

**OFFICE OF THE EXECUTIVE OFFICER
DIGHA SANKARPUR DEVELOPMENT AUTHORITY**

(A Statutory Authority under Government of West Bengal)

Digha New Township :: Purba Medinipur :: Pin - 721463

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ONLINE NOTICE INVITING QUOTATION NO. : NIQ- 003/DSDA/ OF 2020-2021

Name of Scheme : Replacement of Old CCTV Camera & installation of new CCTV Cameras at different locations in Digha.

Online Quotation through **Double Bid System** on behalf of the Digha Sankarpur Development Authority is hereby invited from reliable, resourceful, bonafide and experienced firms/organization/ companies / individual contractors having financial capability and sufficient technical credential of Rs. 60.00 lakh at least for a single work order of similar physical security/IT Security/IT infrastructure Project/installation of CCTV work within last 5 years in a single contract from the date of NIT in any Government / Semi Government / Undertakings / Autonomous / Statutory bodies /Local bodies. The details are given below.

1.	Name of work	:	Replacement of Old CCTV Camera & installation of new CCTV Cameras at different locations in Digha																																				
2.	Location of work	:	Digha, Purba Medinipur.																																				
3.	Scope of Work and Specification	:	Supply, fixing & installation of CCTV Cameras specified hereunder <table border="1" style="width: 100%;"><thead><tr><th colspan="2" style="text-align: center;">5 MP (2560 x 1920) ANPR CAMERA</th></tr><tr><th style="text-align: center;">Feature</th><th style="text-align: center;">Specification</th></tr></thead><tbody><tr><td>Resolution</td><td>Minimum 5MP (2560 x 1920)</td></tr><tr><td>Image Sensor</td><td>1 / 2.8" CMOS or CCD</td></tr><tr><td>Motorized Lens</td><td>5 ~ 50 mm or higher DC-IRIS</td></tr><tr><td>Video Compression</td><td>H.265 , Smart Codec</td></tr><tr><td>Resolution</td><td>2560 x 1440 ,1920 x 1080 , 1600 x 904 , 1360 x 768 , 1280 x 720 ,640 x 360</td></tr><tr><td>Minimum Illumination</td><td>0.06 Lux / 0Lux (@F1.9, IR on)</td></tr><tr><td>Privacy Masking</td><td>Camera should support min 5 areas.</td></tr><tr><td>Zoom</td><td>Optical</td></tr><tr><td>FPS</td><td>2560 x 1440(1 – 50 FPS) for high speed moving vehicle</td></tr><tr><td>Electronic Shutter Speed</td><td>Auto/Manual, 1/32000 ~ 1/30</td></tr><tr><td>S/N Ratio</td><td>More than 50dB</td></tr><tr><td>ICR</td><td>The camera shall incorporate a physical ICR filter for quality images both during day and night</td></tr><tr><td>IR Range</td><td>Min 60M</td></tr><tr><td>Number of IR</td><td>Min 4 nos or better , Smart IR</td></tr><tr><td>Video Streaming</td><td>3 streams</td></tr><tr><td>Angle of View</td><td>H: 45° ~ 7°, V: 33° ~ 5°</td></tr></tbody></table>	5 MP (2560 x 1920) ANPR CAMERA		Feature	Specification	Resolution	Minimum 5MP (2560 x 1920)	Image Sensor	1 / 2.8" CMOS or CCD	Motorized Lens	5 ~ 50 mm or higher DC-IRIS	Video Compression	H.265 , Smart Codec	Resolution	2560 x 1440 ,1920 x 1080 , 1600 x 904 , 1360 x 768 , 1280 x 720 ,640 x 360	Minimum Illumination	0.06 Lux / 0Lux (@F1.9, IR on)	Privacy Masking	Camera should support min 5 areas.	Zoom	Optical	FPS	2560 x 1440(1 – 50 FPS) for high speed moving vehicle	Electronic Shutter Speed	Auto/Manual, 1/32000 ~ 1/30	S/N Ratio	More than 50dB	ICR	The camera shall incorporate a physical ICR filter for quality images both during day and night	IR Range	Min 60M	Number of IR	Min 4 nos or better , Smart IR	Video Streaming	3 streams	Angle of View	H: 45° ~ 7°, V: 33° ~ 5°
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ROI	5 areas or higher
Backlight Compensation	BLC should allow adjusting the gain of the camera to improve exposure of the subjects that are in front of a bright light source
Wide-Dynamic-Range	The camera should give a WDR range of minimum 120 dB Real WDR (Must be Hardware driven)
Noise Reduction	3D-DNR
Camera Tampering	The camera shall provide real time tampering protection by means of alerts generated at the software.
Pre/Post Event Buffering	The camera should support a least of 3 seconds of pre & post event buffering.
Event Notification	Event notification using digital output, HTTP, Email and MicroSD card
Network	IPv4, IPv6, TCP / IP, HTTP, HTTPS, UPnP, RTSP / RTP / RTCP/RTKC,IGMP / Multicast, CIFS / SMB, SMTP, DHCP, NTP, DNS, DDNS, CoS,QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS
Cyber Security Features	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH / Telnet closed, PCIDSS compliance, FIPS Chipset Built-In
Micro SD Slot	Should support upto a 256 GB micro-SD
Others	Exposure Control, AGC, White Balance, day/night
Event	Video motion detection, Periodically, Alarm input, System boot, Recording notification, Camera tampering detection
Built-in Video Analytics	Intrusion, Loiter, Line crossing, Unattended object, Missing object, Face detection
Network Ethernet	RJ-45 (10/100Base-T)
Power Source	12 VDC / 24 VAC (50 / 60Hz), Heat On: PoE (IEEE 802.3 at, Class 4), Heat Off: PoE (IEEE 802.3 at, Class 3), Auto Sensing
Power Consumption	Max 25.5 Watt or less
Smart Phone/ Web	It should support remote monitoring over iPhone, iPad, Android and Windows Phone including desktop/PC
Quick Configuration	Analog output&Wifi Dongle for configuration
Operation Temperature & Humidity	-40 °C to 60 °C & Less than 90% RH
Housing Standard	IP67, NEMA 4X, IK10
Open Protocol	ONVIF Profile S , G (Model must found on onvif.org website)
Alarm	2 In / 1 Relay Out
Audio	Line In / Out
Audio Compression	G.711a / G.711 Mu / G.726
G-Sensor	Support Camera Direction OSD Display (Default - Off)
Construction Material	Metal with powder coating
Certifications	UL,FCC ,RoHS, CE, NDAA Compliant
OEM Warranty	5 years (Warranty should be mention on project specific Authorization)
Country of Origin	bidder to specify
Acceptable Make	Honeywell, Bosch, Axis

5 MP (2560 x 1920) OUTDOOR BULLET CAMERA

Feature	Specification
Image Sensor	1/2.7" CMOS or CCD
Lens Type	2.8 ~ 12 mm or Better
Resolution	2560 x 1920 (5MP)
Minimum Illumination	Color :0.035Lux @f/1.4, B/W : 0Lux @f/1.4(IR on)
IR Distance	50 Mtr or higher
Electronic Shutter Speed	1/5–1/32 000 s
Day/Night	WDR, HLC
Noise Reduction	3DNR
Backlight Compensation	WDR 120dB(Must be Hardware driven)
Edge Base Storage	Support 256 GB Micro SD
Event	Motion, Intrusion, Tempering Detection
VIDEO COMPRESSION	H.265 , Smart Codec
Video Streaming	triple stream support
Supported Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP,RTSP/RTP/RTCP/RTKC, IGMP, SMTP, DHCP, NTP,DNS, DDNS, CoS, QoS, SNMP, 802.1X, UDP,ICMP, ARP, TLS
COMPATIBILITY	ONVIF Profile S , G (Model must found on onvif.org website)
OPERATING TEMPERATURE	0°C to +60°C
RELATIVE HUMIDITY	0–95%, non-condensing
Cyber SECURITY	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH / Telnet closed, PCIDSS compliance, FIPS Chipset Built-In
Built-in Analytics	People Detection, Motion Detection
Housing	IP66, Metal with powder coating
Power Supply	12 V DC, PoE , Max 13 Watt
Certificates	UL, FCC, CE (EN 50130-4) RoHS(EN50581),NDAA Compliant
OEM Warranty	5 years (Warranty should be mention on project specific Authorization)
Country of Origin	bidder to specify
Acceptable Make	Honeywell, Bosch, Axis

