sealed bids, under two envelopes system, from bidders for Supply and Installation of Closed Circuit Television System (CCTV) and Public Address system of MPSEDC Ltd. Interested bidders may obtain further information from the office of MPSEDC Ltd., Bhopal. Bids are invited for the work mentioned hereunder:

Sn	Items	Description
a	Scope of Work	Rate Contract for Supply and Installation of Closed Circuit Television System (CCTV) and Public Address System
b	Cost of bid document	Rs.1000.00 (non-refundable) by Demand Draft/Cash
c	Sale of bid documents	Date 13.04.2011 to 27.4.2011 (Between 10.30 a.m. to 5.30 p.m.)
d	Last date of submission of bid	Date 28.4.2011 up to 3.00 p.m.
e	Date of opening of technical bid	Date 28.4.2011 at 4.00 p.m.
f	EMD	Rs. 25,000/- in the form of Demand Draft payable to MPSEDC Ltd., Bhopal
G	Place of opening of bids:	MPSEDC LTD., 147, Zone-1, Maharana Pratap Nagar, BHOPAL (M.P.)
h	Address for communication:	MPSEDC LTD., 147, Zone-1, Maharana Pratap Nagar, BHOPAL (M.P.)

Note: Tender can be downloaded from the website www.mpsedc.com. In case tender form has been downloaded from the website, the Bidder will have to enclosed a Demand Draft towards the Tender Document cost for an amount of Rs.1,000/- (Rupees One Thousand Only) of any scheduled bank in favor of MPSEDC Ltd. payable at Bhopal alongwith EMD.

***Any future Corrigenda/Information shall be posted only on our website www.mpsedc.com**

Letter for Submission of tender

To
MPSEDC
147 Zone I, M P Nagar
Bhopal (M P)

Dated ----- ,2011.

Ref: Rate Contract for Supply and Installation of Closed Circuit Television System(CCTV) and Public Address System against tender No MPSEDC/MKT/2011/195 dated 13.4.11 due for opening on 28.4.11

Dear Sir,

Having examined the tender document relating to the Rate Contract for Supply and Installation of Closed Circuit Television System(CCTV) and Public Address System as detailed in your tender, Conditions and scope of supply, Specifications etc., and having understood the provisions and requirements relating to the supply and all other factors governing the tender, We hereby submit our offer for the supply of the proposed items in accordance with terms and conditions and confirm our acceptance to execute the order within the time period specified in the tender document, at the rates quoted by us in the accompanying Technical & commercial Bid.

If, after the tender document is accepted, we fail to complete the supply of the items as per the order. We agree that, M/s. MPSEDC LTD. Bhopal shall have full authority to forfeit the earnest money and cancel our order with no obligation on their part.

We confirm having deposited earnest money of Rs 25000/- (Rupees Twenty five Thousand only) by Demand Draft No.....dated drawn onBank Branch attached here to, and general information required are as per annexure attached.

We further confirm that –

- i. We have successfully executed orders of similar nature and we have sufficient experience and financial strength in handling orders of this value.
- ii. We have sufficient qualified manpower and necessary materials and after sales support to execute the order efficiently in the specified time schedule.
- iii. The quoted rates shall be valid till the completion of the order but not less than 90 days.
- iv. We further confirm that all chapters of the tender documents have been read, understood and signed and there is no deviation/discrepancy
- v. We agree to accept the extension order up to 100% quantity within three months of the issue of the order.

Signature of the Bidder
With stamp and date

GENERAL INFORMATION AND EMD DETAILS

1	EMD Details DD No and date: Amount in Rs. Name of the Bank:	
2	Name and Address of the Bidder:	
3	Contacts:	
4	Telephones:	
5	Fax:	
6	E-mail:	
7	Mobile No:	
8	Category of the Bidder (Whether company, partnership firm or Proprietary concern)	
9	Name of Chief Executive Officer and Telephone No.	
10	Year of Establishment	
11	Sales Tax/Commercial Tax/ CST nos.	
12	Income Tax PAN/GIR No.	
13	Yearly Turn over of the Last 2 years.	
14	Name and Address of the Banker	
15	List of major Clients and the size of orders executed	

Note: Separate sheets may be attached wherever necessary.

Signature of the Bidder
With stamp and date

Terms and Conditions

Contents of Bidding Documents for supply and installation of Closed Circuit Television System (CCTV) and Public Address System the bidding procedures and the terms of contract are prescribed here in under:

1 **Eligibility Criteria:**

- Manufacture or their representative is only eligible for bidding.
- The bidder must have working office and service centre in the state of Madhya Pradesh for at-least two years; attach copy of MPST/CST/TIN issued by M.P. Commercial tax department.
- In case of the representative, the representative must attach tender specific authorisation letter (in the enclosed format in the tender form) from respective manufacturer.
- The bidder should be in the business of supply and installing of CCTV and have executed at least 2 projects.

