



**GOVERNMENT OF ODISHA
HOME (ELECTION) DEPARTMENT**

Office of the Collector & District Magistrate, Bhadrak

BID IDENTIFICATION NO.

BID DOCUMENT

FOR THE WORK

**INSTALLATION, IMPLEMENTATION OF WEBCASTING
SOLUTION ON TURN-KEY BASIS FOR ELECTIONS
(LAGISLATIVE ASSEMBLY/ PARLIAMENT)
IN THE DISTRICT BHADRAK.**

**COLLECTOR & DISTRICT MAGISTRATE,
BHADRAK.**

NAME OF WORK:

INSTALLATION, IMPLEMENTATION OF
WEBCASTING SOLUTION ON TURN-
KEY BASIS FOR ELECTIONS
(LEGISLATIVE ASSEMBLY/
PARLIAMENT) IN THE DISTRICT OF
BHADRAK.

BID IDENTIFICATION NO.


COLLECTOR & DISTRICT MAGISTRATE,
BHADRAK.



Election Urgent

DISTRICT OFFICE; BHADRAK
(Election Section)
Website- (www.bhadrak.nic.in.)

Tender reference No. _____ / Date. 04.01.2019

Tenders are invited from eligible firms deals in (Installation, Implementation of Webcasting Solution on Turn-Key Basis for Elections (Legislative Assembly/Parliament) in the district of Bhadrak.

Sl. No	Particulars	Date and Time	Venue
1	Dare & time of release of Tender	04.01.2019	
2	Tender documents will be available in website- (www.bhadrak.nic.in .) for downloading the tender documents		
3	Receipt of Tenders (Sealed cover)	05.01.2019 to 15.01.2019 till 3 PM	District Office, Bhadrak (Election Section)
4	Date & time of Technical bid opening	15.01.2019 at 4 P.M	In the chamber of Addl. District Magistrate, Bhadrak
5	Date of opening of price bid	To be informed to the technically qualified bidders	In the chamber of Addl. District Magistrate, Bhadrak.

The bid documents with all information relating to the tender process including cost of tender document, EMD, Eligibility criteria and terms & conditions are available in the website : (www.bhadrak.nic.in). The authority reserves the right to accept/reject any part thereof or all the tender without assigning any reason thereof.


COLLECTOR & DISTRICT MAGISTRATE
BHADRAK



Election Urgent

DISTRICT OFFICE; BHADRAK

(Election Section)

No. 20 / Elec. dt 4/1/19

TENDER CALL NOTICE

Sealed tender in plain papers are invited from bonafide firms for supply of Installation, Implementation of Webcasting Solution on Turn-Key Basis for Elections (Legislative Assembly/Parliament) in the district of Bhadrak in connection with ensuing Simultaneous General Election-2019.

1. Last date for filling of Tender:- 15.01.19 at 3P.M
2. Date of opening of tender 15.01.2019 at 4.00PM in the chamber of Addl. District Election Officer-cum- ADM, Bhadrak.

Category of Tender:

1. Installation, Implementation of Webcasting Solution on Turn-Key Basis for Elections (Legislative Assembly/Parliament) in the district of Bhadrak.
 - (a) Installation of CCTV
 - (b) Webcasting of Vulnerable Polling Stations.

The details of tender along with terms and condition of filing tenders etc. are available in the District portal can be downloaded from the website www.bhadrak.nic.in.

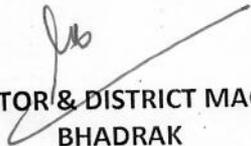
Interest firms should submit their Technical bid and financial bid in separate sealed envelopes for the tender.

The sealed envelope containing the proposal should be sent by Regd. Post/Speed post of Indian Postal Department to District Election office, Bhadrak to be delivered by the stipulated date and time stated above. No other mode of delivery shall be accepted.

