अति आवश्यक / महत्वपूर्ण / द्वारा फैक्स

# उत्तर प्रदेश पुलिस तकनीकी सेवायें मुख्यालय,

चतुर्थ तल, जवाहर भवन,अशोक मार्ग, लखनऊ—226001 पत्रांक—टीएस / एमओडी—120 / 2015—16 (एफएसएल) दिनांक, दि सेवा में

दिनांक, दिसम्बर्ध 2015

निदेशक, सूचना एवं जन सम्पर्क विभाग,(विज्ञापन प्रभाग), उत्तर प्रदेश, लखनऊ।

विषय— आधुनिकीकरण योजना के अन्तर्गत निम्नलिखित उपकरणों के क्रयार्थ निविदा आमंत्रित किया जाना ।

महोदय, कृपया उपर्युक्त विषयक विज्ञापन की 05 प्रतियाँ अंग्रेजी / हिन्दी में मय सी०डी० के संलग्न कर इस अनुरोध के साथ प्रषित की जा रही है कि उक्त नोटिस को व्यापक प्रचार-प्रसार वाले प्रमुख दैनिक समाचार पत्र हिन्दी /अंग्रेजी जैसे दिल्ली/लखनऊ/मुम्बई से प्रकाशित होने वाले दैनिक जागरण, अमर उजाला,दि प्वाइनियर ,टाइम्स आफ इन्डिया तथा द न्यू इन्डियन एक्सप्रेस आदि प्रमुख समाचार पत्रों में प्रकाशित करने का कष्ट करें।

2/ इस सम्बन्ध में निविदा के विज्ञापन की स्वच्छ टंकित प्रति एवं एमएस वर्ड (फारमेट में सी०डी०) साफ्ट कापी भी वेब साइट पर प्रसारित कराने हेतु संलग्न की जा रही है।

3/ अनुरोध है कि कृपया संलग्न निविदा को प्राथमिकता के आधार पर प्रकाशित कराने का कष्ट करें।

संलग्नक—विज्ञापन की प्रति 05 प्रतियों में। 2—सी0डी0की साफ्ट कापी।

> अपर पुलिस अधीक्ष्म तकनीकी सेवायें, निमित्त-पुलिस महानिरीक्षाक,तकनीकी सेवायें, लखनऊ।

प्रतिलिपि—पुलिस महानिरीक्षक,प्रो० / बजट,उ०प्र०पुलिस मुख्यालय,इलाहाबाद को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है। 2—प्रतिलिपि— पुलिस अधीक्षक / सहायक निदेशक, उ०प्र०पुलिस कम्प्यूटर केन्द्र, लखनऊ को विज्ञापित निविदा की एक प्रति एवं सी०डी० संलग्न कर इस आशय से प्रेषित है कि उक्त निविदा को उ०प्र०पुलिस की वेबसाइट पर भी प्रसारित कराने का कष्ट करें। संलग्नक—यथोपरि 3—प्रतिलिपि'—निदेशक,एफएसएल,लखनऊ लखनऊ को सूचनार्थ एवं व्यापक प्रचार—प्रसार एवं आवश्क कार्यवाही हेतु। 4—प्रतिलिपि— नोटिस बोर्ड तकनीकी सेवायें,लखनऊ को चस्पा करने हेतु।

Phone/Fax No..0522-2286615

## U. P. POLICE TECHNICAL SERVICES HEADQUARTERS IVth FLOOR JAWAHAR BHAWAN, ASHOK MARG, LUCKNOW-226 001

TENDER NO.:TS-MOD-120//2015-16(FSL)

DATED :December.

2015

#### NOTICE INVITING TENDER

1- Sealed Tenders are invited from the Indian Manufacturers/registered firms/ Authorised agent of foreign manufacturer for purchase of the following equipment for the use of U.P.Police.

2- The tender form and tender document for item mentioned below along with Technical specification for Item given may be downloaded from U.P. Police website <a href="http://uppolice.gov.in">http://uppolice.gov.in</a>. Tender fee DD/FDR of Rs. 300/- would be deposited in favour of S.P.AD. Uttar Pradesh Police Computer Centre, payable at Lucknow.