2. **Amendment in Bidding Document by the Competent Authority**

At any time prior to the deadline for the submission of bids, the competent authority may, for any reason, whether on it's own or in response to a clarification requested for by a prospective bidder, modify the bidding document by way of amendment(s).

The prospective bidders having received the bidding documents will be notified of the amendment(s) so made in writing or by Fax and such amendments shall be binding on them.

In order to allow reasonable time to the prospective bidders for taking into account such amendment(s), in the preparation of their bids, the competent authority, at its discretion, may extend the deadline for the submission of bids.

3 **Bid Price**

The bidders shall indicate on the prescribed Price Schedule, including item-wise and final Bid Price of the items listed

Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and shall not be subject to variation on any account.

A bid submitted with an adjustable price will be treated as non-responsive and rejected.

4. **The EMD may be forfeited:**

If a Bidder withdraws its bid during the period of bid validity specified by the bidder on the bid Form or In case of a successful Bidder, if the Bidder fails:

- i. To accept the order
- ii. To furnish performance security
- iii. If the Vendor, after accepting the purchase order fails to deliver the material/services as per the order.

5. Any alterations, erasures or overwriting shall be valid only if the person or persons signing the bid initial them.

6. **Technical requirements**

- a. The technical specifications as per annexure are the minimum configuration required. Higher specifications may be considered but no price weightage for higher specifications shall be considered.

7. **Service support requirement**

- a. Successful bidder will ensure the proper monitoring and ensure the timely call attending.
- b. The service support will require strengthening to suit the concerned department requirement. The acceptance for doing so with no extra cost is to be submitted along with the bid.
- c. Following are the limits of time for final closure of call.

- i. 2 days for Closed Circuit Television System(CCTV)/Public Address System at concerned Deptt.
 - ii. The successful bidder will maintain the sufficient inventory of spare items and few complete systems as well.
 - iii. First component be replaced with new one before taking the old one back, as far as possible to avoid delay.
 - d. The delay in rectification of calls would cause the penalty.
 - e. In case of prolonged pending call the concerned deptt reserves the right to get the defective component repaired from other agencies at the risk of the supplier, and would recover the cost of repair from the supplier.
 - f. The delay in call attending / closure will be treated as poor quality of service support and may lead to disqualification of bidder from participation in future purchases.
 - g. The following penalty would be deducted for the delay in call rectification.
 - i. 300/- per week or part thereof for each Circuit Television System(CCTV)/Public Address system remained unrectified more than the above-mentioned period.
8. Inspection
- Purchaser reserves the right to inspect the manufacturer/supplier works prior to supply. The computers supplied shall be inspected by the purchaser.

SUBMISSION OF BIDS

9. Sealing and Marking of Bids
- The bidders shall submit EMD, technical bid (containing the technical specifications offered, literature leaflets etc and original copy of commercial bid in separate sealed, envelopes all the above envelopes shall be sealed in one main envelope. All the envelopes should be distinctly marked EMD, technical bid, and commercial bid.
10. Payment:
Payment: Payment shall be released by MPSEDC as per the following terms:
- Payment for 90% of the value of goods supplied shall be released against proof of delivery of consignment to the destination places as per despatch instructions on submission of bills in triplicate. Balance 10% shall be released after successful installation and commissioning of equipment, subject to the condition of payment receipt from concern deptt. The bills for the purpose of payment shall be submitted to MPSEDC, Bhopal. No interest shall be payable on delayed payments due to what so ever reason.
11. Deadline for Submission of Bids
- Bids must reach to the competent authority at the address specified but not later than the time and date specified in the invitation of Bids. In the event of the specified date for the submission of bids being declared a holiday for the office of the competent authority, the bids will be received up to the appointed time on the next working day.
12. Late Bid
- Any bid received after the deadline for submission of bids prescribed by the competent authority, will not be accepted and returned unopened to the bidder.

BID OPENING AND EVALUATION OF BIDS

13. Opening of Bids
- Since it is a Two-bid system, Technical and EMD envelope will be opened first by the Committee constituted for this purpose. If the technical bid specifications offered, EMD and deviations asked (if any) are found in order, the Committee will open commercial bid only for the eligible bidders.

The Committee will open the bids, in the presence of Bidders' representatives who choose to attend on the date specified at the following location:

Additional Chief General Manager
M.P. State Electronics Dev. Corpn. Ltd.
147, Zone-I, Maharana Pratap Nagar, BHOPAL-462011

Prospective Bidder representatives shall sign a register evidencing their attendance.