TERMS AND CONDITION

1. Each Bidder is required to deposit cost of tender paper of Rs.1000/- (Rupees One thousand)only which is non refundable amount and may be payable through Bank Draft or in Nationalize Bank in favour of Collector, Bhadrak payable at Bhadrak. Earnest Money of Rs.10,000/- (Rupees Ten thousand) only may be payable in shape of Bank draft at any Nationalize Bank in favour of Collector, Bhadrak at payable at Bhadrak. Tender paper without cost of Tender papers and EMD will be summarily rejected. The Earnest Money deposited by unsuccessful bidders will be refunded/returned after finalization of tender.
2. Self attested photocopy of Pan Card, GSTIN, no dues certificate from Income Tax Department and clearance of any other Tax dues up to 31.03.2018 should be submitted along with the tender paper failing which the tender will not be taken into consideration.
3. The tenders will be required to supply the articles within 7 days from the receipt of supply order.
4. The EMD of the selected firm/supplier will be released only after satisfactory execution of the work order, performance as well as supply of specified articles.

5. In case of failure to supply of the required no. of articles and quantity in full as per specification within stipulated period the EMD will be forfeited and criminal liability as per Election Rules will be fixed.
6. The price quoted in the tender should not include the GST but must be shown in separate column.
7. All the articles/materials are to be delivered in District Election Office, Bhadrak on requisition and the cost of transportation will be borne by the successful tender. In case of CCTV and Web-casting, the successful bidder has to install those in the specified locations and obtain certificate from the respective authorized Officers. Price of CCTV etc. and installation charges, if any should be quoted separately. The firm having past experience in the case of installation of CCTV & Web-casting should quote details of work done during past Elections for consideration by the Tender Committee. The details Technical specification
 - (a) Hosting of web base streaming software.
 - (b) Live streaming and recording of polling at polling station.
 - (c) Live streaming and recording of counting process.
 - (d) Setting a help centre and diplomat of man power.
 - (e) Development of training materials.
 - (f) Reporting requirement and time schedule for daily variables.
 - (g) Service level agreement.
 - (h) Technical specification of camera.
8. The District Election Officer & Collector, Bhadrak reserves the right to accept or reject any or all tenders or a part thereof without assigning any reason there for. He also reserves the right to increase or decrease the quantity of any materials/article/execution of works. The decision of the District Election Officer & Collector, Bhadrak shall be treated final.
9. The firm/supplier whose tender will be accepted shall have to execute an agreement with the District Election Officer, Bhadrak or his authorized Officer in non-judicial stamp worth Rs.10/- (Rupees ten only) in the prescribed form on the next day of acceptance of the tender and supply order will be issued.
10. The firms filling tenders are required to remain present through their authorized representatives during the finalization of the tenders by the District Tender Committee on the stipulated date & time.
11. Payment of cost of the articles/works executed will be made after receipt of necessary allotment/funds from Govt. in Home (Election) Department, Odisha, Bhubaneswar and certificates from the competent authority.
12. The rates quoted by the bidders are valid for a period of one year from the date of signing of the agreement/finalization of the tender.


COLLECTOR & DISTRICT MAGISTRATE
BHADRAK

B. Technical Specifications

Task 1: Hosting of the web based streaming software:

The bidder shall deploy suitably secured proven web based software, that has the ability to record video. The key features of the software shall be:

