OFFICE OF THE ADDITIONAL DIRECTOR GENERAL OF POLICE :: CID
MEGHALAYA :: SHILLONG

NOTICE INVITING TENDER

Sealed tender affixing non-refundable court fee stamp of Rs.1000 (Rupees four hundred) only are invited from bonafide, established, reputed manufacturers and registered reputed intending firms and supplier (s) and authorized dealer(s) for entering into rate contract for supply of *"Fingerprint Equipment"* under Modernization Scheme 2017-2018 as per specification and scope of work in Annexure "A", "B", and "C" and terms and conditions laid down in the Tender Notice. The tenders should be in 2(Two) bids system i.e.

(i) Technical Bid

(ii) Price Bid

Terms and Condition:

1.   Items offered must be from reputed companies/manufactures having National Crime Record Bureau (NCRB) certification with experience of supply and installation of AFIS in at least 5(five) States in India and should meet with all the specifications and scope of work as those given in Annexure "A", "B" and "C". Tender should be accompanied with catalogue, diagrams, samples, warranty/guarantee, copy of terms and conditions duly singed by the tenderer, as a token of acceptance of the same should be attached along with the tender or any related papers and will be received up to 12:00 hours on 1**9-07-2018** by hand or by post. These will be opened on the same day/date @ 1400 hrs. No tender will be accepted after the given date/time. Tenderers or their authorized representatives are invited at the time of opening of the tender. The tenderer or the supplier who quote different options will not be accepted and one quotation from 1(one) OEM should be submitted. Quotation for only those equipment which fulfill the specification will be accepted. Tenderers fail to fulfill by the terms and conditions of the "N.I.T" are liable to be penalized as deemed fit by the Department.

2.   **Tender must be accompanied by**:

(a)   Attested passport size photograph (2 Nos)

(b)   ST/SC certificate for (ST/SC)

(c)   Affixed non-refundable court fee stamp of Rs.1000/-

(d)   Earnest Money of 10% of the total amount.

     (i) Crossed Bank Draft or (ii) Deposit at Call payable to the ADG, CID, Meghalaya, Shillong at any Nationalized Bank at Shillong. Tenderer(s) belonging to SC/ST may deposit 50 % of the amount above subject to the production of such certificate.

(e)   Valid and current Income Tax Clearance certificate from the Income Tax Department and attested copy of Pan Card

(f)   Attested copy of Valid Trading Licence in terms of KHADC, (for non-tribal) Regulation Act 1954 by tenderers who are required to obtain such License.

(g)   Successful bidder is required to deposit Security deposit of 10% of the total amount. The Security deposit should be interest free and in the form of a valid Bank Draft/Deposit at Call   pledged in favour of the undersigned.

(h)   Valid current GST Registration certificate alongwith the last GST return copy.

(i)   Dealership/ Distributorship certificate from principle manufacturer in original with seal and inked signed. Computer generated certificate will not be entertained and the tender will be out rightly rejected.

(j)   The bidder should submit a warranty/guarantee of subjected store for a period of 3 (three) years with assurance to enter into AMC @ 7% of the total value of supply valid for the next three years after the expiry of warranty period and renewable after every 3 (three) years whenever required, to be submitted alongwith affidavit.

(k)   Copy of terms and conditions duly singed by the tenderer.

(l)   Tender envelop(s) must be sealed and super scribed "TENDER FOR FINGERPRINT EQUIPMENT" which shall be addressed to Additional Director General of Police, CID, Meghalaya, Shillong.

(m)   Upto date financialy stability certificate from any Nationalized Bank.

(n)   Separate envelope should be used for **TECHNICAL BID** as well as for **PRICE BID**. The word "TECHNICAL BID / PRICE BID" for purchase of FINGERPRINT Equip ment due to open on 09-07-2018 at 1400 hrs shall be prominently marked on the top of the envelope separately. Both these bids shall further be put in one envelope and sealed properly before putting in the tender Box duly super scribed. Tenderer (s) shall indicate complete specifications and all features of the Fingerprint items.

3.   The following information must be mentioned on the body of the envelope containing the quotations, failing which the sealed envelope of the quoting firm will not be opened.
(a) GST   -   is enclosed
(b) Income Tax Clearance certificate -   is enclosed
(c) Earnest money   -   is enclosed
(d) Court Fee stamp   -   is enclosed
(e) Trading License from KHADC, JHADC & GHADC (for non-tribal)
(f) SC/ST Certificate.   -   is enclosed
(g) Passport size photograph of the bidder should also be enclosed.
(h) Dealership/ Distributorship certificate in original- is enclosed.
(i) NCRB Certificate - is enclosed.
(j) Contract agreement.
(k) Warranty/Guarantee alongwith affidavit – is enclosed.
(l) Terms and conditions duly signed – is enclosed

Failure to enclose any one of those above documents or any invalid documents will result in automatic rejection of the quotation.

4.   Rates quoted :
a)   Should be inclusive of all charges, like custom duty, packing, insurance, GST, Transit risk and other incidental charge. Only local taxes and GST against D form should be shown separately if applicable

b)   Should be inclusive of the cost of equipment and all accessories till supply and installation and commissioning of the system.

c)   Should be valid till supply and installation and commissioning of the system.

d)   Should be quoted separately for each item.

e)   Should be quoted **FOR** destination Shillong door delivery Additional Director General of Police, (CID), Meghalaya, Shillong.

f)   Should be written clearly in figure and in words. Any alteration or over writing   must be fully signed by the tenderers.

g)   Once the rates offered in the quotation are accepted, no enhancement will be entertained at any circumstances and tenderers will be liable to supply the items at the rate accepted by the Addl.Director General of Police, (CID) Meghalaya, Shillong. Failure to supply the items at the accepted rates will entail the offer being cancelled and the security money will be forfeited to the Govt. of Meghalaya.

5. Tender/Quotation should be addressed to the undersigned by designation and not by name. Sealed envelopes containing the quotations must be super-scribed as "Tender for Supply of Fingerprint Equipment" and must be sent by register post or hand delivery.