3.- Tender documents will not be given on cash through Technical Head Quarter.

4- Cost of tender document is not refundable, while earnest money(EMD) is refundable after tender process.

5- Each Tenderer will have to deposit an E.M.D. as mentioned against tender in the form of DD/ Banker's Cheque/FDR. in favour of S.P./AD. Uttar Pradesh Police Computer Centre, payable at Lucknow.

6- Successful tenderers will have to deposit a security money @ 10% of the order value, which will be

returnable after expiry of warranty period.

7- For any specification which amounts to proprietory items its equivalent Product / Services of international quality will also be acceptable. However the decision of Technical Committee regarding Product / Services of International Quality will be final.

The Number of equipments may be increased as per need and the increased quantity will also have to be supplied

within time stipulated by the Department.

9- The lowest bid will be decided on the basis of total cost (inclusive of all taxes.)

10- In condition of amendment in any following item's specification. It will be uploaded before 7 days from submitting tender date'

11- The Technical Head Quarters may cancel the tender at anytime without asigning any reason for the same

in the public interest.

Tender No.	Item	Qty	EMD (in Rs.)	Cost of Tender Docume nt (in Rs.)
(1)TS-MOD-113/2015-16( FSL)	DIGITAL VIDEO ANALYSIS SYSTEM	01	2,00,000-00	300-00

last date of deposit of tenders
Date of opening of Technical Bid
Date of Purchase committee meeting for technical evaluation
Date of opening of financial offer
Date of purchase committee meeting for financial evaluation

06-01-2016 upto 02-00pm 06-01-2016 at 04-00pm 07-01-2016 at 11-30am 11-01-2016 at 04-00 pm

A

(SANJAY KUMAR)
Addl. Supdt. Of Police, Technical Services,
For- Inspector Genl. Of Police, Technical Services,
Lucknow.

अति आवश्यक / महत्वपूर्ण / फोन-0522-2286615

उत्तर प्रदेश पुलिस \_ तकनीकी सेवायें मुख्यालय

चतुर्थ तल, जवाहर भवन, अशोक मार्ग, लखनऊ

संख्या-टीएस-एमओडी-120 / 2015-16(एफएसएल)

दिनांक -दिसम्बर,

2015

निविदा सूचना

1— उत्तर प्रदेश पुलिस हेतु निम्न उपकरणों की सील बन्द निविदा भारतीय मैन्युफैक्चरर/डीलर/रजिस्टर्ड फर्म /विदेशी मैन्यफैक्चरर के अधिकृत विकेता से आमत्रित की जाती है।

2— निविदा प्रपत्र व उपकरण से सम्बनिधत तकनीकी स्पेशीफिकेशन उत्तर प्रदेश पुलिस की बेवसाइट http://uppolice.gov.in से डाउनलोड किया जा सकता है। निविदा शुल्क के रूप में रू० 300.00 का बैंक डाफट / बैंकर चेक / एफडीआर पुलिस अधीक्षक / सहायक निदेशक, उ०प्र०पुलिस कम्प्यूटर केन्द्र लखनऊ के नाम देय होगा, जमा की जायेगी।

3- तकनीकी सेवायें मुख्यालय से नगद भुगतान पर टेण्डर डाकुमेंन्ट्स विकय नहीं किये जॉयगें।

4— निविदा शुल्क किसी भी दशा में वापस नहीं किया जायेगा तथा निविदा स्वीकृत न होने की दशा में ईएमडी वापस कर दी जायेगी ।

5— प्रत्येक टेण्डरकर्ता द्वारा टेण्डर की ईएमडीए डीडी / एफडीआर / बैंक गारन्टी के रूप में, जो पुलिस अधीक्षक / सहायक निदेशक, उ०प्र०पुलिस कम्प्यूटर केन्द्र लखनऊ के नाम देय होगा, जमा की जायेगी।