In case, the commercial bid is not opened on the same or next day of opening of technical bid the Committee may decide to open the commercial bid on subsequent dates. In such case the date, time and place of opening of commercial bid will be intimated to the bidders or their representatives.

14. Preliminary Examination

Before starting evaluation, the bids will be examined to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. In case of computational error the basic price will prevail.

If bid is determined as not substantially responsive, the competent authority will reject it and only the substantially responsive commercial bids will be considered.

The process of evaluation of bid is as follows:

- (i) The Committee, appointed by the MPSEDC LTD., will first verify that the Bank Draft for Bid Security is in order and as per requirement of the bid. The Committee will examine the bid on Eligibility Criteria as specified. The scrutiny of technical proposals will be based on the Evaluation Criteria determined.
- (ii) The commercial bid will be opened only for the proposals, which are found eligible and technically acceptable by the Committee and approved. On the day specified for the opening of bid, the Committee, appointed by the MPSEDC LTD., will open the commercial bids of eligible bidders and scrutinize the same minutely.
- (iii) After scrutiny, the MPSEDC LTD. after having examined the proposal may accept the same or accept the bid price of any other bidder found suitable or reject all or any proposal. The decision of the MPSEDC LTD. in this regard shall be final and binding.
- (iv) The quantity mentioned in the tender document is as per our estimate. However, deptt. reserves the right to place order for the less/higher quantity or drop the items or segregated delivery schedule depending on the actual requirement.

15. Performance Security

The successful bidder shall be required to submit performance guarantee equivalent to 10% of the order value for the satisfactory performance/completion of the complete order (Including warranty period), in the form of bank guarantee with MPSEDC LTD or Concern deptt.

16. Contacting the Competent Authority

Any effort on part of a Bidder to influence the Competent Authority or members of Technical/Monitoring committee, in its decisions on bid evaluation; bid comparison or contact award may result in rejection of the bidder's bid.

17. General

- (i) Bid form shall be duly filled in, signed and complete in all respects
- (ii) The price should be inclusive of all taxes and local levies if any. On FOR destination basis.
- (iii) The rates should be free from all escalation. However, all Tax and duty benefits if applicable should be passed on to us.
- (iv) Delivery period should not exceed 45 days from the date of order under any circumstances. The MPSEDC LTD. reserves the right to extend the delivery period, in the interest of the concerned Deptt.
- (v) System should invariably be warranted for a period of One years from the date of successful installation and commissioning.

(vi) Penalty- In case of delay in execution of the order, the concern deptt. may as its option either:

Recover from the supplier/contractor towards liquidated damages a sum @ ½% (half percent) of the price of any stores not delivered for a week, or Part thereof subject to maximum of 10% (ten percent).
OR Purchase from elsewhere on account and at the risk of supplier, the stores not delivered.

OR

Cancel the contract reserving concern Deptt right to recover damages.

The inner and outer envelopes shall be addressed to the competent authority at the following address:

Additional Chief General Manager
M.P. State Electronics Dev. Corpn. Ltd.
147, Zone-I, Maharana Pratap Nagar, BHOPAL-462011

The envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late."

If the outer envelope is not sealed and marked, the competent authority will assume no responsibility for the bids, misplacement or premature opening.

Telex; cable facsimile or fax bids will be rejected.

Conditional bids are liable to be rejected.

MPSEDC LTD. does not bind themselves to accept the lowest or any other tender and reserve the right to accept or reject any or all the tender in full or in part without assigning any reason.

MANUFACTURERS AUTHORIZATION FORM

Ref No:

Dated:.....

To,
Additional Chief General Manager
M.P. State Electronics Dev. Corpn. Ltd.
147, Zone-I, Maharana Pratap Nagar, BHOPAL-462011

Tender No:..... Due Date:

Dear Sir,

We _____ who are established and reputed
Manufacturers of _____ having factories
At _____
_____ (Address of the factory)
do hereby authorize M/s _____ (Name & Address of agent)
to submit a bid, and subsequently negotiate and sign the contract with you against
the above tender.

We hereby extend our full guarantee, warranty and support and also in meeting warranty obligations by providing necessary spares in time for the goods & services offered by the above firm against this tender, as per standard as well as MPSEDC warranty terms.

Yours faithfully

(Name)
(Name of the manufacturer)

Note: This letter of authority should be on the letter head of the manufacturer and should be signed by a person competent and having a power of attorney to bind the manufacturer. The bidder in its bid should include it.

