

# **HSCC (INDIA) LIMITED**

**(A Government of India Enterprises)**

## **TENDER FOR**

**Supply, Installation, Customization, Integration,  
Testing, Training, Implementation & Commissioning  
of Face Recognition System for New Emergency Block  
at Safdarjung Hospital, New Delhi**

**For**

**HSCC (I) LTD  
E-6 A, Sector-1, NOIDA**

**TENDER NO: - HSCC/Safdarjung/EB/FRS/2018**

**January 2018**



HSCC (INDIA ) LTD.  
E-6(A), Sector-1, NOIDA(U.P) 201301 (India)  
Phone: 0120-2542436-40 Fax: 0120-2542447

HSCC/Safdarjung/EB/FRS/2018

09/01/2018

**INVITATION OF THE BID**

HSCC (I) Ltd invites sealed bids for Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi as per the Tender document.

**DETAILS OF THE TENDER**

Issue of tender documents	On all working days from <b>09.01.2018 to 16.01.2018</b>
Last date and time of submitting Bids	At <b>2.30 p.m. on 16.01.2018.</b>
Date and time of opening bids	At <b>3.00 p.m. on 16.01.2018.</b>
EMD	Rs. <b>5,000/-</b> (Five Thousand Only)
Validity of Tender	120 days from the opening of bid
Place of submitting and Opening bids	HSCC (I) Ltd, E-6 A, Sector-1, Noida

HSCC reserves the right to accept or Reject any/all applications without assigning any reason thereof or incurring any liability whatsoever.

No Tender Document will be accepted after the date and time given above. Any bid submitted after the scheduled time will be rejected.

Representatives of the firms may remain present, if they so desire.

No editing/addition/deletion of matter (in tender document) is permitted. If such action is observed at any stage, such tenders are liable for rejection outright and decision of the HSCC shall be final and binding the bidder(s).

General Manager (IT)  
HSCC (I) Ltd

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## INSTRUCTIONS TO BIDDERS

HSCC INDIA LIMITED (A Government of India Enterprises) is having its head office at Noida intends to invite bids for **Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi.**

Completion Period- The time period for completion of work shall be 2 weeks or less from the date of award of work.

1. The Tender document can be obtained from HSCC (I) Ltd, E-6 A, Sector-1 Noida and can also be directly downloaded from HSCC website [www.hsccltd.co.in](http://www.hsccltd.co.in). No editing, addition/deletion of matter is permitted. If such action is observed at any stage, such tenders are liable for outright rejection.
2. Each bidder shall submit only one bid.
3. Bidder should also submit power of attorney/letter of authorization for participating in the bid in the name of the person signing & submitting the bid.
4. The bidder has to submit an earnest money of Rs.**5,000/-** along with bid in shape of demand draft of a scheduled bank issued in favour of HSCC India Limited payable at Delhi/Noida. Any bid not accompanied with EMD shall reject. EMD of the bidder shall be returned within 20 days after the finalization of tender. No interest will be paid by the HSCC on the EMD.
5. Only enclosed formats as provided in original should be used. All sheets need to be submitted **after affixing seal of the Company and signature of the authorized signatory**. Additional sheets, duly authenticated, may be attached to elucidate specifications or clarify the specific issues.
6. The prescribed tender documents may be placed in a duly sealed single envelop clearly marked "**Bid for Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi**" may be dropped in the box kept at HSCC office by 2.30 p.m. on **16.01.2018**.
7. Corrections/Alterations, if any, in the tender documents should be attested properly duly signed by authorized signatory and affixing seal by the vendor, failing which the tender will be rejected.
8. The bidder shall quote the prices in INR of goods and services inclusive of all duties and all taxes, duties, freight, levies, or charges. The bidder will be entirely responsible for all taxes, duties, licenses fee, octroi, road permit fee etc. in connection with scope of work.
9. In case of any discrepancy between the unit price and the total price, the

unit price shall prevail and total price shall be corrected unless it is lower than the sum total of unit prices. If there is any variation between amount written in figure and words then amount whichever is lower shall be taken into consideration. If the amount in figure is not clear than amount in word shall be taken into consideration.

10. Canvassing in any form will be viewed seriously and if any bidder is found to be resorting to such practice, the tender of such firm will be rejected.
11. The amendment shall be published on HSCC website and it will be the responsibility of the applicants to read.
12. The Applicant shall be deemed to have inspected the Site and its surroundings and taken into account all relevant factors pertaining to the Site, while preparing and submitting the Application.