2 MP (1920 x 1080) OUTDOOR PTZ CAMERA

Feature	Specification
Image Sensor	1/2.8" CMOS or CCD
Optical Zoom	30X
Lens	4.3 mm – 129 mm
Resolution	2MP (1920 x 1080)
PAN travel	360°endless
Tilt Angle	–110° to +110°

Manual Speed	1° - 400°/s
Preset	256
FPS	60
Minimum Illumination	Color: 0.1 Lux at F1.6, B/W : 0.005 Lux @ F1.6
Electronic Shutter Speed	1/1 TO 1/10,000 sec
Day/Night	Auto (ICR)/Color/BW
Noise Reduction	2D/3D
WDR	120dB
Edge Base Storage	256 GB SD Card Supported
Iris	DC-Iris
Audio	In/Out
Video Compression	H.265
Video Streaming	Triple streaming
Supported Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, SSL, FTP, SMTP, DHCP, PPPoE, UPnP, SNMP, Bonjour, DDNS, IEEE 802.1x, QoS, NTP, IP Filter, ONVIF
Cyber Security	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH / Telnet closed, PCIDSS compliance, FIPS Chipset Built-In
Standards	ONVIF Profile S , G (Model must found on onvif.org website)
Operational Temperature(Industrial Grade)	0°C to 60°C
Relative Humidity	Less than 90%, non-condensing
Ingression Protection	IP67, NEMA 4X, IK10
Power Supply	24VDC/24VAC/60W UPOE, Max 48 Watt
Certificates	UL, FCC, CE (EN 50130-4) RoHS(EN50581),NDAA Compliant
Construction	Built in Heater, Metal with powder coating
OEM Warranty	5 years (Warranty should be mention on project specific Authorization)
Country of Origin	bidder to specify
Acceptable Make	Honeywell, Bosch, Axis

Supply of Network Video Recording Management Software (NVRMS) :
SYSTEM COMPONENTS

- VMS: The VMS shall contain the recording engine, database of all network-connected cameras and encoders, integrated components and their configurations. Server shall be provided as a combined hardware and software device.
- Workstation Software (VMS Client): The VMS Client software shall render video and act as a main human/machine interface.

OPERATIONAL REQUIREMENTS

- A. VMS shall provide a user-friendly graphical user interface (GUI) to configure the cameras, create schedules for recording, perform video

surveillance and recording operations, and view various reports.

- B. VMS shall be configured to store and to view images captured by minimum 4 cameras and scalable on same hardware for up to 128 cameras.
- C. VMS shall have following major capabilities:
 - 1. Record and monitor up to 128 IP channels at 720P resolution
 - 2. Live viewing of up to 128 IP cameras on a single remote workstation with up to two (2) monitors set up at CIF resolution. For 4CIF and HD resolution, the number of live streams needs to be benchmarked based on client hardware configuration deployed. Cost-effective enhanced HD video rendering on remote desktop clients with support for monitoring of up to 23 @ 1080p HD cameras in real time (30 fps) 1080p FHD with no-time lapse using the GPU capabilities of in-built processor graphics with 6th generation Intel® Core™ Processors for client systems.
 - 3. Powerful investigation and video archive search tools from remote client.
 - 4. Native device integrations supporting new features: 4K resolution, H.265 video compression codec, 3D PTZ control, 360° camera support, and intelligence events.
 - 5. Capable of managing motion detection-based recording with pre-event and post-event recording based on camera based motion detection or Server based motion detection events (SMART VMD) and “advanced” search on recordings from remote client.
 - 6. Preview and Calendar Search permitting search for videos and events based on user-selected date and time from remote client. SMART motion search – fast and efficient forensic search and investigation for objects/motion on recorded video using SMART motion detection Analytics algorithms on the client PC without impacting the VMS Server load.
 - 7. Simultaneous use of multiple video compressions including MJPEG, MPEG-4, H.265 and H.264
 - 8. Internationalization – supports the following languages: French, German, Russian, Italian, Spanish, Dutch, Arabic and English.
 - 9. Email on alarm.
 - 10. Instant clip creation from snapshot.
 - 11. Dynamic IP Camera Discovery – Automatically discover all compatible cameras connected to VMS.
 - 12. Multi-level user access rights for viewing and manages access to the recorder functions.
 - 13. Capable of managing continuous, scheduled, manual, event-based, and alarm-based recording features.
 - 14. Advanced security features with encryption support for communication between desktop client to VMS and secure https login for Web Client and mobile apps.
 - 15. Support for web client and mobile apps.
- D. Mode for User Login: VMS shall have the option of two modes of user logins:
 - 1. Windows Authentication: Uses Windows logged-in username.
 - 2. User DB Authentication: Uses preconfigured username and password.
- E. Workstation (VMS Client) shall provide the following operator options:
 - 1. Configuration: The operator (with Administrator privileges) shall have the option to configure the VMS. Live update of all configurations is supported. The following configurations shall be possible:
 - a. System Configuration: Provide options to configure the system level settings.
 - b. Camera Configuration: Provide options to add/edit/delete IP cameras and encoders.

- c. Schedules: Provide options to configure schedule-based recording for cameras connected to the VMS.
- d. Input and Output: Provide options to configure camera input and output.
- e. Sequences: Provide options to group a fixed number of cameras to view video.
- f. User Management (Users and Roles): Provide option to add/edit/delete users.
- g. Clip Deletion Settings: Provide the ability to automatically utilize more storage on event-initiated recording.
- h. Independent deletion setting for continuous recording.
- i. Independent deletion setting for event recording.
- j. 3D Positioning: The user shall be able to view a specific object in the live video in a 3-dimensional view. This feature is available in the Context menu options and is only supported for PTZ Cameras. 3D positioning options include: Click-based camera positioning, Rectangle selection 3D positioning, and Restore to last PTZ position.
- k. Profile Cameras: Multi-zoom views on HD video and support to create virtual cameras by digitally zooming into the field of view. For example: zooming in on a cash register in one view of the HD camera while at the same time monitoring the cashier in the zoomed out view of that HD camera.

F. Configurations for cameras connected to VMS:

1. Camera Configuration: The user shall be able to configure the following parameters for each camera connected to the VMS.
 - a. Camera Name
 - b. IP Address
 - c. Camera Type
 - d. Fixed/PTZ
 - e. Continuous Recording: All cameras added shall be defaulted to "24/7" recording with the option to select other recording modes.
 - f. Event Based Recording: Shall be "None" by default, with the option to select motion-based recording.
 - g. User name: Shall display and enable setting the user name for a camera.
 - h. Password: Shall enable setting the password for a camera.
 - i. Camera Advanced Settings: Shall enable configuration of Video Format, Compression Format, Resolution, Compression, Video Frame Rate, GOP, Record Quality Settings, Clip Deletion Settings, Launching Web View of camera for Advanced Setup, Motion detection zones configuration for Server based motion detection, Video Archival Settings, Multi-Stream Settings and Video Preview. Shall enable configuration of RTSP URL for cameras or encoders added with camera type – Generic RTSP.
2. The following video recording options shall be supported:
 - a. Scheduled based recording: The system shall support the ability to schedule recordings for each individual camera for times in the future. By default, the VMS shall be pre-loaded with the following four schedules: 24x7, Weekday, Daytime, and Nighttime, which cannot be edited. A maximum of 50 schedules can be created in the VMS.
 - b. User based recording: The user shall be able to configure user activated settings for recording moments of interest while viewing live video from a camera. After configuring the user activated settings, the operator can start recording of video when needed. The video is recorded for the time period specified in the System settings for user activated recording.

The User based Recording Time Duration shall be selectable from a list of values ranging between 30 seconds and 5 minutes.