Technical Specification

CCTV SYSTEM (Digital Video Recording System)

MAKE Samsung/ADACS/Alba Urmet/Neotech/LG./Gobbler/Honeywell/Shyam

- 1 CH-16 STAND ALONE ,D-1 ,H264 comp.,16 Audio & 16 Video DVR**
16 Audio & 16 Video Inputs, 1 Video , 1 VGA, 1 Audio output, Display Video resolution-**D1(704x576)** PAL, VGA Display-1024x768. H.264 compression. Recording at 25fps per channel @352x288(CIF), Recording based on Continuous, Motion, Scheduled or alarm, Backup through USB/High Speed SATA/Remote backup through TCP/IP, Network Interface RJ45 10/100MHz
- 2 CH-8 STAND ALONE ,D-1 ,H 264 comp.,8 Audio & 8 Video. DVR**
8 Audio & Video Inputs, 1 Video / 1 VGA / 1 Audio output, Display Video resolution-**D1(704x576)PAL**, VGA Display-1024x768. H.264 compression. Recording at 25fps per channel @352x288(CIF), Recording based on Continuous, Motion, Scheduled or alarm, Backup through USB/High Speed SATA/Remote backup through TCP/IP, Network Interface RJ45 10/100MHz
- 3 CH-4 STAND ALONE , D-1 ,H 264 comp.,4 audio &4 video DVR**
4 Audio/Video Inputs, 1 Audio/Video & VGA output, Display Video resolution-**D1 (704x576)PAL**, VGA Display-1024x768. H.264 compression. Recording at 25fps per channel @352x288(CIF), Recording based on Continuous, Motion, Scheduled or alarm, Backup through USB/High Speed SATA/Remote backup through TCP/IP, Network Interface RJ45 10/100MHz
- 4 COLOUR DOME CAMERA**
 - a** 1/3" CCD, Min **480 HTV Lines** , 0.1 Lux , 3.6/6 mm Lens
 - b** 1/3" CCD , Min **480 HTV Lines** , 0.3 Lux , 3.6/6 mm lens,
- 5 COLOUR VANDLE DOME CAMERA**
 - a** 1/3" CCD ,Vandal dome camera, Min 480 HTV lines , 0.1 lux with 6mm lens, glass protection IP 66
 - b** 1/3" CCD ,Vandal dome camera, Min 480 HTV lines , 0.5 lux with .3.6 lens, glass protection IP 66
 - c** 1/3" CCD ,Vandal dome camera, Min 480 HTV lines 0.01 lux with 8 mm Lens , glass protection IP 66.
- 6 IR CAMERA COLOUR, 18 IR LED**
 - a** 1/3" CCD, **Min 480 HTV Lines** , 0.1 lux, 0 lux with IR ON, with 4-9 mm F/2 varifocal lens. Min 18 IR LED
 - b** 1/3" CCD, **Min 480 HTV Lines** , 0.3 Lux,0 lux IR ON , With 4-9 mm F/2 varifocal lens. Min 18 IR LED
 - c** 1/3" CCD, **Min 480 HTV Lines** , 0.1 Lux 0 lux IR ON , With 3.6/6 mm lens. Min 18 IR LED
- 7 C S Mount COLOUR CAMERA SUPER HIGH RESOLUTION**
 - a** 1/3" CCD, 480 HTV Lines, 0.5 lux ,pixel 752 (H) X 582 (V), S/N Ratio 48dB, auto white balance, Auto iris varifocal DC drive lens with focal length **(3.5-8)** mm CS mount pitch. maximum opening **F1, 2-300**
 - b** 1/3" CCD, 480 HTV Lines, 0.5 lux ,pixel 752 (H) X 582 (V), S/N Ratio 48dB, auto white balance, Auto iris varifocal DC drive lens with focal length **(2.8-12)** mm CS mount pitch. maximum opening **F1, 4-300**
 - c** 1/3" CCD, 480 HTV Lines,0.5 lux , pixel 752 (H) X 582 (V), S/N Ratio 48dB, auto white balance, 12Vdc-24Vac, Auto iris varifocal DC drive lens with focal length **(5-50)** mm CS mount pitch. maximum opening **F1,6-300**
- 8 COLOUR PIN HOLE CAMERA**
 - a** 1/3" CCD **480 HTV Lines** , 0.1 lux / F2 ,3.6/6 mm
 - b** 1/3" CCD **480 HTV Lines** , 0.5 lux / F2 ,3.6/6 mm
- 9 IP CAMERA**
 - a** IP CAMERA H.264, Min 480 TVL, 1/3" Sony Super HAD CCD, 0.1 Lux, Auto Iris optional, Resolution 25FPS, Alarm on Motion, View tamper, video loss, 1 alarm input / output, SD card supported, dual stream function
 - b** Weather proof IP CAMERA with IR, Min 480 TVL, 1/3" Sony Super HAD CCD, 0.2 Lux, 0 Lux at IR ON, Video Frame Rate 25FPS, SUPPORT 3GPP
- 10 ONE WAY AUDIO CAMERA**
 - 1/3" CCD, **480 HTV Lines** , 0.1Lux ,3.6 mm, in built mike
 - 1/3" CCD, **600 HTV Lines** , 0.1 Lux ,3.6 mm, in built mike
- 11 HIGH III SPEED DOME CAMERA**
 - a** Easy Dome III SPEED DOME- Day & Night, 530 TVL, 1/4 " Sony Ex view HAD CCD, 4,40,400 pixel, Sensitivity Colour(1.0), B/W (0.01)} Lux, **36 X** Optical Zoom- Focal Length (3.5-91)mm, 12X Digital Zoom (Total 312XZoom), 165 preset, 6 Vector Scans, 3 Pattern Function