#### 10. **Sealing, Marking & Submission**

The tender shall be submitted in accordance with the procedure detailed herein:-

Specified documents shall be enclosed in envelope of appropriate size each of which shall be sealed.

**Envelope No. 1:** Earnest Money Deposit (Envelope should be clearly marked as "EMD for Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi")

**Envelope No. 2:** Shall contain tender document duly signed including the following:

- (a) Original tender documents (all pages duly signed stamped & numbered).
- (b) All Amendments
- (c) All the document as stipulated under information to be submitted.
- (d) All Annexure and declarations.

**Envelope No. 3: Price bid** and rates/prices duly filled in and signed and stamped without any conditions whatsoever. Bids containing any conditions or not signed in Price Schedule are liable to be summarily rejected.(Envelope should be clearly marked as " PRICE BID for Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi")

All of these envelopes should be sealed separately and should further be kept in another envelop marked as "(BID for Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi)". All the envelopes should invariably have the name of bidder firm, address and phone/fax number.

#### 11. Application Opening

Applications shall then be opened in the office of HSCC (I) Ltd, at Plot – 6

(A), Block – E, Sector – 1, Noida, Uttar Pradesh – 201 301, an hour after the prescribed time for Application submission in presence of the Applicants' representatives who may wish to be present.

Technical Package: Shall be opened first. Bids of parties who do not accept the conditions laid in the Bid documents are also liable to be rejected.

HSCC will examine the Bids to determine whether they are complete, whether the Bids have been properly signed and stamped and whether the Bids are generally in order.

Telegraphic/ Fax offer will be treated as defective, invalid and rejected. Only detailed complete Bids received prior to the closing time and date of the Bids will be taken as valid.

The Bidder's names, general technical details at his discretion may consider appropriate will be announced at the Bid opening.

Financial Bid for all applicant whose application is found to be generally in order and substantially responsive shall be opened either at the Bid opening or at a subsequent date to be intimated in advance to such eligible Applicants.

Only summary of prices quoted by the Applicants will be read out.

Price evaluation shall be made on total mention in price schedule.

The Application of any Applicant who has not complied with any of the instructions contained herein may not be considered.

12. Evaluation of bid,  
The Purchaser will evaluate and compare the proposals determined to be substantially responsive i.e. which
  1. are properly signed; and
  2. confirm to the terms and conditions, and scope of work.
13. The evaluation of bid would be on total amount quoted for providing the services.
14. Award of work:  
The bidder will award the work to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest rate for the service. The bidder should meet all the technical requirements mentioned in this document.

The bidder must fill up price against each item of Price bid both in words and figures in the blank spaces provided in the respective columns.

## Terms & Conditions of Contract

1. Bidder should have registration of GST Documentary proof the same will need to be enclosed.
2. All the terms and conditions for the supply, delivery, payment, warranty etc. will be as given herein and no change in any term or condition by the vendors will be acceptable.
3. To assist the examination, evaluation and comparison of bids, HSCC may at its discretion, ask the bidders for clarification of bids including price. The request for clarification and the response shall be in writing.
4. **Delivery and Installation period:** Maximum 2 weeks from the date of purchase order. The work shall be performed at new New Emergency Block, Safdarjung Hospital, New Delhi.
5. **Payment terms:** 100% of the payment shall be released within 15-20 days after obtaining installation report from HSCC/client as per the scope of work and submission of Bank Guarantee (BG) for 5% of total awarded cost in favour of HSCC/client with validity of one year from date of installation report. No advance payment or payment against Performa invoice will be made.
6. The supplier's request for payment shall be made in writing accompanied by relevant document such as proper invoice and satisfactory installation reports duly signed by HSCC's representative.
7. HSCC reserves the right to accept or reject any or all offer(s) in part or full without assigning any reason thereof, and to amend the terms and conditions before award of the contract and does not bind itself to accept lowest quotations.
8. Dispute clause: Any dispute relating to the enquiry shall be subject to the jurisdiction of the court at Delhi only.
9. Sub-letting and sub-contracting of the contract shall not be allowed.
10. Any related works specifically not mentioned in this document, but are necessary for carrying out the work shall be in the scope of the executing agency and the work must be complete in all respect.
11. The quotation must be in the form furnished by HSCC/Client and should be free from corrections/erasures. In case there is any unavoidable correction it should be properly attested. If not the quotation will not be considered. Quotation written in pencil will not be considered.
12. Manufacturer's name and country of origin of materials offered must be clearly specified.
13. Complete details and specification if any must accompany the quotation. Make/brand of the item shall be stated wherever applicable. If bidders have got any counter offer as suitable to the material required by us, the same may be shown separately to HSCC/client.