6. The successful tenderers will be:-
a) Intimated by letter of Acceptance of Addl. Director General of Police, CID, Meghalaya, Shillong. Till then, no bidder has, any right to assume that his/ her quotation has been accepted. There shall be no claim for compensation for any expenditure incurred by any tenderers in anticipation of acceptance letter.

b) Required to furnish a security deposit as per rates mentioned and execute the contract agreement to fulfillment of the terms and conditions of the contract, which successful tenderer (s) will have to enter into. Such security deposit will be subjected to forfeiture in case of non-fulfillment of terms and conditions of the tender notice on the contract agreement. The earnest money of the successful tenderer (s) will not be released till the security deposit is furnished. Earnest money of the successful tenderer(s) will be forfeited to the Govt. in case of failure to furnish security money in full.

7. The Addl. Director General of Police, CID, Meghalaya Shillong may rescind forthwith the contract in writing if.
a) A Tenderer assigns or sublets any contract in respect of contract or any other contract entered into with the Government.
b) Tenderer or his agent/Servant are found guilty of fraud of this contract or any other contract. Declines, neglect or delays to comply with demand/requisition or in any other way fails to perform or observe any of or all the conditions of the contract agreement.
In case of such rescission the Security Deposit in full shall stand forfeited and absolutely be at the disposal of the Government without prejudice to any other remedy or action that the Government shall be entitled to recover from the successful Tenderer any extra expenses Govt. may deem necessary in obtaining the supplies.

8. In the event of the successful Tenderer failing to perform his/her part of any or all the contract agreement to the satisfaction of the Department or disregarding terms and conditions of the Tender Notice and or the contract agreement the successful Tenderer shall be liable to any of or all of the following action at the discretion of the Addl. Director General of Police, CID, Meghalaya, Shillong on behalf of the Government of Meghalaya.
        (i)   Forfeiture of security deposit in whole or part.
        (ii)   Making good the loss caused to the Government through the liability, neglect, delay in complying with the demand.
        (iii)   Cancellation of the contract without any prior notice to the contractor

9. If the successful Tenderer willfully neglects, fails to perform or observe any or all conditions of the contract agreement or attempts to cheat or indulge in foul practices, the Addl. Director General of Police, CID, Meghalaya Shillong may impose a ban upon such Tenderer(s) for future business within the Department.

10. Quantities mentioned in the list are only illustrative and may be increased/reduced on finalizations of order depending on the availability of fund/actual requirements.

11. Once the sample is approved, no change of brand name, shape, pattern, quality or specification will be entertained even on the plea of non-availability offer of the same quality or alternative offer of the same quality.

12. The store supplied must be of the same specification, weight and quality as the tendered models/samples/Tech. Spec./Hardware Spec. If the items are rejected by the undersigned due to non-meeting of the technical/Hardware Specification, the supplier must replace the rejected items at their own cost forthwith and in a period of 21 (twenty one) days from the date of rejection.

13.   Delivery & Installation must be completed within 60 (sixty) days from the date of receipt of firm orders. No extension of delivery period will be entertained.

14.   Payment will be made to the suppliers directly only on completion of supplies, successful installation of the equipment, training and on correct receipt of goods by the respective consignee in good condition. Documents/vouchers/P.R. Bills etc. routed through Banks will not be accepted. Consignment will dispatch by the firm after payment of all freight charges at the sources. Freight to pay P.R. Bill will not be accepted.

15   Risk of transportation will be borne by the Tenderer themselves.

16.   Comprehensive onsite warranty should be indicated along with after sale services facilities.

17.   One set of manuals of (Instructions and Maintenance) should be supplied free of cost for each item wherever applicable.

18.   The Purchase Board reserves the right to reject the lowest rate or any of the tender without assigning any reason.

19.   Any dispute arising out of or in respect of these terms and conditions of the Contract Agreement shall be in the Jurisdiction of the Courts in Shillong.

N.B: Details can be obtained from the office of the undersigned on any of the working days between 10:00 AM to 4:30 PM.

Sd/-

(Shri. B.L Buam, IPS)
Additional Director General of Police, CID,
Meghalaya, Shillong.

Memo No. M/CID/Cell-2/29/2017-2018/4-7   Dated Shillong the 20ᵗʰ June, 2018

Copy forwarded to :

1. The Commissioner & Secretary to the Government of Meghalaya, Home (Police) Department, Shillong for information.

2. The Asstt. Inspector General of Police (A), Meghalaya, Shillong for favour of information.

3. The Director of Printing & Stationery Department, Shillong alongwith a soft copy for publication in 2 (two) consecutive issue of the Meghalaya Gazette.

4. The Director of Information & Public Relation, Meghalaya, Shillong alongwith a soft copy with a request to take necessary action from your end for publication in 2 (two) Newspapers (one impression) in English and in Khasi. (in gist) and in 1(one) National Newspaper (English) (in gist) ·

5. The SP (SCRB), Meghalaya, Shillong with a soft copy containing the Tender Notice for uploading the same in the Website of Meghalaya Police.
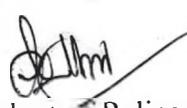

TENDER NOTICE

Sealed Tenders, along with brochures and catalogues for supply of items to CID, Meghalaya Under Modernisation Scheme 2017-2018, will be received by the undersigned upto 12:00 hrs on 19-07-2018 and will be opened immediately thereafter. Details may be collected from the office of the undersigned on any working day or the same may be downloaded from Meghalaya Police Website www.meghpolice.gov.in.

Sd/-

(R. Muthu, IPS)
Special Superintendent of Police, CID
Meghalaya, Shillong

Special Superintendent of Police, CID
Meghalaya, Shillong

Specification of AFIS SOFTWARE:

The entire system of AFIS(Automated Fingerprint Identification System) should have compliance with the following International Standards (specified version or latest).