- b** Easy Dome III SPEED DOME- Day & Night, 530 TVL, 1/4 " Sony Ex view HAD CCD, 4,40,400 pixel, Sensitivity {Colour(1.4), B/W (0.01)} Lux, **35X** Optical Zoom,0.01 LUX , dual stream compression , D -1 resolution ,IP based camera.
- 12 Joystick Controller**
- A Joystick Controller for camera**
3 D Keyboard for PTZ dome camera fast zooming and parameter setting, LCD menu, Temp. 10-55 degree Centigrade
- B Joystick Controller for camera & DVR**
3 axis joystick control keyboard (Pelco-D protocol) for Easy Dome for speed domes with DVR's
- 13 Data Distributors - 4 out**
Data distributor RS 485 1 in/ 4 out ,maximum number of device , connectable in series-2 , connectable in parallel -16 ,distance of single segment max. 1200 mtr. , total distance max. 2400 mtr. (from first to last device),
- 14 One Channel VIDEOSERVER - H 264**
Support 3GPP Function, MPEG4 & MJPEG dual codec video comp. ,snapshot ,motion ,alarm recording, USB 2.0 device interface for external storage, support PTZ control.
- Four Channel VIDEOSERVER - H 264**
Support 3GPP Function ,MPEG4 & MJPEG dual codec video comp. ,snapshot ,motion ,alarm recording, USB 2.0 device interface for external storage, support PTZ control.
- 15 CAR BLACK BOX CAMERA (WITH LCD)**
H.264 format 640 x 480
Real time video Recording
Built-in Nand flash memory 4GB
Support GPS Google Map
Motion Video Recording (buses ,taxi , bikes , cars , ...etc)
Recording speed 30 fps
G Sensor 3-Axis
Sensitivity 0.8 lux minimum
C-Microphone sensitivity 38dB
2.0" Colour LTPS LCD Panel
- 16 MOBILE DVR H.264**
UP to 4 CH camera recording images overly with location & and time of GPS
Individual channel recording set up
Picture quality -3level (Mpg-4/normal/best)
GPS , 3G Support
Up to 4-CH audio input
Impact sensor detect excessive gravitational forces of X,Y,Z
Support backup and external USB HDD mirroring,
Recording speed, PAL-100 FPS (CIF)/100FPS (Half D1)/50 FPS (D1
Display resolution 720(H) X 576(V)(PAL)
- 17 VANDAL PROOF DOME CAMERA FOR MOBILE VEHICLE**
Pixel PAL - 752(H) X 582(V)
Horizontal resolution - 540 TVL
Sensitivity 0.5 lux
Protection class - IP66
- 18 POLICE HD PVR**
Built in 1 mega pixel camera
real time high resolution recording at 1280 x 720 (720p)

High resolution 720p HDMI Output
Date and time text overlay
Multi -language OSD
Recording frame rate -30 fps

19 MAGIC CAMERA

Built in 1/3" sony super HAD CCD High resolution colour camera
No IR required at night .clear image under faint star light .
Horizontal resolution 540 TVL
IP66 weatherproof housing
Sensitivity - 0.01 lux

20 STAR LIGHT CAMERA

Pixel - , PAL - 512(H) X 582(V)
Horizontal resolution 480 TVL
Electronic shutter - NTSC 1/2
lens - DC drive auto iris lens
Sensitivity 0.001 lux
Image device 1/3" sony CCD

21 VIDEO MANAGEMENT SYSTEM (City surveillance, bank, traffic, hospital,...etc)

Server - client based
Display speed - up to 25 fps PAL
Live video - monitor up to 64 live camera views simultaneously on one monitor
Multi-monitor ; support up to 8 monitor
Video resolution : QCIF / CIF / H-D1 /D-1/ Mega pixel
PTZ support : on screen PTZ control on live view
Screen : 1/4/6/9/10/13/16/25/36/49/64
COMPRESSION H.264
SPOT RECORDING ;AVI OR JPEG
BACKUP : AVI / JPEG/PRINT OUT
SECURITY :Multi-user level user management

22 MONITOR FOR DISPLAY

- a Screen TFT 20"
- b Screen LCD TV 32"

23 SAFETY SOLUTION

- a UPS OF CCTV SYSTEM (800 VA) FOR POWER REGULATION
- b UPS OF CCTV SYSTEM (1 KV) FOR POWER REGULATION

24 CABLE WITH CABLING ASSESORIES ISI mark

- a Supply and installation of RG-6 Coaxial cable with power cable (2 core) copper to individual outlets in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.
- b Supply and installation of 3+1 CCTV Cable with power cable (2 core) copper to individual outlets in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.
- c Supply and installation of Data Cable 4 core 2 Pair 1 sq. mm. with power cable (2 core) copper to individual outlets in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement

including other accessories which are required for complete cabling.