14. All supplies are subject to inspection and approval before acceptance. Manufacturer/ supplier warranty certificates shall be furnished along with the supply, wherever applicable.

15. The HSCC/Client reserves the right to modify the quantity specified in this enquiry.

16. The prices quoted should be firm till the supplies are completed. Please quote the rates in words and figures. Rates quoted should be free delivery at destination including all charges otherwise the quotation is likely to be rejected. If there is no indication regarding the FOR, in the quotation, then it will be considered as FOR destinations. Price quoted should be net and valid for a minimum period of four months from the date of opening of the quotation.

17. In case the items in the enquiry are covered by any rate contract or running contract finalized by the DGS&D or any other state or central Government, it should be specified in your quotation and accepted contract rates should also be mentioned. It should be confirmed whether you could supply at the RC rates outside rate contract.

18. Payment of GST is primarily the responsibility of the seller and will not be paid unless the percentage value is clearly mentioned in the quotations. If no indication regarding GST is recorded in the quotation, the GST will be considered as included.

19. Delivery period required for supplying the material should be invariably specified in the quotation.

20. In case bidder's quotation is accepted and order is placed, the supply against the order should be made within the period stipulated in the order. The HSCC/Client reserves the right to recover any loss sustained due to delayed delivery by way of penalty. Failure to supply the material within the stipulated period shall entitle HSCC/Client for the imposition of penalty without assigning any reasons @ 1/2% (half percent) of the total value of the item covered in order as penalty per week subject to a maximum of 5% (five percent) unless extension is obtained in writing from the office on valid ground before expiry of delivery period.

21. If the deliveries are not maintained and due to that account HSCC/Client is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained there by will be recovered from the defaulting supplier.



## Scope of Work

Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi.

### 1. Face Recognition Software with required hardware:

- Face recognition Software should be highly accurate for detection & recognition of faces.
- System should be highly reliable & robust.
- All the required hardware including workstation/server where the software will be installed should be provided with sufficient storage & efficient processor.
- Face Recognition System should be capable of capturing the images from already installed 2 nos. of Face Detection Cameras (OEM- Bosch) & a new proposed Face Detection Camera & use these images for further processing. Any kind of incompatibility will not be entertained.
- System should be integrated with already installed Hospital Management & Information System (HMIS) application in the new New Emergency Block, Safdarjung Hospital, New Delhi.
- Face Recognition System should match with the images of faces to that in the database.
- Alarms: Should send/generate Alarms whether Face Matching or non Matching to Alarm Center/Police Control Room.

Face Recognition System should cover at least the following features:

- Black List Alarm (Terrorists, Known Offenders etc.)
- VIP Identification
- Face Verification based Access Control & Attendance
- Forensic Analysis
- Viewership Analytics (Face Count, Face Presence, Face Frequency)
- Demographic Profiling (Age Group and Gender Detection)
- Should work with generic IP cameras with good quality.
- Should work even with PC, you don't need high end systems
- Should work in both indoor as well as outdoor environments.
- Should work with limited pose changes.
- Should work even when people are walking.
- Should work despite camouflage efforts with spectacles, beard or wig.
- Should work for people of different ethnicity.
- Should have face recognition time of as low as 1 sec.
- Should work for minimum tens of thousands of registered faces.
- Should work even with one registered image per face.

- Any other requirement for the completeness of the system & to the satisfaction of HSCC/client.

Minimum one year onsite OEM warranty/support should be provided for above face recognition software & necessary hardware required for it.