1. Able to record video in H.264 compression or other equivalent open formats which can be read by a variety of open source software solution.
2. This may be either encoded within the video stream or recorded as a separate stream.
3. The camera should be wall mounted and fixed. It should be appropriately secured from physical damage.
4. The web camera should be so placed to cover the maximum possible area in polling station without hampering the secrecy of vote. The light and glare should be minimum and should be capable of zooming in as per the requirements.
5. During recording the assembly constituency (AC No 5) and polling station no. (PS No 1) should be visible clearly in camera view.
6. Further, it must be insured that in the framework used for webcasting, advertisement of any kind is not displayed.
7. Video should have the running time stamp. The timestamp should come from a secured location / source and should be approved by the Nodal Officer.
8. The recording should not require any specialized software for viewing and should be done using the standard browsers which include the latest and up to 4 previous versions of the following — Google Chrome, Internet Explorer, Mozilla Fire Fox and Apple Safari.
9. The Application shall be loaded from the Browser and the operator shall, only have the capability to Start and Stop the Recording. (The operator is @ person provided by the bidder, who will use and operate the recording system and online application at the polling station).
10. The software shall provide video streaming URL with password protection to view district wise, parliamentary constituency wise and polling station/counting centre wise videos which are streamed from the polling stations/counting centres. The software shall provide for secure data streaming over the internet, with viewing access only to the CEO, and such other Offices as authorized by the CEO with user id and password. The data streaming shall not be open for viewing by the public over the internet without the approval of CEO
11. The software shall include options for
 - a. Connectivity status of web camera/IP camera from _ the polling station/counting centre whether the stream is online/offline
 - b. Option for auto rotation of videos within assembly constituency/district/state level based on the type of user connected and options selected.
 - c. Option for on-demand view of the polling station/counting centre wise video
1. Upon browser based video recording commencement, generic desktop lock must be engaged to disable all other applications from launching and connecting to the internet.
2. The software provided should have been developed by the bidder and should not be the free software or shareware available on the internet. During the recording, the User should be able to see the actual video that is being recorded,
3. The software should be able to offer graceful degradation of the recording quality in case there is deterioration in the network speed. This should be automated without any user inputs to be required on this,
4. The necessary load testing should also be carried out so that web streaming event meets the demand and goes through smoothly with good performance.
5. Software provided shall be able to perform query of the video content of the storage. The software shall

- be able to burn CD and DVD disks on Windows based computers and be able to query the content available based on multiple parameters as Data, Time, Location, etc.
6. The Video Streaming solution should be such that it supports rewind with playback option and the option to move to the current live status of recording.
 7. The Video Streaming solution should be able to display multiple streams happening at the same time on one TV location. It shall provide for the selection of any of the polling stations at any time on poll day, from where video data is being streamed, for viewing in the Offices of the CEO, DEOs & ROs.
 8. The software shall list all polling stations/counting centers with their respective webcast after collecting and updating the details and the application software design from the nodal officer.
 9. The data should in no point be hosted outside India and bidder will not access the data unless authorized by the CEO/DEO.
 10. The video recording of the live webcasting at server shall be done as per the instructions of the nodal officer and shall not be stored in any form in any type of devices outside CEO's office after giving backup of all the videos to CEO's office. The bidder shall add the digital video watermark in the background of the streaming videos.
 11. Uploading of the videos shall be carried out by the manpower posted by the bidder at each identified place, using webcam/HD camera and connectivity of either 4G/3G/2G/broadband, WiMax, DSPT etc., based on local availability.
 12. At the end of each event, the web streamed data along with required reports, shall be made available within 4 days to the Client in a Hard disk for later retrieval and usage as necessary.
 13. The Client shall facilitate the bidder in interaction with the telecom service providers to see that the connectivity is ensured during the events towards the smooth transmission of web streaming data.
 14. The client shall also ensure the safety of the equipments such as Laptops, internet connectivity devices, high end cameras etc., installed by the bidders at the respective places, till the events are over.
 15. The bidder shall also develop an application software which monitors the data feed from each Polling Station on the polling day and also from each HD camera in the counting centre on the counting day based on which the performance status of the data feed, and the live streaming at the offices of the RO/DEO/CEO, will be arrived on the Service Levels provided, to levy penalties as indicated under penalty clause. This software should be vetted from CEO a week before deployment.

The bidder shall provide access to dashboard view for more than one locations, i.e. DEO, CEO and ECI HQ which should reflect point of failures, network status, recording status and downtime status. Network quality indicator on each camera should be made available in the User view mode and this should be computed and displayed automatically.