Note

- 1. The job does not include electrification work. Electrical points have to be provided at appropriate location by the client.**
- 2. The structure of network shall be designed by us as per requirement of each building/department, and number of CCTV The number and location of nodes shall be decided by the concerned department, however other cabling parameters shall be decided by us.**
- 3. The cabling will have provision for future expansion.**

TECHNICAL SPECIFICATION : P A SYSTEMS
MAKE Yamaha/ RCF/JBL/Odionix-ADIT/Bosch

- 1** 300 WATT AMPLIFIER P
6 mike input & 2 aux input
Bass , Treble & Master volume Control
100V & 70V Line, & 4/8/16 Ohms output
Power , Monitor , Output level indication
RMS Power Output 300 watt
Power input : 230VAC & 12V DC
- 2** 500 WATT AMPLIFIER
6 mike input & 2 aux input
Bass , Treble & Master volume Control
100V & 70V Line, & 4/8/16 Ohms output
Power , Monitor , Output level indication
RMS Power Output : 500
Power input : 230VAC , & 12V DC
- 3** DESKTOP MICRO PHONE 80Hz-12KHz
Flexible goose neck stem
Push to talk switch
XLR Connector
Capsule type condenser
Polar pattern Ultra - cardioids
Frequency response 70Hz-13KHz
Sensitivity Min -35 +/- 3dB
- 4** CEILING MOUNT SPEAKER 3/6 W
Rated power 6 watt
100 & 70V LMT, 4/8/16 Ohms
Frequency response 150Hz-15KHz
- 5** CEILING MOUNT SPEAKER 5/10 W
Rated power 10 watt
100 & 70V LMT, 4/8/16 Ohms
- 6** WALL MOUNT SPEAKER 5/10W
Rated power 10watt
100 & 70V LMT, 4/8/16 Ohms
Frequency response 110Hz -13kHz
- 7** WALL MOUNT SPEAKER 20 Watt
Rated power 20 watt
100 & 70V LMT, 4/8/16 Ohms
Frequency response 45Hz -18 kHz
- 8** COLUMN SPEAKER 15/30 watt
Rated power 30 watt
100 & 70V LMT, 4/8/16 Ohms
Frequency response 150Hz -18 kHz
In/outdoor weather proof speaker
- 9** COLUMN SPEAKER 10/20 watt
Rated power 20 watt
100 & 70V LMT, 4/8/16 Ohms
Frequency response 140Hz -16 kHz

- In/outdoor weather proof speaker
- 10** CONVERTER / BOOSTER
 - Dual input (line & mic) minimum 1 balanced output
 - output level control
 - Hi-fi audio with wide frequency 20 Hz-20 kHz
- 11** CONFERENCE SYSTEMS
 - Designed in accordance to ISO and IEC914
 - Single, multiple and many groups can be used simultaneously
 - Normally it's workable for 50 units in each main unit
 - The system can be extended to 150 units at most
 - Build-in feedback inhibition circuit
 - MIC on number restriction : 1/2/3/5 open configurable
 - Red indicator light on the MIC
 - Equipped with balanced and unbalanced circuit output socket, and both sides circuit output for connecting other kinds of equipment
 - Install in 19-inch frame
- A** Chairman Unit
 - Frequency response : 100Hz-16KHz
 - Sensitivity : -30dB
 - Reference sound receiving distance : 20-80 cm
 - ON/OFF Selection button
 - Priority button. Chairman unit can turn down delegate MIC by press the priority button
- B** Delegate Unit
 - Frequency response : 100Hz-16KHz
 - Sensitivity : -30dB
 - Reference sound receiving distance : 20-80 cm
 - ON/OFF button
 - Priority button. Chairman unit can turn down delegate MIC by press the priority button
- 12** Conference Controller
 - A low-cost solution to conferencing, the MC-600 allows adding a conference system to existing amplified speaker systems
 - Single, multiple and many groups can be used simultaneously
 - Equipped with three groups of 9P-DIN plugs for system connecting, normally it is workable for 35 units in each circuit
 - Built-in feedback inhibition circuit
 - Built-in TELEPHONE COUPLE for telephone conference
 - MIC on number restriction : 1/3/5/ free
 - Red indicator light on the MIC
 - Auto-off function : The Microphone would close automatically in 30 seconds after making a speech
- 13** Signal Distributor
 - Impedance balancing branch connector (2 Input, 1 Output)
 - Low Insertion loss computation
 - Durable finish treatment
- 14** Wireless Microphone
 - Frequency Response : 40Hz-14KHz
 - Dynamic Range : >110dB
 - Direction : <0.5%
 - S/N Ratio : >100dB
 - Service Range : 100 meters