2. One number of Face Recognition Camera with following specifications:

Standards	
Emission	EN 55022 Class B (2010), +AC (2011) FCC: 47 CFR 15, class B (2012-10-1)
Immunity	EN 50130-4 (PoE, +12 VDC)* (2011) EN 50121-4 (2006), +AC: (2008)
Alarm	EN 50130-5 Class II (2011)
Safety	EN 60950-1 UL 60950-1 (2nd edition) CAN/CSA-C 22.2 No. 60950-1
Vibration	Camera with 500 g (1.1 lb) lens as per IEC 60068-2-6 (5 m/s <sup>2</sup> , operational)
UHD	SMPTE 2036-20012 Resolution: 3840 x 2160 (UHDTV1) 4K UHD (2160p)
HD	SMPTE 274M-2008 Resolution: 1920x1080
Color representation	ITU-R BT.2020
ONVIF conformance	EN 50132-5-2; IEC 62676-2-3

2.1 System Description

A. Performance Requirements

1. 4K UHD security camera (3840 x 2160) for fine detail and exceptional texture.
2. Superior 12 MP image capture at 20 fps in 4:3 aspect ratio, and 30 fps in 4K UHD 16:9 aspect ratio.
3. Ultra wide dynamic range in 4K UHD mode (92+16 dB).
4. Intelligent dynamic noise reduction reduces bitrate by up to 50% (giving reduced bandwidth and storage requirements).
5. Intelligent Video Analysis (IVA).
6. ONVIF conformant.

## 2.2 DELIVERY, STORAGE AND HANDLING

- B. Deliver materials in manufacturer's original, unopened, undamaged containers; and unharmed original identification labels.
- C. Protect store materials from environmental and temperature conditions following manufacturer's instructions.
- D. Handle and operate products and systems according to manufacturer's instructions.

## 2.3 WARRANTY

- E. Provide manufacturer's warranty covering [3] years for replacement and repair of defective equipment.

## 2.4 MAINTENANCE

- F. Make ordering of new equipment for expansions, replacements, and spare parts available to dealers and end users (up to 5 years after the EOL announcement).
- G. Provide factory direct technical support from 8:00 a.m. to 8:00 p.m. via phone and e-mail.
- H. General Characteristics:
  1. The camera shall have 3 basic operating modes (12MP mode, 4K UHD mode, 1080p resolution mode)
  2. The camera shall be a true day/night camera with a mechanical filter for truly outstanding nighttime performance. The filter can be switched remotely, or automatically via a light level sensor or contact input.
  3. The camera shall utilize intelligent Dynamic Noise Reduction (iDNR) technology to reduce the bitrate and storage requirements by removing noise artifacts.
  4. The camera shall offer 12MP resolution (4000 x 3000).
  5. The camera shall accept power via Power over Ethernet (IEEE 802.3af compliant).
  6. The camera shall offer Intelligent Video Analysis (IVA).
  7. The camera shall provide four independent, fully programmable privacy mask areas.
  8. The camera shall provide an on-screen display to simplify the camera/lens back focus and network configuration settings.

9. The camera shall utilize pixel-by-pixel analysis to automatically compensate for bright areas of a high contrast scene (Back light) without having to define a window or area.
10. The camera shall provide intelligent Auto Exposure (iAE) to improve visibility of high contrast scenes (dark objects against a light background and the reverse).
11. The camera shall be easy to install.
12. The camera shall have nine configurable user modes with the best settings for a variety of applications.

#### I. Image processing and compression

1. The camera shall offer a 1/2.3-inch CMOS image sensor.
2. The camera shall offer 12MP sensor pixels.
3. The camera shall have a factory fitted and calibrated 3.2 mm or 5 mm viewing angle lens.
4. The camera shall use intelligent Dynamic Noise Reduction (iDNR) to actively analyze the contents of a scene and reduce noise artifacts accordingly.
5. The low-noise image and efficient H.264 compression technology shall provide clear images while reducing bitrate and storage requirements by up to 50% compared to other H.264 cameras.
6. The camera shall have a dynamic range of 92 dB WDR in 12MP and 4k UHD mode (92+16 dB with iAE).
7. The camera shall provide the most usable image possible by cleverly optimizing the detail-to-bandwidth ratio.
8. The camera shall provide intelligent Auto Exposure (iAE) for superb front light compensation and incredible backlight compensation by automatically adapting to changing light conditions.
9. The camera shall provide user-defined Regions of Interest (ROI) where the remote E-PTZ (Electronic Pan, Tilt and Zoom) controls allow a user to select specific areas of the parent image.

#### J. Network Video

1. The camera shall provide direct network connection.
2. The camera shall allow full camera control and configuration capabilities over the network.
3. The camera shall be capable of capturing and storing images using the following compression standards:
  - a. H.264 MP (Main Profile)
  - b. M-JPEG
4. The camera shall deliver video (UHD @ 30 fps; 12MP @ 20 fps) over a 10/100 Base-T, auto-sensing, half/full duplex, RJ45 Ethernet connection.
5. The camera shall comply with the IEEE 802.3af Power over Ethernet standard.
6. The camera shall conform to the ONVIF standard.