Task2. Live Streaming and Recording of the Polling at Polling Stations

1. A pre-determined list of polling stations from where live web streaming will happen shall be shared with the bidder,
2. Number of Locations for Video: (input numbers) (approximately)
3. The bidder has to supply and install the IP based web cameras, as per the minimum specification in the identified Polling stations. The web camera should have facility of local recording, with minimum of 3 Megapixel camera resolution. The camera should have night vision capability, wide angle with 30/ 170 degrees coverage. The camera should be having capability of 10x zooming. The camera should have minimum illumination of .05 lux.
4. The camera should support 16-4096 Kbps code rate, support constant bit rate/variable frame rate of up to 30 fps. Image Control: Backlight compression, Automatic white balance, 3D digital noise reduction. The display should be supported is 1920 x1080.
5. The bidder has to provide the suitable internet connectivity on all locations of installation of cameras for the services rendered by the bidder.
6. The bidder has to post one person at each identified polling station, with proper training on the usage of the web streaming software, using the camera and the internet connectivity on the day of polling and also during trial runs

7. The bidder is required to have at least two dry/trial runs of the process, to satisfy the Client that their systems are in good working condition at least two days before the poll and the counting day.
8. In case of Re-poll ordered at a booth under live web streaming, the web streaming of that re-poll shall continue to be the responsibility of the bidder. This will not entail additional financial commitment.
9. The bidder shall also provide the following, in the offices of RO, DEO & CEO to view the live feeds of the polling day activities smoothly by providing LED TV 70 “
10. The bidder shall ensure that the live feeds are transmitted in a secure manner to the server and then to the concerned officials up to the satisfaction of the nodal officer, for the duration when the operations are on.
11. The bidder shall ensure that the recorded material transmitted does not fall into the hands of any party, not authorized by CEO to receive the same.
12. The recorded material shall be the exclusive property of the CEO and neither the bidder nor any other party will be entitled to utilize the same.
13. After the event is over on polling day, the supplied LED TV's and internet connectivity, have to be taken back and manpower has to be withdrawn by the bidder.
14. The bidder shall provide adequate compute performance on the servers and storage along with suitable high speed internet / network bandwidth to accommodate the multiple video streaming.
15. The Client will provide the list of mobile phone facilities of the election officials (that of the Presiding Officer / PO Officer), in an excel/CSV format, to the bidder, a few hours before the start of the election process for communication purposes.
16. The video should be live streamed to the Control centre via the server. The bidder should deploy the following resources on the days of polling and counting in each Control Centre
17. The bidder shall provide the sufficient internet bandwidth for the live streaming of the poll day event.
18. In case of any disruption due to internet connectivity, the streaming data has to be stored in the local Hard Disk and the same shall be made available in DVD at the end of the day to the officials concerned.
19. Number of Days required for recording at each location : 1 day [References to Day means 24 hours or part thereof

Task 3. Live Streaming and Recording of the Counting Process

1. The bidder has to supply and install the IP based HD web cameras, as per the minimum specification in the identified Polling stations. The web camera should have facility of local recording, with minimum of 3 Megapixel camera resolution. The camera should have night vision capability, wide angle with 30/170 degrees coverage. The camera should be having capability of 10x zooming. The camera should have minimum illumination of .05 lux.
2. The camera should support 16-4096 Kbps code rate, support constant bit rate/variable frame rate of up to 30 fps. Image Control: Backlight compression, Automatic white balance, 3D digital noise reduction. The display should be supported is 1920 x1080.
3. A pre-determined list of locations where Counting Process will happen shall be shared with the bidder.
4. All the items for Task 1 are required to be adhered to as applicable, Some Important Details for the consideration includes:
5. Number of Locations for Video Recording: (enter Nos) (approximately).
6. The bidder shall supply (specify nos) of High end IP cameras as per the specifications given in (enter Appendix No) at each counting centre location as per the breakups:
 - a. Near the counting board : 1 No
 - b. Near the RO :1No
 - c. Tables 1 to (n) : (write numbers) Nos
7. These cameras should support full HD recording. These cameras will be owned and operated by the bidder and shall be taken back at the end of the assignment.