S. No	Specification	Compliance	Remark
	1. NIST Compliance to Data Format for the Interchange of Fingerprint, Facial & other Biometrics Information (ANSI) (American National Standards Institute)/ NIST-ITL 1-2007) or latest of NIST Standards. 2. JPEG compression for mugshot images (ANSI/NIST-ITL 1-2007) 3. Minutiae and related information encoded from a finger or palm: ANSI/NIST Type-9 (ANSI/NIST-ITL 1-2007) 4. Ten print processing: 500 ppi ANSI/NIST Type 4 images (ANSI/NIST-ITL 1-2007) 5. Palm print Processing :500 ppi/1000 ppi ANSI/NIST Type-15 images (ANSI/NIST-ITL 1-2007, ANSI/NIST-ITL 1-1993) 6. Electronic Fingerprint Transactions Specifications (EFTS) 7. A certified version of the Wavelet Scaler Quantization (WSQ) algorithm as specified by [AFIS-IC-0110(V3) for lossy compression of fingerprint images scanned and transmitted at 500 ppi (JPEG 2000 for those images scanned and transmitted at 1000ppi) 8. The matching algorithm for standard minutiae template should be provided by the vendor with desired level of accuracy & performance. 9. Data conversion tools to convert the data of existing AFIS. 10. Finger Print and Demographic Data acquisition. It should have the capacity to record and maintain interactive Finger Print and demographic data acquisition. 11. Efficient case processing and linking with the captured latent/palm print. 12. Networking and Data Updating Capabilities. 13. Secure and Stable Database. 14. Live Scanner compatibility		
	Standard Module: 1. The system should be capable of receiving storing, matching and retrieving electronically transmitted finger & palm, Latent prints from its workstations and remote workstations. 2. The system should also be capable of receiving, storing and retrieving textual, demographic and photographic details of the criminal. 3. The system should be capable of receiving and processing inked and inkless rolled, flat and palm, print images at a resolution of ≥ 500 ppi or 1000 ppi (pixels per each) 4. There should be facility of automated minutiae extraction, pattern recognition/Henry classification – at least primary & secondary code. 5. The vendor shall use maximum classifications of different attributes / features as per the system being provided by the vendor i.e. core & delta detection, ridge orientation/direction, ridge counting, skeleton, neighboring minutiae architecture etc. 6. The system should perform image quality check and sequence check automatically and also able to capture Rolled Print & Palm Print area & sequence validation with interactive dialog for manual assistance, if required. 7. In case of unacceptable, poor quality or out or order prints, the		

	system should give alert for manual quality check with option for accepting or rejecting poor quality prints or swapping out of sequence prints. 8 If the image is unacceptable, a message should be sent automatically to the exporting remote location/workstation. The system should have auto enhancement and encoding module. 9. The system should provide automatic generation of transaction subject ID. 10. System should provide following image pre-processing capability automatic and manual by the operator in case of poor quality print:- Smoothen, Sharpen, Equalize, /Invert, Rotate-360^0 improve Bright Picture, improve Dark Picture, Improve contrast, Increase White area, filters to improve the image, Density handling, Noise deduction, Background subtraction/ removal, Flattening/ Thickening, Thinning of Ridges, Reduction to single pixel level, Edge Detection, distortion correction, selection of area of interest, histogram and able to separate overlaid chance prints. 11. The system should be able to separate fingerprints on multi-coloured surfaces viz currency notes, Revenue Stamps, Stamp papers, legal documents etc. 12. The system should be capable of enrolling complete palm including phalange areas with automated features extraction like finger prints viz. minutiae and ridge flow, skeleton etc. 13. If segmentation of palm is required by the system, it should be done automatically by the system internally. 14. System should weed out time barred slips automatically based on age or years.		

	Matching Module
	
	 Matching module should provide Ten Print, Palm print, latent print search on the following pattern
	 Ten print Matching
	     a) Ten print to both – Ten print & Latent print Database Search.
	 Latent Print & Unsolved Scene of Crime Print Marketing
	     a) LLatent Print to Both Print & Latent Print Database Search
	 Palm Print Matching
	     a) Palm Print to both Palm Print & Palm Latent Print Database Search.		

	Demographic and Textual Data Module 1. Storage & retrieval module should have facility of phonetic Name Search & indexing. 2. Should be seamlessly integrated with Finger & Palm Print Image data base in all respects. 3. Should be retrievable by clicking on shortlist of probable match results. 4. Should maintain profile/dossier of a criminal viz. (i) Name (ii) Sex (iii) Parentage (iv) Addresses (v) Date of birth (vi) Category (vii) FIR details viz FIR No. Date, Year, U/S. P.S. & District (viii)Conviction details viz. Name of the Court, Date of conviction U/S, Punishment awarded (ix) Photograph (x) MOB etc. 5. Should provide for sub-system for separate categories i.e. Convicted, Arrested Suspect, Inmate wanted, B. C. Proclaimed Offender, Absconder etc. 6. Should have Input, Query and Report Module on the basis of different data fields and categories. 7. System should be compatible with the NCRB codification standard for storage and retrieval of criminal data.		
	Search module 1. Search comparison of ten prints, palm prints and latent prints		

| | | to the AFIS database shall have the following functions
2.   Remote Query can be fired from multiple locations at the same time. The results will sent to the respective terminals.
3.   System's ability to have priority based processing of matching requests received from workstations. The system should be capable of indicating Query No./Date-wise/Time-wise to the transaction in need of priority and provide tools to initiate the priority processing. The system should generate flash to be displayed at concerned workstations 9i) Sl. No. in Queue (ii) Searching (iii) Total No. of Records to be searched (iv) No. of Records searched counter (v) Approximate time to be taken to complete the processing. Total time taken shall be flashed after the completion of search.
4.   Automated comparison of each rolled or flat ten print image against the corresponding "flat" image, to ensure proper finger identification.
Automated image quality rating to each ten prints, flat print palm print & latent print.
5.   Multi-finger matching/searching of latent prints against all 20 finger prints (both rolled and flat) in Ten digit Print record.
6 The latent search algorithms should also support search with no filtering and 100% data penetration to eliminate the need to perform multiple searches of the same latent print.
7.   Ten prints & Latent print should be searched automatically against the ten finger print database and simultaneously unsolved latent database.
8.   The system should be capable to enroll and search/match a slip having less than ten print in case of amputed/bandaged/missing fingers.
9.   Palm print should be searched against the palm print database and simultaneously unsolved latent database.
10. Latent finger print should be searched against the ten print finger database and simultaneously   Unsolved latent fingerprint database.
11. Latent palm prints should be searched against the palm print database and simultaneously unsolved latent palm print data base
12. The system should be capable of matching of latent prints of unknown scale with give accuracy standards
13. The system should be able to re-submit ten prints, palm print and latent print from database to search against database with re-editing facility.
14. Option for ten print, palm print and latent print search for identity verification without entering the record into AFIS.
15. AFIS should support the ranking of candidate matches for a sealed print or set of prints with the highest potential of a likely match appearing in first position.
16. Option for operator to use date field as filter for search.
17. Option for operator to use date field as filter for search. | | |
| | **Verification Module**