- c. Event based recording: Event based recording shall be possible on SMART Video Motion Detection and alarm triggers. The VMS must be capable of managing motion detection-based recording with pre-event and post event recording based on camera and Server-based motion detection events.
- G. Viewer: The VMS Viewer shall have the following minimum capabilities:
 - 1. Main video viewing screen capable of showing 1, 4, 9, 16, and other customized split salvos of live or recorded video. Standard presets shall be customizable to the user preferences.
 - 2. Capable of saving current salvo as a View and allowing the user to drag this view at any later point in time.
 - 3. Capable of configuring and running scan sequences.
 - 4. Capable of adjusting the contrast, brightness, and saturation settings for each camera independently.
 - 5. Capable of exporting user selected image or video clips in simple .wmv, .asf, .mpvc and .bmp formats. Capable of attaching a digital signature for authentication of exported clips in .wmv format.
 - 6. Capability to play back the video clips exported. Each video channel that is being recorded by the recording system shall be overlaid with text and a time stamp that is customizable by the user.
 - 7. Video format support — only playable in desktop clients and standalone Clip Player. Features quicker exports of raw video and support for estimating clip size and split to multiple clips to ensure clip storage media matches. Include the clip player with exported clip for easier review of video evidence and efficient investigation.
 - 8. Allow the user to initiate recording through the GUI or a controller.
 - 9. Capability of complete alarm management for the alarms coming from the VMS.
 - 10. Facility of surrounding camera view.
 - 11. Option to perform various operations through context menu on a particular video (live/recorded/sequence). These operations include: Full screen, point and drag, maintain aspect ratio, toggle text, digital PTZ, add bookmark, start recording, stop recording, mark in, mark out, save image, save image as, show surrounding cameras.
 - 12. Ability to manage timeline control of the recording device, which provides camera recording statistics. Timeline control shall have the following features: Mark input (with looping facility), bookmark, snapshot, time slider, time jump, play controls.
 - 13. Preference configuration including: frame rate of unselected panels, rendered type, preview pane, text display format.
- H. Search: The Search facility shall include search for recorded video and events based on date and time.
- I. Reports: The Report facility shall include event history report and audit log report.

VMS INTEGRATIONS

- J. VMS shall be compatible with the following interoperability standards:
 - 1. **Physical Security Interoperability Alliance (PSIA)**
 - 2. Open Network Video Interface Forum Profile S and G (ONVIF Profile S and G)
 - 3. Real Time Streaming Protocol (RTSP)
- K. VMS shall be compatible with the following Fixed and PTZ IP cameras
 - 1. Supports IP cameras from the following manufacturers.
 - a. Honeywell
 - b. AXIS® Communications
 - c. Pelco

- L. VMS shall be compatible with the following encoders:
 - a. Honeywell
 - b. AXIS® Communications
 - c. Bosch
 - d. ONVIF encoders
- M. VMS shall be compatible with the following 360° Camera solutions.
 - a. Honeywell
 - b. AXIS® Communications
 - c. Pelco
- N. VMS shall be compatible for Multi-site Video Management Systems:
- O. VMS shall be seamless integrated and compatible with various Enterprise level Access Control Security Systems
- P. Video Analytics like LPR, Face Recognition shall be supported through VMS
- Q. Camera, Video Analytics and ANPR should be from same OEM for better compatibility

AI Video Analytics

- I. The Video analytic features should be based on Artificial Intelligence which uses deep learning. The objects should be detected, classified, recognized and tracked based on the Artificial Intelligence.
- II. The AI VA should be robust to work in crowded and Indian conditions. There should be continuous learning which improves the performance.
- III. The AI VA algorithms should use GPU for faster processing.
- IV. The AI VA shall support scheduling so that that analysis can be enabled or disabled for a certain period of time.
- V. The AI VA shall support false alarm minimization using logical operation.
- VI. The AI VA shall offer redundancy on the analytics servers: stand-by failover.
- VII. The VA shall offer to add the analytics output onto the VMS as a camera.

Acceptable Make : Honeywell/ Bosch/Axis

Supply of ANPR Software Lic as per technical specification :

- a) The ANPR System shall automatically detect the license plate in the captured video feed in real-time.
- b) The ANPR System shall perform OCR (Optical Character Recognition) of the license plate characters (English alpha-numeric characters in standard fonts).
- c) The ANPR system shall be based on Artificial Intelligence which uses deep learning for very high accuracy
- d) The ANPR system shall support generation of auto E Challans (optional)
- e) The ANPR System will have a License Plate Database and will have an option to input certain license plates according to category like "Blacklist", "Whitelist", "Stolen", and "Expired" etc. by authorized personnel.
- f) The ANPR system shall be able to run with other applications like Illegal Parking, Speed detection, Face detection, Security analytic features for other cameras and should be able to relate them.
- g) The ANPR System shall store JPEG image of vehicle and license plate and E-challan related Videos/ Images can be generated.
- h) The ANPR system shall be able to run on servers without any local processing unit near the camera
- i) The ANPR system should detect the class of the vehicle
- j) The ANPR system should detect model of the vehicle
- k) The ANPR system should detect no helmet of the riders

Acceptable Make : Honeywell/ Bosch/ Axis

Server :

Server for recording as per below specification - Intel Xeon Silver 4110,2.1 Ghz,32GB RAM,MS SQL Server 2012 or higher, MS Windows 10 or Windows server 2016 or higher,500 GB free partition drive for OS, 2 x 10/100/1000 Port, Dual power supply, RAID 5, Hot Swappable HDD Slot.

Acceptable Make : HPE/IBM/Dell

Client server for VMS as per below specification - Intel Xeon 8 core,3.7 GHz or better ,16 GB RAM,MS Windows 10 or Windows server 2016 or higher,2 x 10/100/1000 port, Dual power supply, RAID 5, 1 TB HDDs.

Acceptable Make : HPE/IBM/Dell

Client server for VA as per below specification - Intel Xeon 6 core,3 GHz or better ,16 GB RAM,MS Windows 10 or Windows server 2016 or higher,2 x 10/100/1000 Port, Dual power supply, RAID 5, Hot Swappable HDD Slot, 8 TB HDD.

Acceptable Make : HPE/IBM/Dell

Client WS as per below specification - Intel i7 -6700 or 6th Generation processor ,2.1 Ghz,08 GB RAM,MS Windows 10 or higher,1 x 10/100/1000 Port,2GB Graphics Adaptor,500 GB free partition drive for OS,1 TB HDDs, Dual Monitor output, Video resolution 1280 x 1024,KB & Mouse.

Acceptable Make : HPE/IBM/Dell

Enterprise Grade 7200 RPM Surveillance HDDs 12TB (Acceptable Make : Segate/WD /Toshiba)

24 Port POE Switch with 4 SFP Port :

- 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only; Ports 1 – 24 support MACSec and 4 x SFP Ports Loaded with SM Modules
- 2 power supply
- Dual Core @ 1.2 GHz, 4 GB DDR3 SDRAM, 1 GB SD Card
- IPv6 Ready Certified
- 1000 Mb Latency: < 2.8 μ s (FIFO 64-byte packets)
- Routing table size: 10000 entries (IPv4), 5000 entries (IPv6)
- MAC address table size: 64000 entries
- 95.2 Mpps (64-byte packets)
- Routing/Switching capacity: 150Gbps
- Operating temperature range: 0° C to 45° C (32°F to 113°F)
- Operating humidity: 15% to 95% @ 104°F (40°C), noncondensing
- Storage temperature range: -40° C to 70° C (-40°F to 158°F)
- EN 60950/IEC 60950, UL 60950
- CAN/CSA 22.2 No. 60950
- EN 60825
- UL 60950-1; CSA 22.2 60950-1; EN 60950-1:2006+A11:2009+A1:2010+A12:2011
- FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013
- Generic: EN55022: 2010
- EN: EN55024: 2010
- ESD: IEC 61000-4-2
- Radiated: IEC 61000-4-3; 3 V/m
- EFT/Burst: IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)
- Surge: IEC 61000-4-5; 1 kV/2 kV AC
- Conducted: IEC 61000-4-6; 3 V

- Power frequency magnetic field: IEC 61000-4-8; 1 A/m, 50 or 60 Hz
- Voltage dips and interruptions: IEC 61000-4-11; >95% reductions, 0.5 period; 30% reduction, 25 periods
- Harmonics: EN61000-3-2:2006 +A1:2009 +A2:2009 Class A
- Flicker: EN61000-3-3:2008
- Command line interface
- Graphical user interface (Web browser)

SLA: Replacement within 5 days of fault detection

Acceptable Make : Moxa/Cisco/Perle

8 Port POE Switch with 2 SFP Port :

Industrial Grade Access Switch with 8 No's of 10/100 TX PoE+ (IEEE 802.3at) and 2 No's of 1000SFP Ports for Uplink, Dual power, Operating Temp : -10 to 60 Degree

Requirement

Shall have 8 No's of 10/100 TX PoE+ (IEEE 802.3at) copper ports (RJ45 connectors) and 2 No's of 1000SFP Ports for Uplink, SFP 10 KM from same OEM with LC connectors.