6— सफल टेण्डरकर्ता द्वारा क्यादेश मूल्य का 10 प्रतिशत धनराशि सिक्योरिटी मनी के रूप में जमा किया जायेगा,जो उपकरण के सन्तोषजनक ढंग से कार्य करने के उपरान्त उनके वारन्टी अवधि के उपरान्त वापस कर दी जायेगी।

7— तकनीकी स्पेशीफिकेशन के अनुसार प्रोप्राइटरी आइटम या उनके समतुल्य उत्पाद/सेवा अन्तराष्ट्रीय स्तर के स्वीकार होगें। प्रोप्राइटरी उत्पाद या इसके समतुल्य उत्पाद/सेवा के सम्बन्ध में सम्बन्धित तकनीकी समिति का निर्णय अन्तिम निर्णय होगा।

8— उपकरणों की संख्या विभाग की आवश्यकतानुसार बढायी या घटाई जा सकती है तथा विभाग द्वारा बढायी गयी संख्या को फर्म को निर्धारित अवधि में आपूर्ति करना होगा।

9— निम्न किसी उपकरण के तकनीकी स्पेशीफिकेशन में यदि कोई संशोधन किया जाता है तो निविदा जमा करने की अन्तिम तिथि के 07 दिवस पूर्व ही संशोधित तकनीकी स्पेशीफिकेशन अपलोड कर दिया जायेगा।

10- समस्त टैक्स सहित न्यूनतम निविदा एल-1 पर विचार किया जायेगा।

11- तकनीकी मुख्यालय द्वारा जनहित में किसी भी समय बिना कारण दर्शाये टेण्डर को निरस्त किया जा सकता है।

टेन्डर संख्या	आइटम	सं0	ई०एम०डी० ( रू० में )	टेंण्डर डाकुमेंन्ट् का मूल्य (रू० में)
(1)टीएस—मोड—113 / 2015—16(एफएसएल)	डिजिटल विडियो एनालिसिस सिस्टम	01	2,00,000.00	300.00

निविदा जमा करने की अन्तिम तिथि तकनीकी भाव पत्र खोले जाने की तिथि तकनीकी भाव पत्र पर क्य समिति की बैठक वित्तीय भाव पत्र खोले जाने की तिथि वित्तीय भाव पत्र पर क्य समिति की बैठक 06.01.2016 समय 02.00 बजे अपरान्ह 06.01.2016 समय 04.00 बजे अपरान्ह 07.01.2016 समय 11.30 बजे पूर्वान्ह 11.01.2016 समय 11.30 बजे पूर्वान्ह 11.01.2016 समय 04.00 बजे अपरान्ह

> (संजय कुमार) अपर पुलिस अधीक्षक,तकनीकी सेवायें, निमित्त—पुलिस महानिरीक्षक



IVth FLOOR, JAWAHAR BHAWAN, ASHOK MARG, LUCKNOW-226001

## GENERAL TERMS AND CONDITIONS FOR TENDERS

The details of specifications & instructions are to be followed strictly in accordance with the tender notice. 1 -The tendering firms are requested to submit the offer in TWO PARTS. The First Part will be named as Technical Offer & the Second Part will be called as Financial Offer. The technical offer as well as financial offer are to be prepared separately for each tender. BOTH TECHNICAL OFFER AND FINANCIAL OFFER PROPERLY SEALED IN SEPERATE COVERS, MUST BE KEPT IN ONE BIG ENVELOPE AND SEALED. ON EACH COVER INDICATE CLEARLY THE OPENING DUE ON ITEM AND DATE TENDER NO. TECHNICAL OFFER, OTHERWISE THE TENDER WILL BE REJECTED.