1.   Verification module should be available at Central AFIS.
2.   Ten-digit search should be based upon at-least four best finger print before the respondents are returned for manual verification and the system should perform ten finger matches automatically against each respondent to ensure accuracy.
3.   The four highest quality finger print images available in the Ten digit search print should be selected automatically by the system through automated image quality assessment.
4.   On screen side by side display presentation of the search print and potential matching prints from the AFIS database. The ranking of candidate matches from potential matching print(s) with highest potential should appear on the top in descending order. | | |

	5. Should be able to selectively display or hide an overlay of extracted minutiae points in the onscreen image comparison and binary image display. 6. The system should provide a convenient method to examine side-by-side same size images of the search prints compared with the candidate list prints and the ability to proceed forward and backward through the candidate list. 7. The system should provide for user defined threshold candidate list. 8. The system should provide automatic charting of matching points on both the matching prints with examiner defined charting option for the Court opinion.		
	System Security 1. Information security is very important to maintain Integrity, Confidentiality & Availability of data. Data needs to be protected against all possible threats 2. Front end application should include features of MD 5/SHA encryption layter, SSL – based (for web-enabled), Prevention from BRUTE Force Attack, SQL Injection, other vulnerability patches etc. 3. Encryption/ Decryption engine for encryption/ decryption of records while storing.		
	Accuracy 1. The system should be capable of achieving accuracy not less than 99% for ten print, palm print and single digit search. 2. The system should be capable of achieving accuracy not less than 90% in case of latent print search		
	Response Time 1. Response time will be measured from the time the search is submitted until images are available at workstation for verification. 2. The time from submission of a print and palm print search should not exceed more than 5 minutes (or stipulated/ normalized time on a connectivity of 256 Kbps bandwidth) from Remote workstation to the 3. Central AFIS Server until the identification message is returned, inclusive of simultaneous unsolved latent database search. 3. The time from submission of latent finger/ palm print search at central AFPIS should not exceed more than 10 minutes (or stipulated/ normalized time on a connectivity of 256 kbps bandwidth) inclusive of simultaneous unsolved latent database search. 4. The time from submission of a Single Digit search from Web (browser) based Remote query to the Central AFIS until the identification message is returned should not exceed more than 3 minutes (or stipulated/ normalized time on a connectivity of 256 kbps bandwidth) inclusive of simultaneous unsolved latent database search. 5. The application should be capable to run on multiple processing to accommodate either 50 concurrent Single digit searches or 30 concurrent single digit processes and 10 Ten digit print process and 3 latent print concurrent processing fired from the multiple locations. 6. AFIS should support image resolution of ≥500 ppi (or 1000 ppi pixels per inch) in all aspects of capture, processing and archiving. There should be no quality loss in transporting the data to the new system. 7. Should have the capability to reproduce one to one hard copy of ten print with flat/ rolled print and Palm print (full hand) records from electronic files submitted to AFIS. 8. The system should provide for separate temporary database for		

	document case, inmate/ suspect examination.		
	Backup/ Recovery Module 1. The system should provide for backups to reclaim the work in process files within 2 hours of a detected failure and backup capabilities to reconstruct permanent files and operating system software. The system should provide for incremental backup in every 24 hours and full backup of database once in a week. 2. The system should provide bridge software or a module through which AFIS system can be integrated with & worked on Hardware & Software of Crime & Criminal Tracking and Network System (CCTNS).		

AFIS server specifications (as per the guidelines of NCRB)   ANNEXURE-B

1.   **Data Base Server & Matcher server With Windows server OS   2 numbers**

Server	
Form factor	2U rack
Processors	Intel® Xeon® processor E5-4600 product family
Processor sockets	2
Internal interconnect	2 x Intel Quick Path Interconnect (QPI) links; 6.4 GT/s; 7.2 GT/s; 8.0 GT/s
Cache	2.5MB per core; core options: 4, 6, 8
Chipset	Intel C600
Memory1	Up to 1.5TB (48 DIMM slots): 2GB/4GB/8GB/16GB/32GB DDR3
I/O slots	7 PCIe slots: Two x16 half-length, full-height One x8 half-length, full-height Three x8 half-length, half-height One x8 half-length, full-height for the RAID controller
RAID controller	Internal controllers: PERC H310 PERC H710 PERC H710P External HBAs (RAID): PERC H810 External HBAs (non-RAID): 6Gbps SAS HBA
Drive bays	Up to sixteen 2.5" hot-plug SAS, SATA, or SSD
Maximum internal storage1	16TB
Hard drives	Hot-plug hard drive options: 2.5" PCIe SSD, SAS SSD, SATA SSD, SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K) Self-Encrypting Drives available
Embedded NIC	Broadcom® Quad Port 1GbE BASE-T (no TOE or iSCSI offload) Intel Quad Port 1GbE BASE-T (no TOE or iSCSI offload) Intel Dual Port 10GbE BASE-T with 2 x 1GbE (FCoE capability enabled on the 10GbE ports) Broadcom Dual Port 10GbE SFP+ with 2 x 1GbE (TOE and iSCSI offload available on 10GbE ports)
Power supply	Platinum efficiency 750W or Platinum+ efficiency 1100W power supplies Auto-ranging power supplies
Availability	High-efficiency, hot-plug, redundant power supplies; hot-plug drive bays; TPM; dual internal SD support; hot-plug redundant fans; optional bezel; luggage-tag; ECC memory, interactive LCD screen; extended thermal support ENERGY STAR® compliant, extended power range; Switch Agnostic Partitioning (SWAP)
Remote management	iDRAC7 Express (default) or iDRAC7 Enterprise (upgrade option), both with Lifecycle Controller 8GB or 16GB vFlash media (upgrade options)

2 . Networking Equipment (as per the guidelines of NCRB

Sr.No.	Item	Specifications	
1.	Switch	• 24 Port 1000 MBPS Full Managed Switch with 4 nos. inbuilt Combo Ports • 24 Port Patch Panel with Cable Manager (CAT-6) • 9U Wall mount Rack Unit with accessory (Power Supply with 4 Socket and 1 Switch, Fans, Cable Trays, Mounting Hardware etc • Single port information Outlets with surface mountable Box (CAT-6) • 5 & 15 amp 2 nos Socket & 1 no Switch with board with wiring from electrical duct to UPS and UPS to Switch	1
2	Cabling Work		1