IEEE 1588 PTPV2 (Precision Time Protocol) for precise time synchronization of networks

DHCP Option 82 for IP address assignment with different policies

Ethernet/IP, PROFINET, and Modbus/TCP protocols for device management and monitoring

Should have Ring support with 250 switches in One Single Ring and have recovery time of <50ms for gigabit backbone

IGMP snooping and GMRP for filtering multicast traffic

IEEE 802.3ad for Port Trunk with LACP

Bandwidth management prevents unpredictable network status

Lock port function for blocking unauthorized access based on MAC address

Port mirroring for online debugging

Automatic warning by exception through email, relay output

RMON for efficient network monitoring and proactive capability

QoS (IEEE 802.1p/1Q) and TOS/DiffServ to increase determinism

Configurable by web browser, Telnet/serial console

Should work with Industrial network management software

System backup and restoration tool to enhance maintenance efficiency and reduce system downtime.

3kV LAN surge protection for extreme outdoor environments

PoE diagnostic for powered device mode analysis

Switch Shall have function to Monitor POE Status

User passwords with multiple levels of security protect against unauthorized configuration

Command line interface (CLI) for quickly configuring major managed functions

SSH/HTTPS is used to encrypt passwords and data

Lock switch ports with 802.1x port-based network access control so that only authorized clients can access the port

Disable one or more ports to block network traffic

Should support 802.1Q VLAN

Security: RADIUS, TACACS+, SSL, SSH, Port Lock

SNMPv3 provides encrypted authentication and access security
IPv4/IPv6, SNMP v1/v2c/v3, LLDP, Port Mirror, DDM, RMON, DHCP Server/Client, DHCP Option 66/67/82, BootP, TFTP,SMTP, RARP, Telnet, Syslog, SNMP Inform, Flow Control, Back Pressure Flow Control
Priority Queues: 4 Max. Number of VLANs: 64 VLAN ID Range: VID 1 to 4094 IGMP Groups: 1024 MAC Table Size: 8 K Packet Buffer Size: 1 Mbit
Alarm Contact 2 relay outputs with current carrying capacity of 1 A @ 24 VDC
PWR1, PWR2, FAULT, 10/100, PoE+
Console Port: RS-232 (RJ45 connector)
Overload Current Protection
Reverse Polarity Protection
Operating Temperature: -10 to 60°C
Ambient Relative Humidity: 5 to 95% (non-condensing)
Mounting : DIN-Rail mounting / wall mounting provision
Housing: Metal, IP30 protection
Input Voltage: 48 (46 to 57 V) VDC redundant dual inputs (> 50 VDC for PoE+ output recommended)
Safety: UL 508, EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A
EMS: EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3
Traffic Control: NEMA-TS2
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
MTBF : More than 700,000 hrs

Acceptable Make : Moxa/Cisco/Perle

**600 VA/1 KVA online UPS : Acceptable Make : APC/Numeric/Emerson
32MM HDPE Pipe :**

Size/ Diameter	32 MM
Material Grade	ISI Marked
Usage	The OFC will be laid underground in trenches through HDPE pipes as per Specifications to connect locations

Supportive Passive Networking Material :

GI SYNTEX BOX	As per project requirement
FIBER JOINT KIT BOX	
PIGTEL	
RJ 45 CONNECTOR	
CLAMP FOR CAMERA	

Acceptable Make : Molex, CommScope/Syntex

CAT6 Cable : Acceptable Make : Molex, CommScope/ D-Link

Conductor	Solid Bare Copper AWG 23
Insulation	HDPE
Average Thickness (± 0.03 mm)	0.23
Min. Point Thickness (mm)	0.18
Insulation Dia. (± 0.05 mm)	1.04
Twisting Lay Length (mm)	30 underneath
Cabling Lay Length (± 10 mm)	140
Filler	PE
Jacket	Fire Retardant PVC 332.1
Average Thickness (± 0.05 mm)	0.5
Min. Point Thickness (mm)	0.46
Weight (kg/box)	14
Operating Temperature	maximum 75°C
NVP (%)	As listed on sheath
Delay Skew	45ns Max
Impedance	100 \pm 15 Ohms
Current Rating	1.5 A Max
Conductor DC Resistance	66.5 Ω /km
Voltage	150VAC
Propagation delay	535ns/100m @ 250MHz
Mutual Capacitance	5.6nF/100m Nominal
Insulation Resistance	500 M Ω Minimum
Dielectric Strength	1000 V RMS
Contact Resistance	10 m Ω Max
Insulation Resistance:	500 M Ω Minimum
Dielectric Strength:	1000 V RMS
Contact Resistance:	10 m Ω Max
Commercial Standards	EN 50173 2nd Edition, ISO/IEC 11801 2nd Edition, EIA/TIA-568.2-D RoHS Compliant
Fire Propagation Tests	UL E137775 VW1, IEC 60332.1, EN0256-2-1 Performance Characters - Category 6 TIA-568.2-D

6U & 42U Rack : Acceptable Make : Netrack, APW, ValRack : Server /IT Rack mount with power distribution unit, 1Ph, 230V, 8A, 50/60Hz, 2U standard with 6 X Indian Round Pin 5A, Inlet Plug type 6A Indian Round Pin, 8A Fuse - PDU Rating 1.8KVA/Side feed-1.5Mt/ Black

55" LED Commercial Display with HDMI & Mounting bracket/Tabletop
(Acceptable Make-LG/Sony/Samsung)

IP Based Joystick for 3 Axis proportional PTZ Control : Supply of IP based Joystick for 3 Axis proportional PTZ control, RJ 45 with POE, USB Port, Touch wheel, LCD 122 x 32 Dots Display.

Acceptable Make : Honeywell/ Bosch/Axis

SFP Module : (Acceptable make - Moxa/Cisco/Axis)

		<p>3 core copper cable (Acceptable make - Finolex/mescab/Havells)</p> <p>2 core aluminum cable (Acceptable make - Finolex/mescab/Havells)</p> <p>HDMI Cable</p> <p>Power Board : (Acceptable make - Havells/ Anchor/Palfrey)</p> <p>Surveillance Monitoring PC (HP/Dell/IBM)</p> <p>6 Mtr. Pole (Utkarsh/Bajaj/N.S.Engg)</p> <p>6 core outdoor single mode OM3 Optical Fiber Cable, LSZH Jacket (International Standard)(acceptable make - Finolex, Molex, CommScope).</p> <p>Other works as per NIQ.</p> <p>Total system should be maintained for 5 years from the date of completion with a periodical maintenance in every 3(three) months.</p>

2. Earnest Money :

₹ 3,00,000.00 (Rupees Three lakh) only.

3. Schedule of Dates :

Sl. No.	Activity	Date & Time
1	Date of Issue of NIQ	: <u>02.11.2020</u>
2	Document download start date	: 02.11.2020 at 6.00 P.M.
3	Document download end date & time	: 23.11.2020 upto 3.00 P.M.
4	Pre-bid meeting in the Office Room of the Executive Officer, DSDA, Digha	: 11.11.2020 at 2.00 P.M.
5	Bid submission start date	: 11.11.2020 at 4.00 P.M.
6	Last date of online submission of Technical Bid and Financial Bid .	: 23.11.2020 upto 3.00 P.M.
7	Opening of Quotation Technical Bid at the office of the Executive Officer, DSDA	: <u>25.11.2020</u> at 3.00 P.M.
8	Opening of Quotation Financial Bid at the office of the Executive Officer, DSDA	: <u>Will be notified later</u>
9	Validity of bid	: 120 days w.e.f the date of publication of this NIT
10	Completion Period of the work	: <u>03(Three) month</u> w.e.f the date of issuing work order
11	Defect liability period/ Guarantee Period with full replacement.	: <u>05 (Five) years from the date of completion of works.</u>

12	Financial Bid	: <u>Rate shall be quoted including all taxes etc. in a single Item Rate Bid in numeric figure against the quotation.</u>
13	E-Tender registration and bidding	: <u>ONLINE BIDS :</u> The bidders interested to submit the bid Online shall get registered and get a digital signature as per the procedure described below : <ul style="list-style-type: none"> • Agencies/Bidders who are interested in participating DSDA's e-tenders are requested to contact the representatives of NIC for registration, computer setting and clarification on e-tendering. • Training on e-tender can also be availed from Office of the EO, DSDA if desired by the bidder during office hours. • Online quotation can be submitted by log in www.wbtenders.gov.in or through the official website of DSDA i.e. www.dsda.org.in <u>ONLINE BID SUBMISSION :</u> The Bidders are required to submit the Technical and Financial Bid documents ONLINE i.e. uploading of the documents complete in all respect by following the Online Bid submission procedure.
14	Training on E-Tender	: Training on e-tendering will be given to the bidders on request.