8. Description and make / model of these cameras should be provided in the proposal.
9. Number of Days required for recording at each location : 1
10. The bidder shall provide the sufficient internet bandwidth to the high end cameras for web streaming of the counting day event.

Task 4: Setting up a Help Centre & Deployment of Manpower.

1. The bidder is required to deploy adequate manpower to meet all conditions of the assignment. The following teams shall be required to be created.
 2. Centralized Help Desk in state HQ operating under the Control of the Nodal Officer.
 3. Team with (enter number) seater minimum, shall be located in (location) and shall assist all other locations to fix the issues that are coming up relating to this assignment.
 4. The help desk should be operational on 3 days before polling and one day after polling, including the polling day. If there is a repoll, it should continue, till the end of the repoll.
 5. Similarly the helpdesk should also function two days before counting and one day after counting including the counting day. If there is recounting, it should continue till the end of the recounting.
 6. Manpower: These personnel should be skilled in the application software being deployed by the bidder, their configuration, use, etc. They should be available to assist with any issues arising during the course of the assignment.
 7. The CVs of all the personnel, being deployed should be provided as per Appendix-4. Each of the personnel should have at least two of the following with him while in duty. — A Passport, A Driving License, PAN Card, Aadhaar Card or other form of identity as specified by the Nodal Officer.
 8. The following details shall be provided by the bidder in the CVs ~ Name, Date of Birth, and Copies of Identity cards as above, Permanent Address, Address during the last 10 years, Any Criminal or Civil Record, Educational Qualifications, Experience.
 9. There may be Police / Security Clearance checks conducted against the personnel and the Client may ask for any or all personnel to be replaced, which shall be required to be complied with immediately.
 10. The personnel shall be required to operate around day of polling and counting process from each of the Centre posted, in each of the (Parliamentary /Legislative) Assembly Constituency.
 11. The personnel have to report for duty on one day before the polling day and should be available till the sealing of EVM's is completed. Similarly during counting, the personnel have to report for duty one day before counting and should be available till the counting process is over completely.
 12. Training of these personnel and the tasks shall include: Training the manpower in downloading the web streaming application and in the setting up of the entire recording system and allied issues, like connectivity, alert assistance etc. The training required will have to be conducted by the bidder, in the districts/at a suitable place for one or 2 days as decided before they are deputed to the concerned place for on duty.
 13. Troubleshooting any hardware/software issues related to entire process of recording, streaming and monitoring.
 14. Any other tasks found necessary for the successful live streaming of the videos.
 15. The client will issue election duty certificate (EDC) or Postal Ballot to the manpower posted in the respective locations as necessary. The manpower shall be asked to report for duty to the concerned officials when posted.

Task 5. Development of Training Material

1. A detailed Training Material is required to be developed by the bidder as the part of the assignment. The training material is required for the following purposes:
 - a. For operating the web streaming Software / Cameras etc.
 - b. For Post event operation of the Video Surveillance footage.
2. The Training Material should be in the following formats:

- pictures / images and text of How-To, Help Guides, etc.
- b. Multimedia: Video content including animations, videos, etc. for the above. Manuals on How to Video shall also be made available.
3. The training material shall be placed in a secure location on the internet, for access only by the authorized users. It shall also be available offline in PEN Drive / CD Discs to all locations, where it can be shared and disseminated with all the intended/required users. The Help Desk personnel shall additionally act as Facilitators to facilitate the learning progress.