3. AFPIS workstations for Central AFPIS and ONE Police Station AFPIS (as per the guidelines of NCRB

Work station : Mother Board : OEM Motherboard with pre loaded OS	3+1
Web Camera : HD web camera	
Processor : Intel Core i7 or equivalent Processor @ 3.4 GHz with Q57 express Chipset with 8 MB Cache	
Memory Type : 2X4 GB DDR3 1066 MHz - Synch DRAM UPGRADABLE to 16 GB Min. 1 DIMM Slot free for future upgrades (8GB RAM) 16GB slots for DRAM	
Internal hard disk /speed 1TB (3.5) SATA-II 3.0GB/s with NCQ @ 7200 rpm	
Optical Drive DVDRW (OEM make)	
Display size 21" Wide LED 1024 X 768 Monitor of the same make of offered PC brand	
Display controller : Integrated (on board) graphics	
Ethernet and ports Integrated 10/100/1000 Mbps Gigabit LAN, with Wake On LAN Support, and Wireless LAN facility, One serial port ,One HDMI port,Min 2 USB Ports 3.0 or higher and 2 USB Ports of 2.0 or higher port of which at least two should be on front side, 1- RJ45, 1-VGA, 2 Line-in (stereo/microphone); 2 Line-out (headphone/speaker)	
Bilingual Keyboard Heavy duty Bi-lingual (INSCRIPT) Etched Membrane Keyboard	
Pointing device Optical Mouse with scroll wheel	
Operating System Preloaded 64 bit Professional version of Windows 8 or advanced Windows OS with Certificate of Authenticity recovery /restore media CD along with patches and updates for 5 years.	
Antivirus Preload with Client anti-virus software Symantec/ McAfee/ Kaspersky/Quick Heal/Trend Micro according to antivirus server along with patches & updates for 5 years Responsibility of Supplier to ensure Latest Virus Signatures are updated on a routine basis, Virus infection Do's/Dont's need to be published widely and train users, ensure that Supplier ensures Zero % tolerance to Virus Infection	
Certifications TCO 05 / Energy Star 5.0 or above/ BEE star certified monitor RoHS for environmental safety UL citified Windows/Linux Certified	
IDC rating The OEM should be in the top 5 IDC rating in worldwide PC Shipments	
1 KVA UPS with battery	
Warranty:3 years comprehensive warranty	

4. Flatbed scanner (as per the guidelines of NCRB

Flatbed Color Image Scanner	3+1
Optical Sensor	
CIS (Contact Image Sensor)	
Optical Resolution1	
4800 dpi	
Hardware Resolution	
4800 x 4800 dpi	
Effective Pixels	
40,800 x 56,160 pixels (4800 dpi)	
Color Bit Depth	
48-bits per pixel internal / 24-bits per pixel external	
Grayscale Bit Depth	
16-bits per pixel internal / 8-bits per pixel external	
Maximum Scan Area F	
Flatbed 8.5" x 11.7"	
Light Source	
Three-color RGB LEDs	
Scanning Speed6	
Color 300 dpi approximately 10 seconds (via USB 2.0)	
Color 600 dpi approximately 30 seconds (via USB 2.0)	

5. Printer Type Laserjet B&W (As per NCRB specifications)

Printer Type Laserjet B&W	1
Print speed 18ppm or higher	
Print resolution 600x600 dpi or more	
Processor Min 500 MHz	
Memory Min.256 MB	
First copy time out 18 seconds or better	
Duty cycle 30,000ppm	
Display LCD touch screen(Color graphics)	
Paper trays 2 or higher	
Input capacity 250 sheets or better	
Output capacity 125 sheets or better	
Connectivity USB 2.0 and USB 3.0 support, 10/100/1000BaseTX Ethernet, Optional:-Wireless LAN, USB 2.0 (Device), SD Card /Memory Stick. Optional:- 10/100/1000BaseTX Ethernet , Wireless LAN, USB 2.0 (Device), SD Card / Memory Stick.	
OS Compatibility Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10,Windows Server 2012, Mac OSX (10.4.9 or later), Linux based OS.	
Warranty 5 years comprehensive onsite warranty	
Accessories Should be supplied with all necessary cables, suitable Driver software.	

6 KVA redundant battery bank Online UPS

5 KVA redundant battery bank Online UPS	1
System with 2 hour backup (for central Server at PHQ and one for Finger Print Section PHQ).	
Specifications – 5 KVA True ON-LINE UPS	
System with management software	
Minimum 2 hour battery backup	
(40X12VX42AH) SMF batteries	
Suitable rack for housing of SMF batteries	
Three phase in and Single phase out(redundant)	
Warranty 3 Year on UPS and 1 year on Battaries	

7. **Police Station AFPIS – Ten digit fingerprint live scanner with AFIS software (as per NCRB specifications) 2 Nos.**

1	Proposed **PS AFIS with Finger Print Live Scanner** should be **fully integrated and compliant with Central AFIS system in the State /** AFIS Technical Specifications issued by NCRB, i.e. PS AFIS with Finger Print Live Scanner should be directly operated from State AFIS application as well as from stand alone application for local operation. Stand alone application includes Capturing Ten Digit Finger Print and generating the printout of the Ten Digit Finger Print Slip with demographic attribute in customized format, local 1: N search with facility of Capturing and printing of mug-shot taken from web camera and local database storage and retrieval of 10,000 persons.
2	**Platen Size:**
	Single platen and single prism of minimum 3.2" X 3.0" architecture, uniformly illuminated capture area. Higher platen size will be preferred.
3	**Scanning area:**
3.1	Plain four fingers – 3.2" X 3.0" (Appx.) or higher
3.2	Rolled finger – 1.6" X 1.6" (Appx.) or higher
4	**TEMPERATURE**
4.1	Operating: From +0°C to +50°C. But operating in higher temperature and negative temperature will be preferred owing to Indian conditions.
4.2	Storage temperature 0 to 60 degree centigrade (preferred)
5	**HUMIDITY**
5.1	From 10 to 98% (non-condensing)
6	**WEIGHT**
6.1	Maximum 3.0 Kg. Lesser weight will be preferred.
6.2	The System should be portable for field operation with Notebook Computer.
7	**DIMENSIONS**
7.1	160 mm x 160 mm x 160 mm or Smaller
8	**ACQUISITION FEATURES**
8.1	Optical resolution – 500 ppi and / or more
8.2	Grey scale - 256 grey scale
8.3	Scanning time 4sec., slap 5 sec. with segmentation. Lesser time will be preferred.
9	**COMPUTER INTERFACE**
9.1	USB 2.0 or better.
9.2	Power supply through USB 2.0 or better, but no external or additional power source is accepted.
10	**QUALITY STANDARDS AND FORMATS**