15	Important Instructions	<p>:</p> <ul style="list-style-type: none"> • Names of the technically qualified bidders as per the bid criteria after verification with original & evaluation will be displayed in the e-portal, this office notice board and official website. • The financial bid documents of the technically qualified bidders will only be opened. • List of Financial comparison chart of bidders will be published on the next day after opening. EO DSDA reserves the right to reject or cancel any or all pre-qualification documents and bid document without assigning any reason's whatsoever • All duties, taxes, royalties, cess, including 1% Cess under W.B. Building but excluding 1 % Cess under W.B. Road and other Construction Workers (Regulation of Employments & Condition of Service) Act, 1996], toll, taxes and other levies payable by the Contractor under the Contract to the State / Central Government for any other cause, shall be included in the rates, prices and total Bid price submitted by the bidder. 1% Cess under W.B. Building but excluding 1 % Cess under W.B. Road and other Construction Workers (Regulation of Employments & Condition of Service) Welfare Cess Act, 1996 will be deducted from the running bills. • To keep the <u>Project</u> in good condition during the <u>next 5(Five) years</u> after the completion of the work if any additional/ excess work is required over the stipulated quantity in the schedule for routine maintenance work, the same will be treated as defect liability and the Contractor has to do the maintenance work at his own cost. • The intending bidders are requested to inspect the work site before quoting their rates.
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Executive Officer
Digha Sankarpur Development Authority
& Spl. Officer, Urban Dev.(T&CP)Deptt.

INFORMATION TO THE BIDDERS(ITB)

1. Request for Quotation

Request for Quotation paper is to be placed online only through the Website www.wbtenders.gov.in

2. Submission of Quotation

The quotation will be submitted in two bid system i.e. Technical bid & Financial bid.

3. Pre-bid Meeting :

It is expected for the sake of nature of the work that the willing bidder should remain present in the Pre-bid meeting.

4. Online Bid submission procedure :

- i) Registration of Contractor: Agencies/Bidders who are interested in participating DSDA's etenders/quotation will have to be enrolled & registered with the Government e-Procurement system, through logging on to www.wbtenders.gov . They are requested to contact to the toll free Help-line No. 1800 3070 2232 of National Informatics Centre for registration, computer setting and other clarification on e-tendering.
- ii) Digital Signature certificate (DSC): Each contractor is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) having Signing and Encryption certificate for submission of tenders, from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount.
- iii) The contractor can search & download Quotation Documents electronically from computer once he logs on to the website www.wbtenders.gov in using the Digital Signature Certificate. This is the only mode of collection of Quotation Documents.
- iv) Submission of Quotation: General process of submission, Quotations are to be submitted through online to the stipulated website in two folders at a time for each work, one in Technical Bid & the other is Financial Bid before the prescribed date & time using the Digital Signature Certificate(DSC). The documents are to be uploaded duly digitally Signed. The documents will get encrypted(transformed into non readable formats).

4.1 TECHNICAL BID

The Technical proposal should contain scanned copies of the following in two covers (folders).

(a). Statutory Cover Containing the following documents

- i) N.I.Q. (download properly and upload the same Digitally Signed)
- ii) Bidders file (All Forms and Annexure)

(b). Non - Statutory Cover(Mandatory Documents) :

All the documents as given under TECHNICAL BID.

4.1.1 Receiving documents :

Relevant quotation documents must be uploaded online for participating in this quotation. If the mandatory documents are not submitted online within the stipulated date & time, then bid of the applicant shall summarily be rejected and the bid offer shall not be opened. The Details of Mandatory Documents are given below :

Mandatory Documents :

- 1) Name and address, registration in detail of Firm/organization/ Company / Agency with name of proprietor or partner etc.
- 2) Application Form with **Annexure -I**
- 3) Completion Certificate in **Form - I** and details of similar type of project/job under any Government / Semi Government / Undertakings / Autonomous / Statutory bodies and Local bodies, with requisite single tender value.
- 4) Income Tax return of last financial year.
- 5) PAN Card.
- 6) Latest Professional Tax return.
- 7) GST registration certificate.
- 8) Latest GST return.
- 9) Completion Certificate. It is to be noted that **Payment certificate will not be treated as credential.**
- 10) Details of Technical persons with supporting documents available with the tenderer.
- 11) List of similar nature of projects undertaken during last five years.
- 12) Trade License.
- 13) Audited Balance Sheet of last three financial years(**authenticated by Chartered Accountant**) and **Form - II** for establishing average Annual Turnover in contractual business.
- 14) Undertaking for correctness of the documents with Brand name, Model No. & OEM contact no. submitted along with this quotation as per **Annexure - II**.

Note: The quotation will be summarily rejected if any of these documents are not submitted online. Original documents shall have to be shown if required by the authority.

4.1.2 Earnest Money Deposit (EMD) :

Traditional procedure of depositing EMD through off-line instruments like Bank Draft, Pay- order, Bankers Cheque etc. has been completely dispensed with for all e-tenders/e-procurements of the State Government , w.e.f 1st September, 2016. Intending bidders desiring to make payment of earnest money (EMD) on-line, should beforehand read the instructions carefully, particularly in the challan generated by the system of e-tender/e-procurement, if opted for EMD payment through RTGS/NEFT.

A) Login by bidder :

- a) A bidder desirous of taking part in a e-tender invited by a State Government shall login to the e-Procurement portal of the Government of West Bengal using his/her login ID and password using valid DSC.
- b) He/she will select the e-tender to bid and initiate payment of pre-defined EMD for that e-tender by selecting from either of the following payments modes :
 - i) Net-Banking (any of the banks listed in the ICICI Bank Payment Gateway) in case of payment through ICICI Bank Payment Gateway;
 - ii) Off-line payment through bank accounts in any Bank approved by RBI in India by generating NEFT/RTGS challan from the e-tendering portal.

B) EMD payment procedure :

a) Payment by Net Banking (any listed bank) through ICICI Bank Payment Gateway :

- i) On selection of net banking as the payment mode, the bidder will be directed to ICICI Bank Payment Gateway webpage (along with a string containing a Unique ID) where he/she will select the Bank through which he/she wants to do the EMD on-line transaction.
- ii) Bidder will make the payment after entering his Unique ID and password of the bank to process the transaction.
- iii) Bidder will receive a confirmation message regarding success/failure of the transaction.
- iv) If the transaction is successful, the amount paid by the bidder will get credited in the respective Pooling account of the State Government maintained with the Focal Point Branch of ICICI Bank for collection of EMD against unique codes for identification of the tendering authority.
- v) If the transaction is failure, the bidder will again try for payment by going back to the first step.

b) Payment through RTGS/NEFT :

- i) On selection of RTGS/NEFT as the payment mode, the e-procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction.
- ii) The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his/her own Bank account.
- iii) Once payment is made, the bank would provide an “**UTR remittance number**” for successful transaction with which the bidder will come back to the e-Procurement portal after expiry of 2 to 3 bank working days to enable the NEFT/RTGS process to complete, in order to verify the payment made and continue with his/her bidding process.
- iv) If verification is successful, the funds get credited to the respective Pooling account of the State Government maintained with the Focal Point Branch of ICICI Bank for collection of EMD.
- v) Hereafter, the bidder will go to e-Procurement portal for final e-submission of his/her bid within pre-assigned last date of submission of e-tender.
- vi) If the payment verification is unsuccessful, the amount will be returned automatically by the system to the bidder's account.

Note : EMD payment made through RTGS/NEFT would require additional 2 to 3 bank working days after date of transaction in the bank before the procedure is completed for enabling the bidder to continue with the bidding process in the on-line e-tender final bid submission.

Thus, the bidder is to take precaution in case of RTGS/NEFT transfers so that the entire process of submission of e-tender is completed within last date of on-line submission of his/her tender. However, Net-banking transaction through ICICI bank payment Gateway would be on real time basis.