Reporting Requirements and Time Schedule for Deliverables

The following would be the reporting requirements for the bidder:

1. An Inception Report within 1 week, from the start of the assignment. Weekly Progress Reports consisting
 - a. All works performed by the bidder
 - b. The Time Sheets / Attendance duly countersigned by the Nodal Officer
2. All Other Reports as required for the successful execution of this assignment.
3. Development and Maintenance of an MIS for all reporting purposes.
4. Final Report within 2 weeks of closure of all activities stipulated in the contract.
5. The reports may be submitted in hardcopy and in soft copy (through e-Mail / MIS / Shared Folder over Internet) to the officers concerned.
6. The bidder after completion of the recording activities, all data to be arranged on the Hard disks and handover to the nodal officer, within 4 days after each event (polling/counting) is completed. After handing over the data, the bidder shall not retain any data in their computers or in any form with them. Any deviation in this regard, the bidder shall be held responsible and liable for punishment as per law. The HDD shall be provided by the bidder at his own cost.

Release of Payment

- a. Submission of an irrevocable Bank Guarantee of the Contract amount in the format (specify format) specified to the Client.
- b. The following would be the Milestones and Payment

SN	Milestone	Approval	By Date
1.	Inception Report Submission	By CEO	
2	Training Documents and By CEO (Enter date) Multimedia content & Training for all officials concerned.	By CEO	
3	Two Trial runs and satisfactory Certificate before two days of poll day and counting day.	By CEO	
4	Submission of all other project the deliverables and final report.	By CEO and Payment in full	Within 15 days after completion of polling and counting events

No advance Payment will be made

Service Level Agreement

1. 100% Server, Network & Power Uptime SLA: The vendor should provide with 100% Server, Network & Power Uptime SLA as standard. This shall be applicable during the Election Day as declared by the client and shall be applicable for 24 hours or as decided by the client. The vendor should ensure.

SERVICE AVAILABILITY	Deduction from total cost
99.8% to 100%	0%
98% to 99.8%	10%
95% to 97.9%	25%
90% and below	50%

2. The buffer should not happen in the streaming at the CEO, DEO and RO office. Vendor will develop a dashboard for reporting the buffer and failure.

Buffer and connection Loss	Deductions from the total cost
<10 point failures	0%
>10 Points Failure	10%
>50 Points Failure	25%
100 Point Failures	50%

Appendix

Technical Specifications of the camera

During Palling	IP based web camera
	3 Mega Pixel minimum
	night vision capability
	wide angle with 30/ 170 degrees coverage
	Minimum illumination of .05 lux.
	support 16-4096 Kbps code rate
	support constant bit rate/variable frame rate of up to 30 fps
	Image Control: Backlight compression, Automatic white balance, 3D digital noise reduction.
	display should be supported is 1920 x 1080.
During Counting	IP based HD web camera
	3 Mega Pixel minimum
	night vision capability
	wide angle with 30/ 170 degrees coverage
	Minimum illumination of .05 lux.
	support 16-4096 Kbps code rate
	support constant bit rate/variable frame rate of up to 30 fps
	Image Control: Backlight compression, Automatic white balance, 3D digital noise reduction.

Display should be supported is 1920 x1080.

FINANCIAL BID FORMAT

{To be submitted by the bidder at e-Procurement portal}

S.No	Item	Description Qty	Unit Price Excluding GST (In Rs.)	Applicable GST (in Rs.)	Unit Price (In Rs.) (Inclusive of GST)	Total Amount In Rs.
1	2	3	4	5	6 = (4+5)	7 = 3X6
1	End to End LIVE Webcast services (per half day event)	1				
2	End to End LIVE Webcast services (per full day event)	1				
Total in Words						

NOTE:

1. The prices offered by the bidder for various items will be evaluated on composite basis i.e., price of all offered items shall be added together and the bidder stands L-1 on composite basis shall be considered for award of contract.
2. The rate quoted for webcasting events shall remain same for the entire period of contract i.e. for a period of one (1) year.
3. Bidders are expected to quote for all the item categories mentioned in above table. In case a bidder does not quote for any of the item category, the bid shall be summarily rejected.