

e- PROCUREMENT NOTICE / INVITATION FOR BIDS (IFB)

BIDDING DOCUMENT

E- BID THROUGH e-PROCUREMENT SYSTEM

FOR

**Supply of Video cum Audio Authentication system with PC for
Regional Forensic Science Laboratory, Bongaigaon**

IFB NO. DFS.2085/2020-22/263

Dated: 28-09-2022

GOVERNMENT OF ASSAM
OFFICE OF THE DIRECTORATE OF FORENSIC SCIENCE, ASSAM,
KAHILIPARA, GUWAHATI-781019

Web site : www.forensic.assam.gov.in,
email: directorfslassam@yahoo.com.

No. DFS.2085/2020-22/263

Dated Guwahati, the 28th September,2022

INVITATION FOR E-BID (IFB)
NATIONAL COMPETITIVE BIDDING

E-Tenders are invited online through e-procurement system i.e. through website www.assamtenders.gov.in from the intending manufacturer/ authorized for Supply of Video cum Audio Authentication system with PC for Regional Forensic Science Laboratory, Bongaigaon.

The E- Tender is Two-Bid System. The terms and Conditions and details of items to be supplied is described in the Tender Document.

Important dates of the e- Tender

Sl. No.	Scheduled	Date	Time
1.	Tender Publishing	28.09.2022	5.00 PM
2.	Tender download	28.09.2022	5.30 PM
3.	Bid Submission Start date	30.09.2022	10.00 AM
4.	Bid Submission End date	21.10.2022	12.00 PM
5.	Technical Bid opening	21.10.2022	4.00PM

1. Brief Schedule

Sl No.	Description	Bid Security (E.M.D.) Rs. In Lakhs	Delivery period	Tender processing fees in INR	Eligibility
1	Video cum Audio Authentication system with PC for Regional Forensic Science Laboratory, Bongaigaon	1.00 Lakh	Within 30 days	1200.00	Manufacturer /authorized Dealer

- Bidding documents are available through online and bids are to be submitted online through e-procurement system i.e. through website www.assamtenders.gov.in only. The bidders would be required to register in the website for submission of the bids. The bidders are required to have Digital Signature (DSC) from any of the Certifying Authorities. Aspiring bidders who have not obtained the user ID and password for participating in e-procurement may obtain the same by registering in the www.assamtenders.gov.in. The requirements to register with the e-procurement portal are available on the website indicated above.
- Tender processing fee: As per Finance Department's order Memorandum No. FEB/269/2017/27 dtd. 21.08.2019. Tender fee should be on or before the date and time of opening of Technical Bid, falling which the bids will be declared nonresponsive.
- Bids security (EMD) through online mode by way of Account Payee Demand draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Schedule Banks in an acceptable form will be accepted.
- Henceforth, any corrigendum/addendum related to this Bid/Tender may kindly be seen at the e-procurement website www.assamtenders.gov.in.
- All other relevant information and the detailed Bid Document are available on website www.assamtenders.gov.in . The undersigned shall not be held liable for any delays for

submission of the tender to the website due to e-procurement system failure beyond the control. Even though the e-procurement system will attempt to notify the bidders of any bid updates, the undersigned shall not be liable for any information not received by the bidder. It is the bidder's responsibility to verify the website for the latest information related to the bid.

7. The bid documents are not transferable.
8. The EMD validity must be valid for 148 days from the date of opening of technical bid.
9. The prospective bidders might not put ZERO (0:00) data in the Price Bid (BOQ) format in any circumstances which is uploaded by the tendering authority.
10. Participated Bidder must be submitted INDEX of the quoted items (Sl .No) with make, model & Country of Origin in the front page of the Technical Proposal.
11. No procurement shall be made from a country which is against the spirit of the Circular issued by Ministry of Finance, Department of Expenditure Public Procurement Division vide F.No. 6/18/2019-PPD, dated 23rd July 2020.
12. Technical bids of all participating bidders will be opened on the above mentioned date.

-sd-

Director (In-Charge),
Directorate of Forensic Science, Assam,
Kahilipara, Guwahati- 19.