C) Refund/Settlement Process for EMD :

- i) After opening of his/her bids and technical evaluation of the same by the Tender Inviting Authority through electronic processing in the e-Procurement portal of the State Government, the tender inviting authority will declare the status of the bid as successful or unsuccessful which will be made available along with the

details of the unsuccessful bidders to ICICI Bank by the e-Procurement portal through web services.

- ii) On receipt of the information from the e-Procurement portal, the Bank will refund through an automated process the EMD of the bidders disqualified at the technical evaluation to the respective bidders' bank accounts from which they made the on-line EMD transaction. Such refund will take place within T+2 Bank working days where T will mean the date on which information on rejection of bid is uploaded to the e-Procurement portal by the Tender Inviting Authority.
- iii) Once the financial bid evaluation is electronically processed in the e-Procurement portal, EMD of the technically qualified bidders other than that of the L1 and L2 bidders will be refunded, through an automated process, to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank working days where T will mean the date on which information on rejection of financial bid is uploaded to the e-Procurement portal by the tender inviting authority. However, the L2 bidder should not be rejected till the LOI process is successful.
- iv) If the L1 bidder accepts the LOI and the same is processed electronically in the e-Procurement portal, EMD of the L2 bidder will be refunded through an automated process, to his/her bank account from which he/she had made the payment transaction. Such refund will take place within T+2 Bank working days where T will mean the date on which information on Award of Contract (AOC) to the L1 bidder is uploaded to the e-Procurement portal by the Tender Inviting Authority.
- v) As soon as the L1 bidder is awarded the contract (AOC), the same is processed electronically in the e-Procurement portal for transfer credit to Government Receipt under Public Accounts through GRIPS where under the security deposit to be collected would also be deposited in connection with the work.
- vi) All refunds will be made mandatorily to the Bank account from which the payment of EMD and Tender Fees (if any) were initiated.
- vii) If the e-tender is cancelled, then the EMD would be reverted to the original bidders account automatically after such cancellation order is affected online by the Tender Inviting Authority

4.1.3 CREDENTIAL

4.1.3.1 Technical :

The agency should have successfully completed (100%) similar physical security/IT Security/IT infrastructure Project/installation of CCTV work having financial capability and sufficient technical credential of Rs. 60.00 lakh at least for a single work order within last 5 years in a single contract from the date of NIT in any Government / Semi Government / Undertakings / Autonomous / Statutory bodies /Local bodies in a single contract. The work completion certificate (100 %) shall specify detailed nature of job completed, value of job done, date of commencement of work and the date of completion of the work. Payment certificate may also be submitted for successfully completed work along with the said certificate. **Completion Certificate of partly completed projects shall not be accepted. If it is found that the completion Certificate or the work order which the agency has submitted does not matched with the original work order or**

completion certificate then legal action shall be taken against the agency.

4.1.3.2 Form - I for fully (100 %) completed works during the last 5 (five) years from the date of NIQ will only be accepted. The quotation should attach the said certificate under their signature along with the quotation documents. The similar nature of work has been mentioned in the Form-I, therefore agencies who have completion certificate against any of the works mentioned in Form-I shall be eligible for this quotation.

4.1.3.3 The Completion Certificate should be pertaining to the work specified in the NIQ. The completion certificate should not be misleading the authority. If the completion certificate has mention on multiple nature of works executed by the agency in a single quotation including the work specified in this NIQ, then the value of the work as specified in this NIQ will only be taken into account for evaluating the eligibility of the bidder. The decision of the authority in this respect is final and binding.

4.1.4 If the applicant is an authorized signatory he should submit document of authorization in his favour along with the application. In case of Partnership firm, copies of the partnership deed are to be submitted along with the quotation document.

4.1.5 Penalty for suppression / distortion of facts :

If any bidder fails to produce the original hard copies of the documents (especially Completion Certificates, audited balance sheets or any document which is vital for his eligibility), or any other documents within the specified time frame stated above or if any deviation is detected in the hard copies from the uploaded soft copies or if there is any suppression of fact during any time of the tendering process or even after the issuance of work order, the bidder will be suspended from participating in the quotation on e-quotation platform for a 2 (two) years.

4.2 FINANCIAL BID :

1. Single rate (**Item Rates**) shall be quoted in the Financial bid.
2. The rate is to be quoted both in words and figures clearly in the specified space of the BOQ Sheet.
3. The rate quoted by bidder shall be inclusive of all elements of taxes and duties, demands, etc.
4. The bidder shall include income tax, GST, cess etc. as applicable, if any, toll, ferry charges, local charges, royalties, turn over tax and all other charges as applicable while quoting the rate.
5. All other charges like insurance charges, freight etc. as would be required for completion of the work shall also be included in the rate quoted. No claim what so ever in this account shall be entertained.

4.3 Taxes & duties to be borne by the Contractor :

It may again be reiterated that Income Tax, GST, Royalty, Construction Workers' Welfare Cess and similar other statutory levy / cess etc. will have to be borne by the contractor while executing the work.

4.4 Site inspection before submission of quotation :

Before submitting any quotation, the intending bidder should make themselves acquainted thoroughly with the local conditions prevailing at site by actual inspection and taking into consideration all factors and difficulties likely to be involved in the execution of work in all respect and no claim whatsoever will be

entertained on these account afterwards.

4.4.1 Conditional and incomplete quotation :

Conditional and incomplete quotations shall be summarily rejected.

5. Acceptance of Quotation :

Lowest valid rate may be accepted, however, the undersigned does not bind himself to do so and reserves the right to reject any or all the quotations, without assigning any reason and also reserves the right to split the work amongst more than one bidders.

6. Payment :

It is also mentioned here that **No mobilization advance and secured advance will be allowed in any circumstances.**

Payment will be done as per final measurement of work.

7. Security Deposit :

7.1 The bidder shall be required to properly maintain the work properly including all its components for a period of **05(Five) years** from the date of completion of the whole work recorded in the MB. 10% will be deducted from the bill as Security Deposit. The EMD shall be adjusted with the Security Deposit. The release of S.D. would be subject to quality and proper maintenance of the work and its components satisfactorily for the entire security period. Failure to execute proper maintenance of the work will **lead to forfeiture of the security deposit.**

7.2 An application along with a prescribed format of this office to be submitted for release of S.D. for which the contractor should apply to the authority at least 2 (two) month prior to the last date of defect liability period with an undertaking that the work is maintained properly as per the terms of contract.

7.3 The security deposit will be released in following manner :

- i) After 4th year from the date of completion of work - 30% of SD.
- ii) After 5th year from the date of completion of work - 70% of SD.

8. Withdrawal of quotation :

A quotation once submitted shall not be withdrawn within a period of 120 days from the last day of the opening of the financial bid of the quotation..

9. Technical Specification & General Terms and Conditions:

- 1) Online quotation can be submitted by logging in www.wbtenders.gov.in only.
- 2) The Bidders are required to submit the Technical and Financial Bid documents ONLINE by following the Online Bid Submission procedure.
- 3) The Cameras are to be fixed & installed upon the pole etc.
- 4) The bidders should themselves do a site inspection before submitting their bid. The factor of corrosion & lightening as well as sandy/windy/salty weather should be kept in mind.
- 5) In event of power failure, UPS should provide a backup of minimum 15 minutes for the whole system. It should be ensured by the bidders that the technical issues of a single camera should not affect the entire system.