- Operating Temperature : 5 to 45 degrees C
- Carrier Frequency Range :UHF-500-960 MHz
- -: MICROPHONE :-
- Frequency Stable Range : <30pm
- Carrier Output Power : <30mW
- Pre-Emphasis : 75us
- RFI Suppression : >40dB
- Radio Frequency Type : FM
- -: RECEIVER :-
- Sensitivity : 2 micro V
- Output Impedence : 600 ohms
- Output Level : 300mV

15 Handheld Microphone

- Output Impedance : $600\Omega \pm 30\%$
- Frequency Response : 50Hz-13KHz
- Direction : Uni-direction
- Sensitivity : $-50 \pm 3\text{dB}$
- Body Material : Zinc Alloy
- Cable : $\phi 6.0 \times 5\text{M}(\phi 6.3\text{Plug})$
- Gross Weight/Net Weight : 25.5/24

16 Cabling

- a Supply and installation of speaker cable 2 Core 1 Sq mm copper cable in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.
- b Supply and installation of speaker cable 4 Core 1 Sq mm for audio conferencing in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.

Price Bid of CCTV System

(To be submitted in separate envelope)

Item No. 1				
S.No.	CCTV SYSTEM (Digital Video Recording System)	Unit	Make & Model	Rate
1	CH-16 STAND ALONE ,D-1 ,H264 comp.,16 Audio & 16 Video DVR	1		
2	CH-8 STAND ALONE ,D-1 ,H 264 comp.,8 Audio & 8 Video. DVR	1		
3	CH-4 STAND ALONE , D-1 ,H 264 comp.,4 audio &4 video DVR	1		
4	COLOUR DOME CAMERA			
a	1/3" CCD, Min 480 HTV Lines , 0.1 Lux , 3.6/6 mm Lens	1		
b	1/3" CCD , Min 480 HTV Lines , 0.3 Lux , 3.6/6 mm lens,	1		
5	COLOUR VANDLE DOME CAMERA			
a	1/3" CCD ,Vandal dome camera, Min 480 HTV lines , 0.1 lux with 6mm lens, glass protection IP 66	1		
b	1/3" CCD ,Vandal dome camera, Min 480 HTV lines , 0.5 lux with .3.6 lens, glass protection IP 66	1		
c	1/3" CCD ,Vandal dome camera, Min 480 HTV lines 0.01 lux with 8 mm Lens , glass protection IP 66.	1		
6	IR CAMERA COLOUR, 18 IR LED			
a	1/3" CCD, Min 480 HTV Lines , 0.1 lux, 0 lux with IR ON, with 4-9 mm F/2 varifocal lens. Min 18 IR LED	1		
b	1/3" CCD, Min 480 HTV Lines , 0.3 Lux,0 lux IR ON , With 4-9 mm F/2 varifocal lens. Min 18 IR LED	1		
c	1/3" CCD, Min 480 HTV Lines , 0.1 Lux 0 lux IR ON , With 3.6/6 mm lens. Min 18 IR LED	1		
7	C S Mount COLOUR CAMERA SUPER HIGH RESOLUTION			
a	1/3" CCD, 480 HTV Lines, 0.5 lux ,pixel 752 (H) X 582 (V), S/N Ratio 48dB, auto white balance, Auto iris varifocal DC drive lens with focal length (3.5-8) mm CS mount pitch. maximum opening F1, 2-300	1		
b	1/3" CCD, 480 HTV Lines, 0.5 lux ,pixel 752 (H) X 582 (V), S/N Ratio 48dB, auto white balance, Auto iris varifocal DC drive lens with focal length (2.8-12) mm CS mount pitch. maximum opening F1, 4-300	1		
c	1/3" CCD, 480 HTV Lines,0.5 lux , pixel 752 (H) X 582 (V), S/N Ratio 48dB, auto white balance, 12Vdc-24Vac, Auto iris varifocal DC drive lens with focal length (5-50) mm CS mount pitch. maximum opening F1,6-300	1		
8	COLOUR PIN HOLE CAMERA			
a	1/3" CCD 480 HTV Lines , 0.1 lux / F2 ,3.6/6 mm	1		
b	1/3" CCD 480 HTV Lines , 0.5 lux / F2 ,3.6/6 mm	1		
9	IP CAMERA			
a	IP CAMERA H.264, Min 480 TVL, 1/3" Sony Super HAD CCD, 0.1 Lux, Auto Iris optional, Resolution 25FPS, Alarm on Motion, View tamper, video loss, 1 alarm input / output, SD card supported, dual stream function	1		
b	Weather proof IP CAMERA with IR, Min 480 TVL, 1/3" Sony Super HAD CCD, 0.2 Lux, 0 Lux at IR ON, Video Frame Rate 25FPS, SUPPORT 3GPP	1		
10	ONE WAY AUDIO CAMERA			
a	1/3" CCD, 480 HTV Lines , 0.1Lux ,3.6 mm, in built mike	1		
b	1/3" CCD, 600 HTV Lines , 0.1 Lux ,3.6 mm, in built mike	1		
11	HIGH III SPEED DOME CAMERA			
a	Easy Dome III SPEED DOME- Day & Night, 530 TVL, 1/4 " Sony Ex view HAD CCD, 4,40,400 pixel, Sensitivity Colour(1.0), B/W (0.01)} Lux, 36 X Optical Zoom- Focal Length (3.5-91)mm, 12X Digital Zoom (Total 312XZoom), 165 preset, 6 Vector Scans, 3 Pattern Function	1		