Contents

Sl. No.	Page no.
1. Instruction to Bidders	5 to 13
2. Technical Specifications (Annexure I)	14 to 17
3. Annexure II	18
4. Price Schedule (Annexure III)	19
5. Declaration on after Sales Service (Annexure IV)	20 to 21
6. Under taking on Fraud and corruption (Annexure V)	22
7. Manufacturer's authorization form (Annexure VI)	23
8. Performance Security Form (Annexure VII)	24
9. Contract Form (Annexure VIII)	25 to 39

INSTRUCTION TO BIDDERS (ITB)

1. **The bid should be submitted in e-Procurement mode through the portal www.assamtenders.gov.in within the date and time as stipulated in the IFB.**
 - A. This Invitation for Bids (National Competitive Bidding) is open to all eligible manufacturer and/or their authorized dealers.
 - B. The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Director, Directorate of Forensic Science, Assam, Kahilipara, Guwahati-19 herein after referred to as “the Purchaser” will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tender process.
 - C. It is the responsibility of the Bidder to ensure that their Bid documents are submitted in the e-Procurement mode through the portal www.assamtenders.gov.in within the stipulated date and time as mentioned in the IFB.
 - D. No Bid will be considered for acceptance unless cost of the Bid Document in prescribed mode is submitted within the stipulated time by the intending Bidder.
 - E. The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidder’s risk and may result in the rejection of its bid.
2. The Directorate of Forensic Science, Assam takes no responsibility for delay, loss or non-receipt of the sealed envelope containing the cost of Bid document, Bid Security sent by post. In this regard unsealed envelope or Telex/Telegraphic/ Fax correspondence shall not be considered for acceptance.
3. The Bid shall be completely filled in all respects and shall be uploaded with requisite information and annexures. Any Bid incomplete in any particulars shall be liable for rejection.
4. If the space in the Bid or any schedule or annexure thereof is insufficient, pages shall be separately added. These shall be consecutively page numbered and shall be signed by the Bidder and entered in the index of the Bid.
5. **This Bid is invited for e-Procurement in Two Bid System. The Bid documents are issued in two parts; Part – I: The technical Bid & Part – II: Price Bid. Both the part, completed in all respect is to be uploaded on or before the stipulated time & date.**
6. **Bidders shall submit their bids in two parts as under:**

For submission of the bid, the Bidder is required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities authorized by Government of India for issuing DSC. Aspiring Bidders who have not obtained the user ID and password for participating in e-procurement in this tender, may obtain the same from the website: <https://assamtenders.gov.in>. Bids must be submitted online on <https://assamtenders.gov.in> on or before the deadline for submission of bids and will be opened online at the specified time and date for opening of bids, as given above. Any bid or modifications to bid (including discount) received outside e-procurement system will not be considered. The electronic bidding system would not allow any late submission of bids.

Documents to be uploaded in the Technical folder of e-procurement portal:

- a) **Softcopy of the signed and sealed Technical bids**, consisting of technical details bringing out clearly in a separate sheet, the deviations in specifications if any from that of 'Technical Specifications' and also clause-by-clause compliance of specifications along with the commercial terms and conditions and bid security. Hard copy of the technical bid along with the receipt of tender processing fee and EMD submission proof to be sent to the undersigned on or before the bid submission date.
- b) Valid up to date GST clearance certificate.
- c) No Fraud & Corruption document has to be submitted. **(Annexure V)**.
- d) Photocopies of valid GST and PAN.
- e) Supplier & completion certificate of similar and/or identical goods supplied in the past three years prior to the date of Tender opening
- f) Literature/catalogue/leaflet in support of the tendered item.
- g) Up to date dealer/ distributor certificate.
- h) Declaration on details of nearest after sales service facility with details of technical personnel, along with non - conviction certificate/ declaration for the past 3 years. **(Annexure IV)**.
- i) Manufacturer Authorization letter as per the format enclosed at **Annexure-VI**.
- j) All the undertaking should be in the companies/ Bidder letterhead.
- k) Written power-of-attorney accompanying the bid shall indicate the letter of authorization.

Documents to be uploaded in the financial folder of e-procurement portal:

BOQ or Price bids

Bidders whose technical bids are found to be substantially responsive will be informed accordingly for opening of their price bids automatically by the e-portal itself. Price to be quoted is "**FOR**" Bongaigaon.

Currency of Bid: The unit rates and prices shall be quoted by the Bidder and shall be paid for, entirely in Indian Rupees.

7. The bid shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the contract. Written power-of-attorney accompanying the bid shall indicate the letter of authorization. The person or persons signing the bid shall initial all pages of the bid.
8. The bidder shall complete the bid forms/ BoQ and the forwarding letter for bid submission **(Annexure-III and Annexure-II)** furnished in the bidding documents.
9. For comparison of bids, the purchaser will grant a margin of preference to goods in accordance with the Govt. standing procedures, provided the bidder shall have established to the satisfaction of the purchaser that the goods are eligible for price/purchase preference.
10. However, the quantum of price/purchase to be allowed shall be determined by the purchaser on the merits of individual cases based on the prevailing Government policy.