- 6) The CCTV system designed and offered for this project shall ensure the recording of the data for minimum 30 days.
- 7) All the products to be used in the Project or in the future should have approval of DSDA.
- 8) Total system should be maintained and made functional without any disruption for 5 years from the date of completion with a periodical maintenance in every 3(three) months.
- 9) After completion of the project, the Bidder should provide the detailed diagram of the project i.e. provide a sketch map where from OFC digging, Power connectivity from pole to pole, Junction box to each camera line etc.
- 10) The bidder should provide the details of contact number of the OEM of product.
- 11) The bidder should provide the purchase challan/road challan where the date of purchase of the product from the OEM is mentioned.
- 12) An undertaking must be given by the OEM in their letter pad that during the defect liability period, if the bidder fails to repair or maintain the product/project properly, the OEM should be liable to maintain the work.
- 13) 2(two) months before completion of the defect liability period, the bidder should provide the detailed information about the present condition of the each product either it is good in condition or damaged or going to be damaged.
- 14) Before execution of the work, the bidder should submit the all products to the Executive Officer to verify the product with the specification specified in the NIQ.
- 15) Training to DSDA officials for operation & maintenance has to be imparted.
- 16) No alternative offer will be acceptable.
- 17) OEM for all categories of CCTV cameras and back end devices should fulfill the following requirements :
 - Direct presence and a RMA centre in India.
 - Online dedicated CCTV support centre and a fully equipped repair and maintenance office in India – document details to be submitted for the same for verification.
 - Should have own office with GST No. & service centre in Kolkata.
 - Should possess product Certification copies as per specification – certificates to be submitted for verification.
 - The firm should produce authorization from OEM of cameras for its offered make in original.
- 18) The quotation accepting authority may ask any bidder to submit analysis to justify the rate quoted by the bidder.
- 19) In case of any query, the same should reach this office on or before **11.11.2020**
- 20) The Agencies shall abide by all the labour welfare laws and their modifications from time to time, if any, within the contract period. Minimum labour wages act, labour facilities, E.S.I, EPF etc. should be provided as per latest Govt. order/Circulars. In no case, DSDA shall be held responsible for any eventualities in this regard including payment of wages to personnel deployed by the contractor.
- 21) Bidder can approach the Assistant Engineer (Elec.), DSDA for any clarification with respect to this quotation.
- 22) The decision of authority with respect to this quotation is final and binding.
- 23) All corrections in the quotation should be signed with date by the Bidders. Each of the quotation document and drawings must be signed by the Bidders.

- 24) The Bidder, whose quotation is accepted shall within 07 (seven) days of issue of an intimation to that effect by this office obtain additional one set of contract documents on production of proof of LOA in favour of Executive Officer, Digha Sankarpur Development Authority in Nationalized Bank and submit the same duly signed by him to this office for formal agreement. If the contractor fails to perform the formalities as mentioned within the specified period, acceptance of the quotation will be liable to be cancelled and the earnest money shall be forfeited.
- 25) Bidders who will sign on quotation on behalf of a company or Firm must produce the "Registered documents" in respect of their competency to do so, failing which their quotation will not be considered.
- 26) After receipt of the Work Order, the successful Bidders shall submit the work programme, Bar chart of execution of the work, establish site office and deploy Site Engineers. He shall also maintain Work Order Copy, Drawings, schedule of work if any and tools & tackles at site to assist DSDA Engineers to carry out necessary checking and supervision of the work.
- 27) The successful bidder shall ensure that qualified technical personnel are deployed to carry out quality works. If substandard works during the execution of work is detected, then the authority shall have right to direct the agency to re-do the work again, check the qualification of engineers and supervisors, penalize the agency etc.
- 28) The successful Bidders shall have to start the work at site within 7 days after receipt of the work order failing which work order shall be cancelled with forfeiture of earnest money deposited with DSDA without assigning any reason.
- 29) Sub-letting of the job is not permissible and the Bidder must submit one undertaking that he will not sub-let the job under any circumstances. If the authority comes to know that the agency has sub-let the work then action shall be taken to terminate the contract and the SD money will be forfeited.
- 30) Defect liability period starts from the date of completion of the work and release of Security Money (10% of the contract value) will be done as per the date of completion of the work.
- 31) The Emergency Services : The awarded agency will have to attend all complains for any break down, malfunctioning of the system within 24 hours on call over telephone/mobile/e-mail from DSDA & also will have to restore the system without any delay. For any non satisfactory service the work order of the agency shall be cancelled and EMD and SD will be forfeited.
- 32) **Site Inspection and Complain Monitoring Register** : All emergency maintenance/breakdown calls over telephone/mail/mobile shall be recorded in the complain register with complain attendance and disposal details. The agency must submit the registers along the prayer for security deposit release. Payment shall not be made if the registers are not properly maintained and submitted to the authority
- 33) Original copy of all certificates shall be produced for checking and verification of all supporting documents on request of DSDA.
- 34) **Penalty** : Time is the essence of any contract and any deviations from completion time will attract penalty @ ½% per week delay and maximum of 10% for the non execution portion of the work.
- 35) Credibility of the agency engaged for more than two works in DSDA will be evaluated by the tender committee to allow him to participate in the next quotation.

Decision of the authority is final and binding on the concerned agency.

- 36) The agency shall erect "**Citizen Information Board**" which shall be placed on both ends of the work site or any suitable location approved by the Engineer. The details of board are to be provided by DSDA.
- 37) The contractor shall collect photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work and lastly after the completion of the work. Those photographs should be submitted at the time of submission claim for payment. No separate payment will be made to the contractor for this purpose. Payment shall not be made without submitting the photographs/video photographs.
- 38) DSDA reserves the right not to allow the agency to participate in future quotations under the following circumstances.
 - i. Delay in completion of job.
 - ii. Performance in terms of either quality of materials and workmanship.
- 39) In case of any modification in drawings etc., it shall be notified to the vendors during pre- bid meeting or through corrigendum.
- 40) **Termination of Contract/ Work Order** : The authority may terminate the contract/work order due to the following reasons.
 - i) Poor Progress of work.
 - ii) Poor Quality of work.
 - iii) Adoption of any unfair means during execution of work.
 - iv) Violation/Non-compliance of any instructions of the authority.

For termination of the contract/work, the authority will issue a 7 days notice to the agency/contract to make up the discrepancy/shortfall of the work as instructed by the authority, failing which the contract/work order will be terminated with forfeiture of E.M.D., S.D., Performance Security etc.

- 41) **Discretion of the authority inviting quotation** - The quotation inviting authority reserves the right to accept or to reject any or all applications/tenders without assigning any reason whatsoever. On matters of dispute authority decision shall be final and binding. The quantity of work indicated above is provisional and should not be taken as firm. The extent to which the work would be actually executed will depend on the final decision of the Executive Officer, DSDA. He however reserves the right to reduce the quantity even substantially without assigning any reason thereof and take up the same otherwise for which no compensation is payable under any circumstances.
- 42) The Change of dates and any other amendment in this regard shall be informed on website of www.wbtenders.gov.in



Executive Officer
Digha Sankarpur Development Authority
& Spl. Officer, Urban Dev.(T&CP)Deptt.

Copy forwarded for information to :-

1. The Hon'ble Chairman, Digha Sankarpur Development Authority
2. The Hon'ble Vice-Chairman, DSDA & M.L.A., Ramnagar
3. The District Magistrate, Purba Medinipur.
4. The Additional District Magistrate & Additional Executive Officer, Purba Medinipur Zilla Parishad, Tamluk, Purba Medinipur.
5. The Sub-Divisional Officer, Contai, Purba Medinipur.
6. The Block Development Officer, **Ramnagar-I & II** & Executive Officer, **Ramnagar - I & II** Panchayet Samity.
7. The District Information & Cultural Officer, Purba Medinipur
8. The District Informatics Officer, NIC, Purba Medinipur, Tamluk with a request to publish it in the official website of Purba Medinipur District.
9. Reception / Notice Board.



Executive Officer
Digha Sankarpur Development Authority
& Spl. Officer, Urban Dev.(T&CP)Deptt.

FORM - I

**CREDENTIAL CERTIFICATE
(100 % physical completion)**

1	Name of the work	:	
2	Name of the client	:	
3	Amount put to quotation/tender	:	
4	Contractual amount against the tender/quotation	:	
5	Date of commencement of work	:	
6	Date of completion as per work order	:	
7	Actual date of completion	:	
8	Final gross value of the bills for - Physical security/IT Security/IT infrastructure Project/installation of CCTV work	:	

Note: In case of completion of multiple nature of works in a single tender, then the value of work as specified in the NIQ shall only be taken for the eligibility of the bidder.

I hereby declare that all the statements made above are true to my knowledge. I also understand that any discrepancy found in the above statement will render me liable for cancellation of my quotation.

(Signature of the bidder)

Note:

1. While calculating the amount, i.e, money value of the major item 'Earthwork' stated above, amount of all sub- items like leads, lifts, disposal, transportation included in the major item should be arithmetically added.
2. Completion Certificate (s) should be supported by BoQ(s).
3. Completion Certificate for fully (100%) completed works will only be considered.

FORM - II

STATEMENT ON ANNUAL TURNOVER FROM CONTRACTUAL BUSINESS

This is to certify that the following statement is the summary of the audited Balance sheet arrived from contractual business in favour of for the three consecutive years.