10.1	ISO 19794- 4: 2005 Section 7 and Annex A certification requirements (IAFIS, Appendix F certified) (For storing, recording and transmitting biometrics data) will be preferred – 2 for FP Minutiae.
10.2	FBI IAFIS IQS CJIS-RS-0010 (V7) Appendix F compliance ANSI/NIST-ITL 1- 2011 or latest.
10.4	ISO/IEC FCD 19794-4
10.5	ANSI/NIST-ITL 1-2000 or latest Interpol Implementation.
10.6	Bio API 2.0 (Biometrics Application Programming Interface) or latest version will be preferred.
11	**DEVICE/ ACQUISITION QUALITY CHECK**
11.1	Calibration and Diagnostic Test: factory calibrated and sealed with self test / diagnostic at device start up.
11.2	The system should be able to notify regarding the quality of acquiring FPs prior to the capturing of next acquisition.
12	**AUTO CAPTURE**
12.1	Sensing of slap/single finger placement on the scanner and auto capture of prints before going to next acquisition.
13	**SLAP SEGMENTATION/ AUTOMATIC SEQUENCE CHECKING AND CORRECTION:**
13.1	Real time display of slap segmentation on acquisition screen. Slanted slaps should be automatically segmented.
13.2	System should be able to detect sequence error and should be able to place the finger print in its right place in 10 digit slip.
13.3	Slap segmentation algorithm should comply with the NIST Standards.
14	**ELIMINATION OF LATENT/GHOST PRINTS**
14.1	Elimination of latent/ghost prints originated from recent/past scans. This is most important for operating under Indian condition as platen always contains the ghost or latent print.
15	**ROLLED FINGERPRINT CAPTURING**
15.1	Display in real-time, self-adaptive to rolling speed and directions, seamless composite image generation, automatic stop detection and acquisition.
16	**IMAGE QUALITY CHECKING**
16.1	Dynamic estimation and notification of fingerprint image quality during scanning process; NISTIR7151 compliant
16.2	Real time Quality check and notification of acquiring FP: Quality check such as nail to nail rolling, smudging, non correct placement, poor quality acquisition etc.
16.3	Detects deformations of fingerprints due to sliding during acquisition.
16.4	Highest quality image selection during flat fingerprints scanning.
17	**IMAGE COMPRESSION**
17.1	WSQ Compression - FBI certified software / algorithm to compress the fingerprint images.
17.2	JPEG2000 compression for Mug-Shots.
18	**CONNECTIVITY**
18.1	Should be able to connect State / Central AFIS/ AFIS RQT system through CCTNS WAN system/ SWAN and existing GSM/CDMA network when operating with Notebook or handheld devices.
18.2	The Application Software should have Remote Biometric Data Submission Module for submitting captured Fingerprints, Mug-Shots & Demographic data to the Central AFIS Data Centre at FPB, SCRB/ AFIS RQT / NCRB.
19	**MUG-SHOT CAPTURING**
19.1	System should capture Mug-Shot (JPEG2000 compliant) of the subject front, left & right. Should be compatible with Face Recognition System. Face acquisition through minimum 8 MP Web Camera.
20	**AFIS APPLICATION SOFTWARE SPECIFICATIONS**
20.1	Operation friendly in English
20.2	Should have capability of producing and accurately printing ten digit and plain FP slip with mug shot and other demographic (text) data.

20.3	Provision for noting details in the space if any finger (s) is amputated, bandaged, webbed and deformed, etc in the printout of Ten digits Slip.
20.12	Should have mounting bracket for fixing on table top (preferred)
20.13	The system should allow editing of minutiae points
20.14	Cropping / cutting of fingerprint from desired location
20.15	Enrolment and searching of fingerprint
20.16	System should have facility to archive up to 20 slips if duplicate slip is found.
21	**OPERATING SYSTEM**
21.1	AFIS Software / Device must run on Windows-XP (32 bits & 64 bits) / Windows 7 (32 bits & 64 bits) / Windows 10 (32 bits & 64 bits) / Linux (32 bits & 64 bits) or other higher version (32 bits & 64 bits) as per requirement on up- gradation of AFIS.
22	**SPECIFICATIONS (PREFERABLE)**
22.1	System should have provision for compatibility on up gradation of existing AFIS Soft Ware and have provision for palm print storage and matching in future.
23	**OTHER ESSENTIAL FUNCTIONALITY**
23.1	Ten Digit Finger Print Slip Format to be designed as per the existing format for recording Finger Print and entering demographic details
23.2	Provision for capturing step wise details like Finger Print image, demographic details and mug shot through web camera etc.
23.3	Web Camera should be compatible with the system for capturing photograph and provision for three photographs (Front view and left & right side views) should be available
23.4	In case the number of persons is increased, back up management facility should be available
23.5	Facility for on-line data porting
23.6	Audit trail / log facility to AFIS Server / Remote Query Terminals.
23.7	Role based management (Administrator, Modifier and Creator) facility
23.8	Maintenance of Audit Trail and modification log facility
23.9	Query facility basing on demographic data
23.1	Total matching list should be displayed in a Combo Box for verification
23.11	Export of multiple selected records to NIST Format
23.12	Reporting of multiple selected records as per the designed format
23.13	Whenever there will be any Up-gradation of Software during the maintenance period of five years, the supplier will install the upgraded version without any additional cost.
23.14	Any additional features, without cost variation will be preferred.
	Warranty :- **3 years from date of installation**
24	**WEB CAMERA**
24.1	The web camera should have face acquisition capacity of Minimum 8 MP or higher without cost variation
24.2	JPEG2000 Compression for Mug-Shots or latest version with compatibility
	Warranty :- **3 years from date of installation**

3 (B)   DOCUMENTS REQUIRED   TO   BE   ATTACHED WITH COMMERCIAL / PRICE BID IN THE FOLLOWING ORDER: -

PRICE BID shall contain price only and no other documents shall be enclosed with the price bid.

1.   Details of Rates, inclusive of all taxes including freight installation, commissioning & testing of each items quoted by the tenderer shall be submitted on their letter Pad in clear terms, in words and in figures. The cutting & over-writing not valid. The option in the rates will not be entertained.