11. To assist in the examination, evaluation and comparison of bids, the purchaser may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.
12. Preliminary examination: The purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required EMD and tender processing fees has been furnished, whether the document have been properly signed, whether the bid validity is as required and whether the bids are in order.
13. **Bid from authorised dealers without proper authorization from the manufacturers shall be treated as non-responsive and shall be rejected.**
14. **The bid shall remain valid for 120 (One Hundred Twenty) days after date of technical bid opening.** The Purchaser shall reject a bid valid for a shorter period. In exceptional circumstances, the purchaser may solicit the bidder's consent to an extension of the period of tender validity. The request and the responses thereto shall be made in writing. The EMD (bid security) provided under provision 17 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security. A bidder granting the request will not be required nor permitted to modify its bid.
15. The Supply and Installation should be completed on or before 60 days from the date of Contract.
16. The bidder must furnish EMD (bid security) unless otherwise exempted under Govt. Orders/Rules in force.
17. **The EMD** (bid security) should be valid for 148 days from the date of opening technical bid.
18. Any bid from a bidder who fails to furnish EMD, secured in accordance with provision 14 and 17 will be summarily rejected by the purchaser, as non-responsive.
19. Unsuccessful bidder's EMD (bid security) will be discharged /returned by e-procurement portal.
20. The successful bidder's EMD (bid security) will be discharged /returned by e-procurement portal upon the bidder executing the contract and after furnishing the Performance security, pursuant to provision 26.
21. The prices must be quoted in Indian Rupees for both indigenous and imported make. Bids, where prices are quoted in any other way shall be treated as non-responsive and rejected. The bidder shall indicate on the appropriate price schedule (BoQ) (Annexure-III) attached to these documents the unit prices and total bid prices of goods it proposed to supply under the contract.
22. The Purchaser will technically evaluate and compare the bids to determine the substantially responsive and technically acceptable bid/bids.

- 23.** The comparison shall be of F.O.R. site and delivered at consignee's end. The purchaser's evaluation of bid will take into account, in addition to the bid price and the price of incidental services, the following factors, in the manner and to the extent indicated in provision 24 and in the 'Technical Specifications':
- a) delivery schedule offered in the bid,
 - b) deviations in payment schedule from that specified under provision 44.
 - c) the cost of guarantee/ warranty and
 - d) the Performance and productivity of the equipment offered.
- 24. Purchaser's right to accept any bid and to reject any or all bids:** The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject any or all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligations to inform the affected bidder or bidders of the grounds for the purchaser's action.
- 25. Signing of contract:** After the purchaser notifies the successful bidder that its bid has been accepted, the purchaser will send the bidder the contract form provided in the bidding documents, incorporating all agreements between the parties. The successful bidder shall sign and date the contract form provided in the document. A registered Power of Attorney is to be supported with the bid in favour of the person(s) who will sign the bid as well as contract form if contract is awarded. **(Annexure-VIII)**
- 26. Performance Security:** Within 10 days from the date Letter of Intent is issued to the successful bidder (winner), the successful bidder(winner) shall furnish Performance Security to the purchaser for an amount of **5% (Five percent)** of the order value, valid for the entire period of warranty. The performance security shall remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the bidder including warranty obligations, maintenance and defect liability period, which ever is the latest.
- However, if the supplier fails to execute the order or fails to perform the services as per contract in addition to other panel actions, the performance security shall be encashed & the amount forfeited.
- 27.** Failure of the successful bidder to comply with the requirement of provision 25 or provision 26 shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD (bid security), in which event the purchaser may like to hire the award to the next lowest evaluated bidder or call for new bids.
- Under the above conditions, the purchaser shall endeavor to procure the concerned equipment from the approved L2 vendor (make and model offered by L2 vendor) at L1 rates of the equipment finalized in the tender, and proceed to complete procurement. If the L2 bidder fails, the L3 bidder shall be considered and so on and so forth.
- 28.** The proceeds of the Performance Security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract.
- 29. The Performance Security** shall be denominated in the Indian Rupees and shall be Bank Guarantees (in the prescribed pro forma given at **Annexure-VII** issued by any of the scheduled banks).

30. Qualification Criteria:

1. The bidder must be a manufacturer or their authorized dealers (specifically against this IFB for the subject goods).
2. Notwithstanding anything stated above, the purchaser reserves the right to assess the bidder's capability and capacity to perform the contract satisfactorily before deciding on award of contract, should circumstances warrant such an assessment in the overall interest of the purchaser.