#### K. Intelligent Video Analysis (IVA)

1. The camera shall be capable of processing and analyzing video within the camera itself, with no extra hardware required.

2. The camera shall be capable of detecting and sending alarms for abnormal events.
3. The camera shall allow users to set up separate profiles and switch profiles based on day/night or holiday schedule.

L. Surveillance Software

1. The camera shall be accessible from a web browser, with the Bosch Video Management System, with the free-of-charge Bosch Video Client, or via third-party software.
2. The camera shall be accessible from the Bosch Security System mobile app.

M. Access Security

1. The camera shall offer three levels of password protection.
2. The camera shall support 802.1x authentication using a RADIUS (Remote Authentication Dial In User Service) server.
3. The camera shall store a SSL certificate for use with HTTPS.
4. [The camera shall be capable of being independently AES encrypted with 128-bit keys.]

N. Image Posting

1. The camera shall offer periodic JPEG image posting to an FTP server or a Dropbox account.
2. The camera shall offer best face detection and JPEG best face image posting to an FTP server or to a Dropbox account.

O. Storage Management

1. The camera shall support iSCSI devices to allow video stream to be recorded directly to an iSCSI RAID array.
2. The camera shall support iSCSI storage targets to enable the camera to function as a conventional DVR.
3. The camera shall have a microSD card slot that uses standard; off-the-shelf microSD (SDHC and SDXC) cards for local storage (up to 2 TB).
4. The local storage feature shall be capable of storage for Automatic Network Replenishment (ANR).

P. Alarm Handling Features:

1. The camera shall provide an alarm input that may be triggered by either a normally opened or normally closed contact.
2. The camera shall provide the capability on alarm to display up to a 31 character, programmable alarm message.
3. The camera shall provide an alarm output that may be selected for normally opened or normally closed operation. The output can be activated from an external alarm input to the camera, manual activation from the browser, upon video motion detection, an alarm task script or video loss.
4. The camera shall provide email alarm messaging with optional JPEG posting.

Q. Electrical

1. The camera shall accept either +12 VDC or Power over Ethernet.
2. The camera shall consume 9 W (max.).

R. Audio

1. The camera shall offer one (1) line in jack connector and one (1) line out jack connector.
2. The camera shall offer two-way, full duplex audio communication.
3. The camera shall offer G.711, AAC and L16 audio compression (live and recording).

S. Environmental

1. The camera shall operate in -20°C to +50°C (-4°F to +122°F) temperature range.

T. Technical Specifications:

Power	
Power Supply	12 VDC Power-over-Ethernet 48 VDC nominal
Current Consumption	500 mA IVA (12 VDC) 175 mA IVA (PoE 48 VDC)

Power	
Power Consumption	9 W
PoE	IEEE 802.3af (802.3at Type 1) Class 3

Sensor	
Type	1/2.3-inch CMOS
Pixels	12 MP

Video performance - Dynamic range	
12 MP (4:3) mode	92 dB WDR (92+16 dB with iAE)
4K UHD (16:9) mode	92 dB WDR (92+16 dB with iAE)
1080p mode	98 dB WDR (98+16 dB with iAE)

Video performance - Sensitivity (3200K, 89% reflectivity, 30% IRE, 33 ms, F2.45), scene illumination	
Color (12MP / 4K UHD mode)	1.932 lx
Color (1080p mode)	0.966 lx
Mono (12MP / 4K UHD mode)	0.638 lx
Mono (1080p mode)	0.328 lx

Video streaming	
Video compression	H.264 (ISO/IEC 14496-10); M- JPEG, JPEG
Streaming	Multiple configurable streams in H.264 and M-JPEG, configurable frame rate and bandwidth. Regions of Interest (ROI)
Overall IP Delay	Min. 120 ms, Max. 340 ms
GOP structure	IP, IBP, IBBP
Encoding interval	1 to 30 [25] fps

Video streaming	
Encoder regions	Up to 8 areas with encoder quality settings per area