                                                    (   )

SIGN. OF TENDERER _____

NAME IN BLOCK LETTERS: _____

TENDER FOR THE PURCHASE OF FINGERPRINT EQUIPMENT FOR MEGHALAYA POLICE

Date of opening................................   Time ....Hrs.

We_____here by certify that we are established manufacturers/authorized representatives of M/s_____-with factories at _____which are fitted with modern equipment and where production methods, quality control and testing of all materials manufactured or used by us are open to inspection by the representative of the purchaser. We hereby offer to supply the following items at the prices indicated below with 3 years onsite warranty & Maintenance of all software and hardware supplied. After the expiry of the warranty period hereby agree to enter into AMC at the rate 7% of the total value for next 3 (three) years and renewable after every 3 (three) years whenever required.

S. No.	Description of work/ item	Qty.	Unit Price In Indian Rupees	Extended Price In Indian Rupees	Sales Tax/VAT In Indian Rupees	Another Govt. Levies, if any (To be specified)	Incidental charges, if any (To be specified)	Total Price FOR Destination In Indian Rupees
a	b	c	d	e	f	g	h	i
1.								

It is hereby certified that we have understood all the terms and conditions specified in the tender document and are thoroughly aware of the nature of job required to be done and goods/items to be supplied. We agree to abide by all the tender terms and conditions.

We hereby offer to carry out the job and (or) supply the goods/items detailed above or such portion(s) thereof as you specify in the notification of award.

(Signature and seal of Bidder)
Dated:_____

TENDER FORMAT

TENDER FOR PURCHASE OF FINGERPRINT EQUIPMENT

1. NAME OF THE FIRM : _____

2. CORRESPONDENCE ADDRESS : _____
    WITH TELEPHONE AND FAX NO : _____

3. LOCAL ADDRESS WITH TELEPHONE : _____
    AND FAX NO. : _____

4. WHETHER REGISTERED WITH NSIC : _____
    /DGS&D IF YES ATTACH COPY

5. SALES TAX / VAT REGISTRATION : _____
    PROOF

6. LATEST SALE TAX / VAT : _____
    CLEARANCE CERTIFICATE.

7. COPY OF AUTHORISED DISTRIBUTOR : _____
    /DEALERSHIP/MANUFACTURER

8. SPECIFICATIONS OF THE SYSTEM : _____
    ALONGWITH LITERATURE/BROCHURE

9. APPLICATION FEE : _____

10. EARNEST MONEY DETAIL : _____

11. COPY OF TERMS AND CONDITION : _____
    DULY SIGNED

SIGNATURE OF THE TENDERER WITH STAMP.

_____

_____

SCOPE OF WORK AND DETAILED TECHNICAL SPECIFICATIONS

I. SCOPE OF PROJECT

The responsibilities of the Tenderer for this project include the following:

1. Supply of required hardware and software as per the Technical Specifications in this document, for use in FPB, CID Hqr. Shillong and Shillong Sadar PS

2. Supply of all API, SDK and Interfaces required for AFIS (Automated Finger Print Identification System);

3. Provide Technical assistance software/Patched /Tools to export data to AFIS application software in single or batch mode;

4. Installation and commissioning of AFIS Finger at FPB, CID Hqr. Shillong and at Shillong Sadar PS.

5. Training;

6. 3 years Onsite Warranty & Maintenance of all software and hardware supplied.

II. TASKS TO BE PERFORMED

A. Supply of required hardware and software as per the Technical Specifications in this document, for use in Police stations of Meghalaya.

B. Provide Technical assistance to transfer existing fingerprint data and develop required Bridge software/Patched /Tools to export data to AFIS from the available cartridges.

C. System study, analysis, design, development, customisation of software to acquire, store and export the demographic (Criminal Attributes, arrest and conviction details etc.) text data into new AFIS;

D. 3 Years Onsite Warranty & Maintenance of all software and hardware supplied.

E. The Tenderer has to provide training on the AFIS to Meghalaya Police personnel as follows:
* For training and support, Meghalaya Police will provide space. Training shall be in English. Training material should also be in English. Some material at expert level should also be in English. Required hardware for training, other than available in training lab CID/Hqr is to be arranged by Tenderer. Required software is to be arranged by Tenderer.

Level of Trainee	Type of Training	No. of personnel to be trained	No. of Batches & Duration	Level
Inspector and Sub Inspector (Finger Print)	Training on Fingerprint equipment handling, functioning, operation & administration, advance use of application software	8 (eight)	2(4 days)	Expert/ Immediate
S.I/H.C/Constable	Fingerprint equipment Operator Training including training for data entry	60 (sixty)	3(3 days)	Operator/ Immediate
AFIS Administrator Training, Insp, & S.I (FP), Working at AFIS Cell of Meghalaya Police	System Administrator Extensive training in different aspects Fingerprint equipment, installation configuration, operation, maintenance & trouble shooting , Integration with AFIS;	6 (six)	1 (4days)	Expert

It is to be clearly understood that the requirement of training shall be considered to be fulfilled only when the competent authority is satisfied that identified personnel has developed/ acquired necessary knowledge/ skill/ capability & confidence to run the system/ project without support from tenderer. It may require multiple session and refresher trainings etc.

A. The Tenderer shall perform any other related work for efficient functioning of said Project as directed by Competent Authority from time to time. Tenderer may require system analysis and study of the existing system, and Meghalaya police requirements in terms of customisation of the product, designing of input screens, forms and output reports etc. before supply and installation of hardware and software. Input screens, forms and output reports, will be required to be approved by competent authority. Tenderer shall give site requirements as soon as the agreement is executed between the parties.

B. Tenderer and CID/Hqr shall mutually decide the project execution and implementation strategy and form implementation team soon after signing of the agreement.