31. Warranty:

- i. The supplier must warrant that the goods supplied under the contract are new, unused, or the most recent of current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier must further warrant that the goods supplied under the contract shall have no defect arising from design, materials or workmanship (except insofar as the design or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in India, i.e. the country of final destination.
- ii. The purchaser/indenter shall notify the supplier in writing of any claims arising under this warranty.
- iii. Upon receipt of such notice, the supplier shall, with all reasonable speed, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the purchaser for the replaced parts/goods thereafter.
- iv. If the supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchase may have against the supplier under the contract.
- v. The warranty for defective parts will begin de novo from the date of replacement. Supplier will pay applicable taxes & duties and all expenses up to the destination for the replaced part.

32. Reasonability of rates/ firm price:

- i. The bidder shall certify that the rates quoted are the lowest ones for any institution in the country.
- ii. During the period of the contract, if the price of any tendered item is reduced due to any reason including any Law or Act of the Central/State Government, the bidder shall be statutorily bound to intimate the reduced rates immediately to the purchaser and shall charge the reduced rates. The purchaser is empowered to unilaterally effect such reduction as is necessary in rates, in case the bidder fails to notify or fail to agree to such reduction of rates.
- iii. Subject to the condition stipulated above, the prices shall remain firm for the validity period of tender and on no account any increase in price shall be entertained till completion of the contract period.
- iv. No bidder will be allowed at any time on any ground whatsoever, to claim revision of or modification in the rates quoted by him. The representation of the bidder that computation/ typographical or clerical error etc. has been committed in the bid and request for reversion on such plea shall not be entertained after opening of the

bid.

- v. The prices quoted by the L1 bidders / winning bidders shall be shared with the concerned principal manufacturers. The Principal manufacturers shall submit a written declaration regarding justification of the prices quoted by the L1 / winning bidders of the concerned equipment. Necessary steps shall be taken by the tendering authority regarding any adverse remarks made by any principal manufacturer.

33. Contacting the Purchaser: No bidder shall contact the purchaser on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded. Any effort by a bidder to influence the purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions shall result in the rejection of the bidder's bid and also banning of business dealings with the bidder for a period of three years from the date of such ban.

34. Documents establishing good's eligibility and conformity to bidding documents:

The bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services, which the bidder proposes to supply under the contract. The documentary evidence of the goods and services eligibility shall consist of a statement in the price schedule. The documentary evidence of the goods and services conformity to the bidding documents may be in the form of literature, drawings and data and shall furnish:

- i. A detailed description of the goods essential technical and Performance characteristics,
- ii. A list giving full particulars, including available sources and current prices, of all spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for specific period, following commencement of the goods use by the purchaser and
- iii. A provision-by-provision commentary on the purchaser's 'Technical Specification' demonstrating the goods and services substantial responsiveness to those specifications or a statement of deviations and exceptions to the provisions of the 'Technical Specifications'.

35. Definition of Technical Specification: For purposes of the commentary to be furnished to provision 34 (iii) above, the bidder shall note that standards of workmanship, material and equipment and references to brand names or catalogue numbers designated by the purchaser in its 'Technical Specifications' are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the purchaser's satisfaction that the substitutions are substantially equivalent or superior to those designated in the 'Technical Specifications'.

36. Statutory taxes/ duties :

In case of any enhancement of Taxes and/ or duties or levy of fresh Taxes/ duties due to Statutory Act of the Govt., after date of submission of the tenders and during the contractual delivery period, additional or fresh levies so imposed will be allowed to be claimed as extra without any change in the price structure approved under the tender. For this purpose, the supplier shall produce a certificate from the authority concerned

certifying that the item supplied falls under particular tariff resulting in additional/fresh levies for the supplied item.

However, the same shall not be borne by the purchaser in case such levies become applicable after expiry of the contractual delivery period stipulated in the contract.

Further, in case the bidder has been enjoying Excise Duty exemption on any criteria like turnover etc. and at a later date, during currency of the contract, even if applicable Duty becomes chargeable on goods manufactured, the same shall be to the supplier's account and shall not be borne by the purchaser.