Video resolution	
12MP	4000 x 3000 (at 20 fps)
4K UHD	3840 x 2160 (at 30 fps)
1080p HD	1920 x 1080 (at 30 fps)
720p HD	1280 x 720 (at 30 fps)
D1 4:3 (downscaled/cropped)	704 x 480
480p SD	Encoding: 704 x 480; Displayed: 854 x 480
432p SD	768 x 432
288p SD	512 x 288
240p SD	Encoding: 352 x 240; Displayed: 432 x 240
144p SD	256 x 144

Video functions	
Day/Night	Color, Monochrome, Auto
Adjustable picture settings	Contrast, Saturation, Brightness
White Balance	2500 to 10000K, 4 automatic modes (Standard, SON/SOX, Basic, Dominant color), Manual mode and Hold mode
Shutter	Automatic Electronic Shutter (AES) Fixed (selectable) Default shutter
Backlight compensation	Off, Auto, intelligentAE (iAE)
Contrast enhancement	On/off
Noise reduction	intelligent Dynamic Noise Reduction (iDNR) with separate temporal and spatial adjustments
Sharpness	Sharpness enhancement level selectable
Privacy Masking	Four independent areas, fully programmable



Video functions	
Video Motion Analysis	Intelligent Video Analysis (IVA)
User modes	9 modes
Other functions	Image flip, Pixel counter, Video watermarking, Display stamping

Audio	
Standard	G.711, 8 kHz sampling rate L16, 16 kHz sampling rate AAC-LC, 48 kHz sampling rate AAC-LC, 80 kHz sampling rate
Signal-to-Noise Ratio	>50 dB
Audio Streaming	Full-duplex / half duplex

Input/output	
Analog video out	SMB connector, CVBS (PAL/NTSC), 1 Vpp, 75 Ohm (service only)
Audio line in	1 Vrms max, 18 kOhm typical,
Audio line out	0.85 Vrms at 1.5 kOhm typical,
Audio connectors	3.5 mm mono jack
Alarm input	2 inputs
Alarm input activation	+5 VDC nominal; +40 VDC max. (DC-coupled with 50 kOhm pull-up resistor to +3.3 VDC) (< 0.5 V is low; > 1.4 V is high)
Alarm output	1 output
Alarm output voltage	30 VAC or +40 VDC max. Maximum 0.5 A continuous, 10VA (resistive load only)
Ethernet	RJ45
Data port	RS-232/422/485

Local storage	
Internal RAM	10 s pre-alarm recording

Local storage	
Memory card slot	Supports SDHC and SDXC microSD cards
Recording	Continuous recording, ring recording. alarm/events/schedule recording

Network	
Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, NTP (SNTP), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox, CHAP, digest authentication
Encryption	TLS 1.0, SSL, DES, 3DES, AES (optional)
Ethernet	10/100 Base-T, auto-sensing, half/full duplex
Ethernet connector	RJ45
Connectivity	ONVIF Profile S, Auto-MDIX

Software	
Unit Configuration	Via web browser or Configuration Manager
Firmware update	Remotely programmable
Software viewer	Web browser, Bosch Video Client, or third party software

Optical	
Lens mount	Factory mounted
Lens type (NBN-80122-F6A)	5 mm, fixed-focus, fixed-iris lens (70 deg FoV) with minimum object distance of 1.1 m (3.6 ft)
Lens type (NBN-80122-F2A)	3.2 mm, fixed-focus, fixed-iris lens (120 deg FoV) with minimum object distance of 0.45 m (1.5 ft)

Mechanical	
Dimensions (W x H x L)	78 x 66 x 200 mm (3.07 x 2.6 x 7.87 inch) with factory-mounted lens

Mechanical	
Weight	860 g (1.90 lb) with 3.2 mm lens 870 g (1.92 lb) with 5 mm lens
Color	RAL 9006 Metallic Titanium
Tripod Mount	Bottom and top 1/4-inch 20 UNC

Environmental	
Operating Temperature	-20°C to +50°C (-4°F to 122°F)
Storage Temperature	-30°C to +70°C (-22°F to +158°F)
Operating Humidity	20% to 93% RH
Storage Humidity	up to 98% RH

## 2.5 ACCESSORIES

- A. Monitor cables
  - 1. NBN-MCSMB-03M analog cable
  - 2. NBN-MCSMB-30M analog cable
- B. Software Options
  - 1. MVC-FENC-AES BVIP AES 128 bit Encryption License
- C. Power supplies
  - 1. UPA-1220-50 power supply
  - 2. UPA-1220-60 power supply

## 2.6 INSTALLATION

- U. Install devices in accordance with manufacturer's instruction at locations indicated on the floor drawings plans.
- V. Ensure selected location is secure and offers protection from accidental damage.
- W. Location must provide reasonable temperature and humidity conditions, free from sources of electrical and electromagnetic interference.