Sl. No.	Financial		Remarks
	Year	Turnover (rounded of)	
1	2017-2018		
2	2018-2019		
3	2019-2020		
Total			
Average Turnover			

Note

- i) Average turnover is to be expressed in lakh of rupees, rounded up to two digits after decimal.
- ii) Average turnover for 3 years is to be obtained by dividing the total turnover by 3 (three).

Signature of the Bidder

ANNEXURE - I

APPLICATION FOR e-NIQ

To
The Executive Officer,
Digha Sankarpur Development Authority,
Digha :: Purba Medinipur.

Ref: - Quotation for _____

_____(Name of work).

N.I.Q.No. : _____ (Sl. No. ____)/DSDA/ 2020-2021.

Dear Sir,

Having examined the Technical cover, OID cover & all other e-NIT documents, I/we hereby would like to state that I/we will fully accept all your conditions and offer to execute the works as per e-Tender no and Serial no stated above. I/We also agree to remedy the defects after/during execution of the above work in conformity with the conditions of contract, specifications, drawings, bill of quantities and addenda.

Dated this _____ day of _____ 201_____

Full name of Bidder / Contractor : _____

Signature : _____

In the capacity of : _____

Duly authorized to sign bids
for & on behalf of (Name of Firm) : _____

Office address with seal if any : _____

Telephone no(s) (office): _____

Mobile No : _____

Fax No: _____

E mail ID: _____

ANNEXURE-II

SAMPLE FORMAT FOR AFFIDAVIT

I, Sri.....,S/o Sri....., aged..... Years, Residing at....., Proprietor/Partner/Director of, do hereby solemnly affirm and declare in connection with "Replacement of Old CCTV Camera & installation of new CCTV Cameras at different locations in Digha" as follows:

- 1) That I, the undersigned, do certify that all the information furnished & statements made in the bid documents are true and correct to the best of my knowledge and belief.
- 2) We would deploy at site all necessary & skilled Technical Personnel for efficient contract management and supervision of works with a view to achieving best quality of works at site.
- 3) Any departure whatsoever in any form will be considered as breach of contract. In such situation the Department at his liberty may with hold our payment till we rectify the defects or fulfill our contractual obligation. In this connection, authority's decision will be final and binding.
- 4) The undersigned also certifies that neither we have abandoned any work awarded to us, nor any penal action was taken against us by any department. The undersigned also declares that we do not have any running litigation with any department.
- 5) I do hereby undertake that if I be awarded as a Successful Bidder, I shall submit the following :-

Camera & other accessories	Brand/Make	Model No.
5 MP (2560 x 1920) ANPR CAMERA		
5 MP (2560 x 1920) OUTDOOR BULLET CAMERA		
2 MP (1920 x 1080) OUTDOOR PTZ CAMERA		
Supply,of Network Video Recording Management Software (NVRMS) system with distributed architecture to collect, manage and present video from all the cameras and supports emerging technologies in the industry, like 4K resolution, H.265 video compression codec, multi-imager/lens cameras and 360° fisheye cameras. The NVRMS should support database redundancy N+1 in future expansion. NVRMS shall equipped licenced for 100 cameras recording & 6 users clients, recording licenses should expandable up to 128 cameras in single hardware & 10 user clients without any additional version/Hardware upgrade. The NVRMS should support network joystick controller, GPU rendering support for H.264 and H.265 decoding , video on demand, Adaptive video throttling, rule engine, operatore role management, server based Video Motion Detection (VMD), Cybersecured with		

<p>features such as Digital Signing, General Data Protection Regulation (GDPR) compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones, seamless integration with integrated security platform which provides HSDK&API for further integration with 3rd party systems. NVMMMS shall support Analytics like Auto tracking</p> <p>The NVMMMS should support seamless soft integration with Bio Metric & Analytics software like LPR , Face recognition etc and shall be complete system including server for satisfactory surveillance operations with all necessary softwares, licenses, required PC Hardware, Storage, accessories etc., civil, electrical works & peripheral items, as required as per specification (as per Specification stated in NIQ)</p>		
ANPR software Lic as per technical specification stated in NIQ		
Server for recording as per below specification - Intel Xeon Silver 4110,2.1 Ghz,32GB RAM,MS SQL Server 2012 or higher, MS Windows 10 or Windows server 2016 or higher,500 GB free partition drive for OS, 2 x 10/100/1000 Port, Dual power supply, RAID 5, Hot Swappable HDD Slot (as per specification stated in NIQ)		
Enterprise Grade 7200 RPM Surveillance HDDs 12TB (as per specification stated in NIQ)		
Client server for VMS as per below specification - Intel Xeon 8 core,3.7 GHz or better ,16 GB RAM,MS Windows 10 or Windows server 2016 or higher,2 x 10/100/1000 port, Dual power supply, RAID 5, 1 TB HDDs (as per specification stated in NIQ)		
Client server for VA as per below specification - Intel Xeon 6 core,3 GHz or better ,16 GB RAM,MS Windows 10 or Windows server 2016 or higher,2 x 10/100/1000 Port, Dual power supply, RAID 5, Hot Swappable HDD Slot, 8 TB HDD (as per specification stated in NIQ)		
Client WS as per below specification - Intel i7 -6700 or 6th Generation processor ,2.1 Ghz,08 GB RAM,MS Windows 10 or higher,1 x 10/100/1000 Port,2GB Graphics Adaptor,500 GB free partition drive for OS,1 TB HDDs, Dual Monitor output, Video resolution 1280 x 1024,KB & Mouse (as per specification stated in NIQ)		
24 Port POE Switch with 4 SFP Port (as per specification stated in NIQ)		
8 Port POE Switch with 2 SFP Port (as per specification stated in NIQ)		
600 VA UPS		
1 KVA online UPS		

32MM HDPE Pipe laying for optical fibre		
GI Syntex Box (as per specification stated in NIQ)		
Fiber Joint Kit Box (as per specification stated in NIQ)		
Pigtel (as per specification stated in NIQ)		
RJ 45 Connector (as per specification stated in NIQ)		
Clamp for Camera (as per specification stated in NIQ)		
CAT 6 UTP Cable (as per specification stated in NIQ)		
42 U Floor Mount Rack (as per specification stated in NIQ)		
6 U Floor Mount Rack (as per specification stated in NIQ)		
IP based Joystick for 3 Axis proportional PTZ Control (as per specification stated in NIQ)		
SFP Module		
3 core copper cable		
6 core outdoor single mode OM3 Optical Fiber Cable, LSZH Jacket		
2 core aluminum cable		
HDMI Cable (5 mtr.)		
Power Board		
Surveillance Monitoring PC		
6 Mtr. Pole		
55" LED Commercial Display with HDMI & Mounting bracket/Tabletop		

6) I/We would deploy at site following skilled Technical Personnel for efficient contract management and supervision of works with a view to achieving best quality of works at site.

Sl. No.	Name of the Technical Person	Qualification	Designation	Minimum Experience

Signature of the Contractor

Name: Place:

Date:

ANNEXURE-III

EXPERIENCE PROFILE

Name of the Firm :

**LIST OF WORKS COMPLETED WHICH ARE SIMILAR IN NATURE AND EXECUTED DURING THE
LAST FIVE YEARS IN ANY GOVT. DEPARTMENT / GOVT. UNDERTAKING / STATUTORY BODY
UP TO A VALUE OF 60.00 LAKH PUT TO TENDER/QUOTATION**

Name of Employer	Name, Location & nature of work	Contract price in Indian Rs.	Work Order Date	Date of completion of work as per work order	Actual date of starting the work	Actual date of completion the work	Reasons for delay in completion (if any)

Signature of the Contractor/company/agency

- Note :** (a) Certificate from the Employers to be attached.
(b) Non-disclosure of any information in the Schedule will result in disqualification of the firm.
(c) No quotation will be deemed to be fit for consideration unless the quotation documents are fully and completely filled in. All information's that may be asked from a bidders must be unequivocally furnished. Any quotation which is incomplete or does not comply with the prescribed conditions or stipulations laid down herein to rejection at the time of opening or during subsequent scrutiny. Quotation received with conditional rate will be liable to rejection at the time of opening.
(d) Canvassing in connection with the quotation is strictly prohibited and a bidder who resorts to this will render his quotation liable to rejection.
(e) No alteration shall be permitted to be made by the bidders in any quotation after its submission.