37. Penalty for delay in delivery:

- a) Non-performance of the contract provisions may make the bidder liable to be disqualified to participate in any tender for the next 5 years, in addition to forfeiture of EMD / Performance Security and other penal provisions.
- b) Delay in supply may invite 0.5% penalty on the cost of the equipment

38. Force majeure:

The above condition of delivery period, price reduction & termination etc. are subject to force majeure conditions which are beyond the control of the supplier, do not involve fault or negligence of the supplier and are not anticipated. Such events may include but are not limited to riots, mutinies, war, fire, storm, tempest, flood, epidemics, or other exceptional causes like quarantine restrictions, freight embargoes. On specific request made by the supplier the time period of supply may be extended by the purchaser at his discretion for such period as may be considered reasonable. However, the condition shall not include scarcity of raw materials, power cut, labour dispute, failure of sub-vendor and increase in cost of raw material.

39. Fraud & Corruption:

The bidders, suppliers & suppliers shall observe the highest standard of ethics during bidding and during performance of the contract. For the purposes of this provision, the following acts shall be considered as corrupt and / or fraudulent practices -

- a) "Corrupt Practice" means offering, giving, receiving, or soliciting directly or indirectly, of anything of value to influence the action of an official in the procurement process or in contract execution.
- b) "Fraudulent Practice" means misrepresentation or omission of facts in order to execution of contract.
- c) "Collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, non-competitive level.
- d) "Coercive Practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process or in execution of a contract.

During the process of evaluation of a bid or proposal for award of a contract, if it is detected that a bidder directly or through agent has engaged in corrupt, fraudulent, collusive or coercive practice in competing for the contract in question, then a) the bid shall be rejected and b) declare the firm ineligible for a specific period or indefinitely to participate in a bidding process.

40. Local conditions:

It will be imperative on the bidder to fully acquaint himself of all local conditions and factors that would have any effect on performance of the Contract. The purchaser shall not entertain any request for clarifications from the bidder regarding such local conditions nor shall accept any offer conditional to the local factors. No request for any change of price or extension of time schedule of delivery of goods shall be entertained after purchaser accepts the bid.

41. Adjudication/Review board:

Any dispute arising out of or during execution of the contract shall be settled with mutual agreement through an Adjudication/Review Board appointed by the Directorate of Forensic Science , Kahilipara, Guwahati, Govt. of Assam.

42. Saving clause:

No suit, prosecution or any legal proceedings shall lie against Tender Inviting Authority or any person for anything that is done in good faith or intended to be done in pursuance of tender.

43. Laws governing the contract & jurisdiction:

The contract shall be interpreted in accordance with the laws in force in India. All disputes shall be subject to the jurisdiction of appropriate court situated at Guwahati.

44. Payment Terms:

Procedure for payment: The paying authority on production of the following documents shall make Payment.

- a. Invoice in triplicate are to be submitted to the paying authority along with the other documents after completion of the supply.
- b. The original Challan Copy.
- c. Warranty certificates.
- d. Operational Manual.

45. Additional Terms and Conditions:

- a. Total monetary value of similar nature of work performed during each of the last three years must be furnished by the bidder which are as follows:
 - i) Experience in works of a similar nature and size for each of the last three years, and details of works underway or contractually committed; and clients who may be contacted for further information on those contracts;
 - ii) Information regarding any litigation, current or during the last three years in which the Bidder is involved, the parties concerned, and disputed amount;
- b. The service should be provided directly by Tenderer. Undertaking by the bidder that the spares for the principal equipments supplier shall be available from at least 10 years for the date of supply.

46. Interpretation of the Bid document:

The Bid documents are drawn up in English and Bid and other documents that are to be filled in by the Bidder shall also be in English. The language to which the

documents are to be interpreted shall be English. Any clarification with regard to interpretation or of ambiguities discovered or pointed out after the issue of the Bid document but prior to the receipt of Bids, as to the meanings, conditions, or instructions contained in any of the issued documents, shall be valid only when such clarification is made by the Director of Education, Assam or his authorized subordinates, through a written instruction signed by him or his authorized subordinates. Any such written clarification or amendment shall be published as corrigendum to the IFB in the e-procurement portal, www.assamtenders.gov.in only. Corrigendum / Addenda and circular thus issued (if any) shall form part and parcel of the relevant documents. The various documents comprising the Bid document are complementary to one another and are to be taken as part of a complete, whole and mutually explanatory Bid Document.

47. Addenda:

Addenda to the Bid document, if any, will appear only on the web page of the website: www.assamtenders.gov.in under “Latest Corrigendum” and email notification is also automatically sent to those bidders who have moved this bid to their “My Tenders” area.