- 2 After submission of tender any addition, alteration or change in any offer shall not be acceptable.
- 3 All the enclosures should be valid on the date of opening of the tender.
- 4 If any cutting/ corrections, it should be properly attested by the tenderer.
- 5 Earnest money (as mentioned in tender advertisement in news papers) has to be deposited FOR EACH ITEM SEPARATELY along with the Technical Offer in the form of Fixed Deposit of Scheduled Bank in the name of Superintendent of Policel Asstt. Director, Uttar Pradesh Police Computer Center, payable at Lucknow,. Offers without earnest money will be ignored. If any firm is exempted from furnishing earnest money, enclose government orders. If government order is not submitted by the tenderer his tender will not be considered.
- 6 It shall be the responsibility of the tendering firms to present themselves on the dates of opening of Technical & Financial offers and acquaint themselves with the short comings in the tender if any. No separate intimation will be sent to them in this regard.
- 7- Authorized Agent/ Dealer / Supplier/ Distributor should submit a self attested valid certificate of authority of their Principal/ Manufacturer. Manufacturer should attach a proof of which being so. Authorization is not necessary for Kits, Chemicals, Glassware, General Apparatus, Lab work station, furniture.
- 8 -Tenderer / Authorized person who shall sign the offer and all the enclosures submitted by them should have signature with their designation, seal and date.
- 9 Quoted equipments should be complete working system with all necessary accessories including stabilizer / UPS, cables, wires etc. to run the system properly at the time of installation.
- 10 Clearly mention installation requirements in the technical offer. Only space and electrical points will be provided at the time of installation. Installation of the supplied equipments shall be completed within 30 days from the date of receipt of equipment in this laboratory, failing which equipments costing up to Rs.5 lacks, penalty of Rs.100-00 per day and for every additional 5 lacks Rs.100-00 per day may be charged.
- 11- On Site Comprehensive Warranty of the equipments will be TWO YEARS on parts and labour or as specified below the specifications in the tender form from the date of supply and successful installation. Warranty of consumables and glass wares will be one year or as per their shelf life. Maintenance work of the supplied equipments shall be done by the supplier firm during warranty period.
- 12 During warranty period, in case of local service centers complaints should be attended Next Business Day and in case of out station service centers complaints should be attended with in 7 days, failing which equipments costing up to Rs.5 lacks penalty of Rs.100-00 per day and for every additional 5 lacks Rs.100-00 per day may be charged.

- 13 Supply is to be executed as mentioned in the purchase order. Officer who is issuing purchase order can permit extra time on his discretion. If after making purchase agreement, any tenderer fails to supply goods of desired quality and quantity within 30 days in case of indigenous supply and 60 days in case of foreign supply, supply order may be cancelled and Security Money/Earnst money deposited by tenderer may be forfeited.
- 14 Attach list of organizations to which the equipments have already been supplied and performance reports obtained from them with the technical offer.
- 15 -The items quoted should be of repute / standard brand. The tenderer should mention full particulars about the brand name, make, model, manufacturer and detailed specifications of the material offered by them with printed literature.
- 16 -Technical details as per tender specifications or their compatibility with the tender specifications shall be clearly mentioned in the technical offer.
- 17 Firms shall quote in Indian Rupees and they must enclose (i) Self attested photocopy of valid U.P. Trade Tax Registration / Central Sales Tax / VAT Registration / latest Clearance Certificate (ii) photo copy of PAN / TAN no. (iii) Bank account no., name of bank and branch.
- 18 The tenderer is required to submit an affidavit on 10 rupees stamp paper stating that :
  - (1) there is no dispute between the tenderer and state Govt./UP Police.
  - (2) the tenderer has no link with Mafia or some unsocial elements or organized crime.
- 19 Quote rates including packing, forwarding, insurance, installation FOR destination any where in U.P. excluding all taxes and duties. However VAT, Entry Tax, other taxes and levies etc., should be mentioned separately. Rates should be quoted in two parts: 1- Cost of equipment with Two years on site comprehensive warranty, 2- Year wise charges for on site comprehensive annual maintenance contract from 3rd year to 5th year.
- 20 After the receipt of goods in Forensic Science Laboratory, U.P., as specified in the purchase order( any district of U.P.), installation where needed shall have to be carried out by the firms at the required places within Uttar Pradesh.
- 21 Any conditional discount on quantity basis (different discounts for different quantities) shall not be acceptable and such offers shall be rejected out rightly. However, unconditional discount given on quoted price on whole quantity, mentioned in financial offer only be acceptable.
- 22 THE Technical Headquater RESERVES THE RIGHT TO ACCEPT OR REJECT ANY TENDER, EITHER IN PART OR FULL, WITHOUT ASSIGNING ANY REASON THERE OF.
- 23 Firms must come prepared to demonstrate their goods in Forensic Science Laboratory, U.P., Mahanagar, Lucknow 226006, on the next date of opening of technical bid. Demonstration will be asked if required, failing which tender will be rejected.
- 24 The Technical Headquater has right to accept any lower or higher rates of the tenders without assigning any reason.
- 25- The validity of the rates should be at least for six months from the date of opening of the tender.
- 26 In case of imported goods, foreign manufacturers can directly quote their rates but after sales service will be provided by their Indian Branch/ Agent. Name of trained engineers and details of service facilities available should be mentioned in technical offer.
- 27 If Indian agents are quoting on behalf of foreign manufacturers/ Principals then self attested valid authority letter from them should be submitted along with the technical offer. Rates should be quoted in FOB as well as CIF Value at New Delhi air port.
- 28 Tenderer have to accept one of the following payment terms:

OPTION-A: ON CAD TERMS i.e. 100% payment by Swift/ Wire Transfer to tenderer's Bank Account upon submission of required documents together with certificate of acceptance of equipment by the end-user's Department/Consignee to release 100% payment to the supplier.

OPTION-B: On LC Terms i.e. Letter of Credit for 100% value of the purchase order shall be established. Payment shall be released to the supplier by the Bank upon submission of documents to the bank by the beneficiary together with certificate of acceptance of equipment by the end-user's Department/Consignee after its installation. Bank charges in India shall be born by us whereas all bank charges in the foreign country, including confirmation charges of Letter of Credit, shall be to the account of the supplier.

- 29 It will be the responsibility of the Indian agent of foreign principal to clear the consignment from customs and deliver it to Forensic Science laboratory, Lucknow/Agra/Varanasi as specified in the purchase order. The Indian Agent would bear the custom clearance charges (except custom duty), transportation charges, octri etc. for supply of the goods to F.S.L. Lucknow/Agra/Varanasi.
- 30 Forensic Science Laboratory, U.P., has to pay concessional customs duty . Custom duty at concessional rate certificate will be provided by FSL.
- 31 Successful Tenderer will deposit 10% of the cost of equipment in India as security money and sign a purchase agreement within 7 days after receipt of purchase order on Rs. one hundred non judicial stamp paper at their own cost. Draft of purchase agreement shall be enclosed with the purchase order. Purchase order to the firms, who fail to execute the agreement shall be cancelled and EMD deposited by them shall be forfeited. Owner/partners of the firm /authorized person will sign purchase agreement. All signatures should be attested by notary. (authorized person will attach authority letter of owner / partners of the firm. )
- 32- Security Money will be in the form of Fixed Deposit of Scheduled Bank in the name of Superindent of Police / Asstt. Director, Uttar Pradesh Police Computer Center, payable at Lucknow, or in the name of tenderer and pledged to Superindent of Police / Asstt. Director, Uttar Pradesh Police Computer Center, Lucknow, which will be returned after expiry of warranty period.
- 33 After thorough examination if the equipment delivered is found defective and unserviceable, it is to be replaced with new one within 30 days in case of indigenous items and 90 days in case of imported items. The expenditure incurred on this account will be borne by the "Supplier Firm". In case of inability to do so, the total cost of the equipment shall have to be refunded by the firm to the government of U.P.
- 34 Bill to be submitted in triplicate by the firm in the name of Dy. Inspector General of Police, U.P. Police Technical Services, Head Quarters, Lucknow. Normally payment of bill will be made within 30 days but in case of delay no interest will be paid.
- 35 Special Terms and conditions if any for any particular equipment has been mentioned below the specifications of the equipment in the tender form.
- 36 If any item is on D.G.S & D/ D.I. rate contract enclose copy of rate contract along in the technical offer.
- 37 -Tendering firms will also impart hands on training for the supplied equipments wherever necessary free of cost.
- 38- Due to continuous research and developments and introduction of new models tendered can supply upgraded model at the same quoted price with permission of the department.
- 39 Tendering firms should ensure that they will make available consumables, spares and services for equipments at least for five years from the date of supply and installation.
- 40 If supplier is unable to supply consumables, spares and services for five years, he has to take back the supplied equipment and replace it by upgraded version free of cost.