## 2.7 FIELD QUALITY CONTROL

- X. Test snugness of mounting screws of all installed equipment.
- Y. Test proper operation of all video system devices.
- Z. Determine and report all problems to the manufacturer's customer service department.

## 2.9 ADJUSTING

- AA. Make proper adjustment to video system devices for correct operation in accordance with manufacturer's instructions.
- BB. Make any adjustment of camera settings to comply with specific customer's need.

## 2.10 DEMONSTRATION

- CC. Demonstrate at final inspection that video management system and devices function properly.

### List of Approved Makes:

<b>S No.</b>	<b>Component</b>	<b>Make</b>
1	Face Recognition Software	Intellivision/NEC/Herta
2	Face Detection Camera	Bosch
3	Workstation	HP/Dell/IBM

**Annexure - I****BID SUBMISSION FORM**

**Name of the Work:** Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of Face Recognition System for New Emergency Block at Safdarjung Hospital, New Delhi

**Tender No : HSCC/Safdarjung/EB/FRS/2018**

**To**

**General Manager (IT),  
HSCC (India) Ltd.,  
E-6(A), Sector 1,  
Noida – 201301**

**Sub : Submission of Proposal**

Having examined the Conditions in tender document and amendment/addenda for the above work, we the undersigned, are pleased to submit our Bid along with relevant documents. Bid in the following format is to be submitted:-

Firm's Reference		Date	
Firm Registration No. (if any)		PAN (attach photocopy)	
GST No.		LIMITED TENDER FORM	Address:
Phone			
Fax			
Email			
M/s:	Enquiry No. and Date		
	Date of Tender Opening		

- I/we engage to supply the material(s) to your office/site and comply the following:
1. Tender schedule and technical specification indicated.
  2. Item/tender specific conditions for this tender.
  3. General conditions of contract signed by me at the time of supplier registration (for registered suppliers).
  4. I/we confirm that set off for the GST etc. Paid on the inputs have been taken into consideration in the above quoted price and further agree to pass on such additional duties as sets offs as may become available in future under GST etc.
  5. That we have not been debarred by any Government/Undertaking.
  6. That the rates quoted are not higher than the rates quoted for same item to any Government/ Undertaking.
  7. That the bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.

Signature & Seal Place & Date:		Name of Authorized Signatory:	
Address:		Tel. No./Fax. No./Mobile No. Email	

## Annexure – II

**Price Bid**

Price should be quoted in Indian Rupees inclusive of all cost associated with the work, any out of pocket expenses, taxes, charges, levies, cess, GST etc. as applicable.

S.No.	Item	Quantity	Price in words	Price (INR)	Amount of GST (INR) & its rate	Total (INR) with all taxes, duties etc.
1.	Supply, Installation, Customization, Integration, Testing, Training, Implementation & Commissioning of all in one Face Recognition Software License per camera with database of blacklist and whitelist as provided by Law Enforcement agencies with up to 10000 entries for three no. of cameras (two cameras installed already and one more proposed) as per requirement & complete in all respect as per the satisfaction of Engineer with minimum one year onsite support.	3				
2.	Supply Installation Testing & Commissioning of Workstation with Intel i7 processor, 8 GB RAM, 2TB HDD, 2 GB Dedicated NVidia Graphics card, Windows 7 or as recommended by VMS Software. with 22" monitor, The Workstation shall be suitable for any open platform software, as required as per specification & at site of work in line with the Engineer in Charge instructions with minimum one year onsite OEM warranty.	1				
3.	Supply, installation, testing and commissioning of IP Ultra 12 MP camera having built-in Video analytics to trigger relevant alerts and quickly retrieve data, Outstanding wide dynamic range (92+16dB) with varifocal megapixel lens, P-Iris, CS Mount, 1/1.8", F1.5, 4-13mm, Indoor housing and mounting, etc complete in all respects including all the accessories and as per the requirement of site and with 3 years comprehensive onsite warranty (with parts and labour)	1				
	<b>Total (1+2+3)</b>					

Name of Bidder \_\_\_\_\_

Signature of Bidder with seal \_\_\_\_\_

Place :

Date :