Technical Specifications

Annexure I

Technical Specification for Video cum Audio Authentication system with PC

Objective	Required Specifications
Audio/Video files formats	All audio files formats and majority of video files formats supported and converted: 3gp, aac, ac3, amr, ape, asf, au, avi, avm, avs, cda, dat, divx, dts, flac, flv, m4a, mkv, mka, mov, mp2, mp3, mp4, mpa, mpc, mpeg, mpg, mts, nsv, ofr, ogg, ogm, ppk, ra, rm, rmvb, tp, ts, tta, vdr, vob, voc, wav, wma, wmv, wsd.
Signal analysis	<ul style="list-style-type: none"> • Manual signal analysis (for every expert depending on competence) • Multi frame signal processing and representation • Speaker text linked to the audio segments for audio decoding and text transcription • Speech enhancement and distortion compensation techniques • Expert metadata drawn above the signal layer and stored in a service file • Forensic speaker voice identification toolset • Authenticity approval of audio evidence verification toolset • Recording device identification toolset.
	FUNCTIONALITY
General:	<ul style="list-style-type: none"> • Oscillogram /energy • spectrogram/LPC-spectrogram, • cepstrogram signal representation • Fast calculation parameters adjustment, • easy spectral view attenuation • Signals synchronization • Additional information shown over main signal representation (including user marks and notes) • Fast information management • Batch audio processing; • Data recovery from back-ups • Parallel computing techniques implemented • Full export options with user presets (images, transcribed text, pitch and formant tracks, voiceprints); • Precise input and audio recording, playback speed attenuation; Real-time spectrogram, cepstrogram; Other file formats (documents, images, etc.) support.
Text decoding:	<ul style="list-style-type: none"> • Speech signal segmentation, • manual audio decoding and text transcription • Speech fragments are displayed as corresponding text that can be exported to MS Word as a text document • All standard text editing features supported (color, bold, italic, underlined). Fields for exported text table can be specified from the application; Importing existing text from clipboard and linking phrases to signal fragments.
Speech enhancement:	<ul style="list-style-type: none"> • Band filtering, inverse and spectrum saving filtering; • Broadband filtering, • filtering by noise sample; • Filtering to target frequency response; • Advanced filtering (customized by user) • equalization and harmonic filter; Amplification, mixing and playback speed correction; • Stereo filtration.
Forensic Speaker voice identification:	<ul style="list-style-type: none"> • Speech quality assessment; • Speech range comparison Pitch extractor and pitch distributions comparison; • Prosodic patterns comparison; • Formant tracks extractor • Tracks represented over spectrogram • Matching articulations automated search; • Speaker phonetic profile creation and phoneme statistics comparison; • Search for matching text (words/sounds).

Audio evidence verification/Authenticity	<ul style="list-style-type: none"> • Detailed file structure parsing and file format check • HEX and ASCII data representation • Automatic search and interpretation options • Frame allocation map; Software traces usage automatic detection Recording device information • Extraction Histogram of samples • asymmetry, smoothing calculation • Histogram of samples autocorrelation analysis • Levelogram signal representation • DC Offset extractor • Repeating samples automatic search • Identical signal fragments automatic detection (“copy-paste” search) • Matching energy patterns detector;
Professional workstation	<ul style="list-style-type: none"> • Desktop PC for Speech analysis and case work: Configuration: i5, 8GB RAM or better, 1 TB HDD , 24 inch monitor, keyboard, mouse. MS Windows 7 (64 bit) or higher, MS Office (MS Word, MS Excel required) • UPS • colour printer
Audio recording device	<ul style="list-style-type: none"> • Analog inputs/outputs-2 simultaneous inputs and 2 simultaneous outputs • Coupling- AC or DC channels • Sampling rates-24-bit/96kHz • Dynamic range->90db • Frequency response-20-90kHz or more • Software interface-MME, WDM, Direct sound and ASIO 2.0 support • Computer interface- USB or PCI card compatible with 3.3v and 5.0v PCI
Microphone	Studio quality microphone with stand
Headphones	Studio Quality headphone : 02
Audio monitors	Studio Quality Audio monitors [02]
	Compatibility of software:
Compatibility of software	All software for Voice analysis and authenticity with media file Structure analysis should be from same company and all operation should run from same software platform. Software support by single manufacturer/developer.

Forensic video authentication system.

Basic functionality:

1. Supported video formats: avi, mp4, m4v, mov, wmv, asf, mkv, mpeg, mts, dav.
2. Frame by frame video playback in forward and reverse direction;
3. Video playback and audio synchronized playback
4. Frame image zoom with interpolation;
5. Image normalization using brightness, contrast and color adjustments;
6. De-Interlacing using the first or second half-frame;
7. Image or image sequence export.