b	Easy Dome III SPEED DOME- Day & Night, 530 TVL, 1/4 " Sony Ex view HAD CCD, 4,40,400 pixel, Sensitivity {Colour(1.4), B/W (0.01)} Lux, 35X Optical Zoom,0.01 LUX , dual stream compression , D -1 resolution ,IP based camera.	1		
12	Joystick Controller			
a	Joystick Controller for camera	1		
b	Joystick Controller for camera & DVR	1		
13	Data Distributors -4 out	1		
14	VIDEOSERVER - H 264	1		
a	One Channel VIDEOSERVER - H 264	1		
b	Four Channel VIDEOSERVER - H 264	1		
15	CAR BLACK BOX CAMERA (WITH LCD)	1		
16	MOBILE DVR H.264	1		
17	VANDAL PROOF DOME CAMERA FOR MOBILE VEHICLE	1		
18	POLICE HD PVR	1		
19	MAGIC CAMERA	1		
20	STAR LIGHT CAMERA	1		
21	VIDEO MANAGEMENT SYSTEM (City surveillance, bank, traffic, hospital,...etc.)	1		
22	MONITOR FOR DISPLAY			
a	Screen TFT 20"	1		
b	Screen LCD TV 32"	1		
23	SAFETY SOLUTION			
a	UPS OF CCTV SYSTEM (800 VA) FOR POWER REGULATION	1		
b	UPS OF CCTV SYSTEM (1 KV) FOR POWER REGULATION	1		
24	CABLE WITH CABLING ASSESORIES ISI mark			
a	Supply and installation of RG-6 Coaxial cable with power cable (2 core) copper to individual outlets in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.	Per Mtr.		
b	Supply and installation of 3+1 CCTV Cable with power cable (2 core) copper to individual outlets in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.	Per Mtr.		
c	Supply and installation of Data Cable 4 core 2 Pair 1 sq. mm. with power cable (2 core) copper to individual outlets in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.	Per Mtr.		

Bid of PA System

(To be submitted in separate envelope)

PA System

S. No.	Public Address System	Unit	Make & Model	Rate
1	300 WATT AMPLIFIER	1		
2	500 WATT AMPLIFIER	1		
3	DESKTOP MICRO PHONE-80 Hz-12 KHz	1		
4	CEILING MOUNT SPEAKER 3/6 W	1		
5	CEILING MOUNT SPEAKER 5/10 W	1		
6	WALL MOUNT SPEAKER 5/10W	1		
7	WALL MOUNT SPEAKER 20 W	1		
8	COLUMN SPEAKER 15/30 W	1		
9	COLUMN SPEAKER 10/20 W	1		
10	CONVERTER / BOOSTER	1		
11	Conference system- standard	1		
a	Chairman Unit	1		
b	Delegate Unit	1		
12	Conference Controller	1		
13	Signal Distributor	1		
14	Wireless Microphone	1		
15	Handheld Microphone	1		
16	Cabling			
a	Supply and installation of speaker cable 2 Core 1 Sq mm copper cable in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.	Per Mtr		
b	Supply and installation of speaker cable 4 Core 1 Sq mm for audio conferencing in weather proof Casing Capping/PVC Cable Duct/PVC Conduit as per requirement including other accessories which are required for complete cabling.	Per Mtr		

We further confirm our acceptance to the terms & conditions of the tender document.

Signature of the Bidder
(with stamp and date)