III. TIME SCHEDULES FOR VARIOUS TASKS

The Tenderer shall submit his implementation plan and time schedule for various tasks. However the indicative schedule of activities for implementation of project at Shillong may be as following:

All the times are mentioned in weeks. **D is the date of signing of agreement/completion of site preparation as communicated by Meghalaya Police to the successful tenderer**;

#	ACTIVITY	Preceding Activity (Week)	Start Time (Week)	End Time	Duration (Week)	Responsibility
A	System study, analysis, design, development, store and successful export of existing data and the demographic details. (Criminal Attributes, arrest and conviction details etc.) text data;	D Signing of agreement	D+4		4	Tenderer

#	ACTIVITY	Preceding Activity (Week)	Start Time (Week)	End Time	Duration (Week)	Responsibility
B	Hardware and software(application Software and all required API, SDK etc.) delivery ; and initial testing of prototype application software, integration of Live Scanner System with AFIS, work stations at FPB, Shillong and one Police Station at Shillong.	Completion of Activity' **A** '.	D+ 4	D+ 8	4	Tenderers.
C	Bug fixing, Redesigning Development of and Final version.	Completion of Activity '**B**'.	D+8	D+9	1	Tenderers.
D	Software and Hardware Acceptance test	Completion of Activity '**C**'	D+9	D+10	1	Tenderers.
E	Software and hardware delivery installation and commissioning at all locations	Completion of Activity '**D**'	D+10	D+12	2	Tenderer/MP Police

F	Training	Completion of Activity 'E'	D+12	D+14	2	Tenderer

TOTAL TIME FOR THE SYSTEM TO BE OPERATIONAL = 14 WEEKS

Failure to abide the proposed time schedule stated above may result in penalty. The proposed time does not include the time taken by Meghalaya Police to accord necessary consent / assent approval etc. required on its part.

Technical Specification of Finger Print Slab Live Scanner

Sl. No	Description	
1	Live Scanner with software capability to collect all elements on a ten print card, i.e. roll scans, 4-finger flat and thumb scans (4+4+2). All Live scan components proposed shall meet the following industry standards governing image capture & compression: 1. Full Compliance with Wavelet Scalar Quantization Grayscale Image Compression Specification. 2. Full Compliance with ANSI Data format for the interchange of Finger Print, Facial & SMT Information (ANSI/NIST-ITL-I-2007 or current). 3. Full Compliance with IAFIS Image Quality specification, Electronic Finger Print Transmission specification (EBTS Appendix F and G) (CJIS-RS- 0010 V7). 4. Full Compliance with FBI NCIC CJIS WAN Protocol Specification and IAFIS Telecommunications Standard. 5. Electronic images must be of sufficient quality to allow for: (1) conclusive fingerprint comparisons (identification or non-identification decision); (2) fingerprint classification; (3) automatic feature detection; and (4) overall Automated Fingerprint Identification System (AFIS) search reliability. .6. The fingerprint comparison process requires a high fidelity image without any banding, streaking or other visual defects. Finer detail such as pores and incipient ridges are needed since they can play an important role in the comparison. Additionally, the gray-scale dynamic range must be captured with sufficient depth to support image enhancement and restoration algorithms. 7. The fingerprint scanner must be capable of producing images that exhibit good geometric fidelity, sharpness, detail rendition, gray-level uniformity, and gray-scale dynamic range, with low noise characteristics. The images must be true representations of the input fingerprints without creating any significant artifacts, anomalies, false detail, or cosmetic image restoration effects. 8.Live Scanner should be fully integrated with existing Meghalaya Police AFIS, i.e. live scanner can be directly operated from AFIS as well as Finger Print Images (Rolled and Slab) and demographic details captured through Live Scanner Application Software can be imported directly to AFIS. Tenderer will develop all necessary interfaces and tools for AFIS and Live Scanner Integration. All required drivers, SDK and API will be procured, by Tenderer only.	
2	**Key Features and Specifications:**	
a	Resolution of resulting images	min. 500 ppi, max 1000 ppi, software selectable
	Gray Scale	256 Gr~y Scale, 8 bit.
b	Dynamic Range	At least 80.0 % of the captured individual fingerprint images shall have a gray-scale dynamic range of at least 200 gray-levels.
c	Sensing Area	Single platen (single prism, single imager, uniform capture area) for rolling and taking plain and Slab impressions of finger. No moving parts in the Optic Deck.
d	Scan Area (Min.)	81 x 76 mm
e	Image area:	
	-Rolled	41 x 38 mm (Roll Live scanner must be capable of capturing at least 80% of full roll are length, where full roll arc length is defined as arc length from nail edge to nail edge.)
	- Slab (4 fingers)	81 x 76 mm
f	Time for scanning a fingerprint	Maximum 4 seconds (for slaps -5 seconds)
g	Image Compression Method	WSQ -compression (Maximum: I: 15)
h	Image Quality	Complies with FBI's IAFIS Image Quality Specification :CJIS-TD-0010; CJIS-RS-0010 (v7) appendix. F.
i	Interface	USB 2.0
j	Capabilities	
	i. Automatic finger detection	System should detect finger automatically

	ii. Calibration and Diagnostic test	Factory calibrated and sealed, with self test/ diagnostics at start-up
	iii. Quality Check	The system issues a massage regarding the quality of rolled and plain fingerprint images prior to capturing next finger.
	iv. Automatic change to the next finger	If the image quality is good, the system offers to scan the next finger
	v. Both Direction Capturing	Capability to allow the fingers to be rolled in a left to right or right to left direction when taking the rolled impressions.
	vi.Capability to compensate complicated cases	Capability to capture significant ridge definition of dry and sweaty skin (Ignores moisture and sweatto prevent blobs that degrade image quality) along with capability to compensate Smudge (accurse while rolling the finger on platen) and smeared image.
	vii. Automatic sequence	Automatic sequence checking of rolled print with respect to plain print.
k	Protection from Dust, Debris and Liquid	Rugged enough to withstand extreme working conditions in law-enforcement environment.
3	Software	
a	Operating Systems	OS Windows @ Vista /XP
b.	Application Software	The Live Scanner system Application: Capable to store minimum of 1000 complete 10 print card. Preview, zoom and 10 Print Card Printing facilities. Ability to search for an individual's data by his touch fingerprint On Screen Prompt feature indicating the direction of Finger roll and correct finger Exporting of Ten-print cards files in the following formats: 0 International data exchange format ANSI/NIST ITL-1-2007 : 0 FBI IAFIS CJIS-RS-OOIO (v.7); 0 INTERPOL (INT-I) (v.4), November 19, 2002; 0 Non WSQ compressed NIST complaint for maximum minutia extraction. 0 Print / reproduce 10digit slip (image and text data) in Meghalaya Police / NCRB format

Evaluation Committee: The bidders will have to demonstrate the functioning of the system for proper valuation by Technical Committee to be formed for final acceptance.