II. Search for traces of interframe editing/manipulation (video continuity)

1. **Brightness graph analysis:**
 - Graph of brightness of a selected area (including all frame);
 - Dynamic spectrogram of brightness graph (frame size and type);
 - Narrowband harmonics detection;
 - Energy and phase plots of selected harmonic continuity analysis (frame size, step, initial phase);
 - Copy/Paste search in brightness graph (autocorrelation analysis using decision making threshold);
 - Display of copy/paste fragments in two video display windows for detailed comparison;
2. **Date/Time stamp automatic recognition:**
 - Different date/time stamp shapes recognition algorithms;
 - Automatic recognition of date/time stamp values;
 - Numbers with/without stroke;
 - Numbers with/without stroke;
 - Indicating digit area;
 - Marking frames with date/time stamp value changing;
 - Output of date/time stamp recognition results in table form;
 - Plotting of date/time stamp recognition results;

<ul style="list-style-type: none"> ○ Frame PTS on frame number; ○ Date/Time stamp on frame number; ○ Time difference between frames on PTS of a frame; ○ Number of frames with matching values 	
III. Search for traces of intraframe editing/manipulation (video frame integrity):	
1. Coding errors of digital image (ELA) detection; <ul style="list-style-type: none"> • Calculation and visualization of two dimensional graph of quantization errors for video frames and images; • Detection of degree of compression of JPEG algorithm to calculate the quantization error graph; • Zoom and navigate in the plane of the quantization errors graph; • Synchronization of quantization errors graph and the original image in two video display windows. 	
2. Pixel brightness dispersion analysis (detection of insertions): <ul style="list-style-type: none"> • Calculation and visualization of a two dimensional graph of brightness dispersion; • Histogram of the two dimensional graph of brightness dispersion; • Contrasting of brightness dispersion using histogram; • Zoom and navigate in the plane of brightness dispersion; • Synchronization of brightness dispersion graph and the original image in two video display windows 	
3. Image color gradient analysis (detection of insertions): <ul style="list-style-type: none"> • Calculation and visualization of a two dimensional graph of color gradients; • Color gradient graph calculation: <ul style="list-style-type: none"> ○ Using Scharr operator; ○ Using Sobel operator; • Contrasting of color gradient using a relay filter; • Zoom and navigate in the plane of color gradient; • Synchronization of color gradient graph and the original image in two video display windows. 	
4. Display of frame difference in video frames sequence.	
IV. Video recording device identification: <ul style="list-style-type: none"> • File structure analysis (correct parsing and format check); • Information detailing for every header field; • HEX and ANSI data representation; • Frame allocation mapping; • Software traces detection; • All metadata extraction (XML, GPS, etc.) • Date/Time stamp overlay image analysis; • PRNU analysis (unevenness of video matrix elements); • Calculation and visualization of a two dimensional graph of unevenness of photosensitive elements of the matrix 	
<ul style="list-style-type: none"> • Contrasting of the graph of unevenness of photosensitive elements of the matrix using histogram; • Zoom and navigate in the plane of unevenness of photosensitive elements of the matrix; • Synchronization of unevenness of photosensitive elements of the matrix graph and the original image in two video display windows; • Automatic detection of maximum and minimum values of unevenness of photosensitive elements of the matrix graph; • Automatic comparison of unevenness of photosensitive elements of the matrix graphs for different video recorders. 	
<ul style="list-style-type: none"> • Desktop Configuration:Core i7(11th Gen), minimum 4GB graphics card, 64 GB RAM, 512 GB SSD, 2 TB HDD, 32-inch curve monitor, built-in stereo speaker, bluetooth keyboard and mouse. MS Windows 10 Pro (64 bit), MS Office 2019 (MS Word, MS Excel required) 	
Studio Quality headphone (02)	
Maintenance and support:	Technical support & Free updates (inside version) and fix builds.
Training and warranty support	5 days of detailed training at Customer site for both system.
Warranty	Two Years from the date of completion of installation

-sd-

Director(In Charge),
Directorate of Forensic Science, Assam,
Kahilipara, Guwahati-19.

Annexure-II**FORWARDING LETTER FOR BID SUBMISSION**

IFB No.

Date

To

The Director (In-Charge),
 Directorate of Forensic Science, Assam
 Kahilipara, Guwahati19.

Sir,

Having examined the bidding documents the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver (description of goods and services) in conformity with the said bidding documents for the sum of (total bid amount in words and figures) or such other sums as may be ascertained in accordance with the schedule of prices attached herewith and made part of this bid.

We undertake, if our bid is accepted, to commence delivery within (number) days and to complete delivery of all the items specified in the contract and to perform all the incidental services within (number) days calculated from the date of your notification of award.

If our bid is accepted, we will obtain the guarantee of a bank in a sum not exceeding 3 % (Three) percent of the contract price for the due Performance of the contract.

We agree to abide by this bid for a period 120 days from the date of opening of the technical bid (please specify the calculated date) and it shall remain bidding up on us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this.....day of

Signature
 (in the capacity of)

Duly authorized to sign tender for and on behalf of

Annexure-III**PRICE SCHEDULE (BOQ)**

(as to be uploaded only in the standard format for e-bidding at available in the e-procurement website i.e. www.assamtenders.gov.in)

Annexure – IV**DECLARATION
on
After Sales Service****Tender enquiry No**

For supply of

- 1 Name of the bidder
- 2 Full Postal Address
- 3 Telephone No./Fax No.
- 4 Email address
- 5 Date of inception of business
- 6 Registration no. & Date
- 7 Issued by
- 8 Valid till
- 9 Detail of After Sales Service facilities available locally
Name of the Agency

Full Postal Address

Phone / Fax / E-mail

- 10 Name of person responsible for 10 above

Sl. No.	Name	Designation	Age	Residential Address

- 11 Has the bidder ever been black listed by any govt. agency? If yes, give details
- 12 Has any cases pending in the court related to any supplies? If yes, give details
- 13 Does the firm have the adequate facilities for inspection and quality

control? Please give details

I, _____ Proprietor/ Partner /Director of M/s
_____ hereby declare that the information given in this form is true and correct to the best of my knowledge & belief. I/we agree to the tender Inviting Authority forfeiting the Earnest Money Deposit and/or Performance Security Deposit and blacklisting us for a period of 5 years, if any information furnished by us proved to be false at the time of inspection and non – compliance with terms and conditions of the contract

I offer to supply the items mentioned in the schedule (enclosed in price bid) at the rates quoted therein. I agree to hold this offer for one year after finalization of rate contract.

Dated:

Signature

Name of the bidder

Address

ANNEXURE-V**UNDERTAKING
ON
FRAUD AND CORRUPTION**

We M/s.....Do hereby undertake that, in competing for (and, if the award is made to us, in executing) the subject contract for supply of item(s) under tender reference no. Dated We shall strictly observe the laws against fraud and corruption in force in the country.

Sd/-

Signature of proprietor/Partner/Director

Designation:

Seal:

Annexure-VI**MANUFACTURERS' AUTHORISATION FORM**

To

, The Director (In-Charge),
 Directorate of Forensic Science,
 Kahilipara, Guwahati-19, Assam,

Sir,

IFB No. _____

We, who are established and reputable manufacturers of, having factories at hereby authorize Messrs. (name and address of agents) to bid, negotiate and conclude the contract with you against IFB No.for the above goods manufactured by us.

No company or firm or individual other than Messrs.....are authorized to tender negotiate and conclude the contract in regard to this business against this specific IFB as also for all business in the entire territory of India.

An agency commission of% included in the gross ex-works price is payable to Messrs.

We hereby Certify that the Machine / spare parts do not contain any recycled or reconditioned parts or components. **Process for Prosecution or legal proceedings would be initiated for non- compliance of the same.**

We hereby extend our full guarantee and warranty as per provisions of contract for the goods offered for supply against this Invitation for Bid by the above firm.

Our other responsibilities include:

- (i).....
 (ii).....
 (here specify in detail manufacturer's responsibilities)

The services to be rendered by Messrs. are as under:

- (i).....
 (ii).....
 (here specify the services to be rendered by the agent).

Yours faithfully,
 (name)

For and on behalf of Messrs... (name of manufacturer)

NOTE: This letter of authorization should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer. A copy of notarized power of attorney should also be furnished.

Annexure-VII**PERFORMANCE SECURITY FORM (BANK GUARANTEE)**

To

The Director (In-Charge),
 Directorate of Forensic Science, Assam
 Kahilipara, Guwahati-19

Whereas.....(name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract No.....dated.....2017 to supply (Description of goods and services (hereinafter called "the contract")).

And whereas it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled bank for the sum specified therein as security for compliance with its obligations in accordance with the contract.

And whereas we have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of(amount of the guarantee in words and figures), such sum being payable in the types and proportions of currencies in which the contract price is payable, and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This bank guarantee shall be valid from.....to

Place and Date

Signature and seal of the guarantor