- 41 Supplier firm will provide driver software for new operating systems free of cost for ex years.
- 42 Tenders received after the due date and time or incomplete tenders will not be accepted. This office will not be responsible for postal delay.
- 43 Conditional tenders will not be accepted.
- 44 If any firm will be defaulter of any terms and conditions given above the undersigned has right to deduct the part or full amount of the Earnest money/ Security money deposited by the firm, firm may be black listed and legal action may be taken.
- 45 All disputes will be subject to jurisdiction of court at Lucknow only.

Following declaration form duly filled in and signed should be submitted along with the technical offer failing which tender will be rejected.

(Amitabh yash)
Inspr.Genl.Of Police, Technical Services,
U.P. Police Technical Services, Lucknow

DECLARATION	
I, (name of authorized representative)————of M/S (Name of firm) ————————————————————————————————————	Son of-
our firm. Earnest Money in the form of Fixed Deposit of scheduled bank Rs.————————————————————————————————————	ptable to
Pradesh Police Computer Centre, payable at Lucknow is enclosed herewith.	or, Uttar
PLACE:	

(Signature and seal)

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## Ts-moD-113/2015-16 Video Analysis System

### Part-1/1-Softwares

### VIDEO FORENSIC TOOL SPECIFICATIONS:-Qty-01 nos

- 1. Should able to Load, save, process, and analyze single images, sequences of pictures, or videos from a VMS or external source using the same methodology and software.
- 2. Should able to generate Instant results: add, configure, move, and modify an unlimited number of filters, in real time during video playback.
- 3. Should able to automatically apply the same filters sequence to different files to avoid resetting all filters for different images from the same source or environment.
- 4. Should able to apply the filters only to a region of interest of the image, or select frames of interest in a sequence.
- 5. Should able to quickly seek for events in a long duration video with the integrated motion detection filter.
- 6. Should able to automatically remove duplicates or mismatched frames.
- 7. Should able to automatically de-multiplex multi-camera video feeds.
- 8. Should able to flexibility with technology: choose between classical standard techniques or latest state-of-the-art algorithms.
- Should able to precise control over images: operate with pixel level precision on selections and
  measurements on images. Filters should work on the whole image, on a static selection should automatically
  track a moving target.
- 10. Should be able to crop quad multiplexed videos.
- 11. Should able to do document evidence that can automatically generate detailed reports (in .doc, .pdf, or .html formats) so that the investigations process is clearly documented. The report documents scientific methodology and includes all the technical details of the processing and relevant frames and processing steps selected by the user. This is something mandatory for Frye or Daubert states in the United States
- 12. Should able to view original and processed image or video side by side to easily show the results of your work.
- 13. Should able to do fast redaction tool to hide sensitive details in the video by blurring, darkening or pixelating selected areas even while moving.
- 14. Should highlight sensitive details in the video blurring, darkening or pixelating selected areas.
- 15. Should able to load image files from the most common formats, such as bitmap, jpeg, tiff, targa, jpeg2000, png.
- 16. Should able to load video files from almost any digital format, sourced from NTSC, PAL and almost any other system such as mobile phones and internet content; users can decode most video formats by using internal libraries and codecs.
- 17. Should have complete internal library allows decoding even if your system does not have the required codecs installed.
- 18. Should choose the video decoding engine to use for every single file. FIVE is the only tool which integrates all video frameworks available on Windows (DirectShow, Video for Windows, QuickTime, FFMS, FFMPEG).
- 19. Should able to visualize the type of encoding of the current frame (I, P, B).
- 20. Should have customizable player allows to define personal frame step for faster seeking or to use the mouse wheel as a jog control.
- 21. Should process a live feed from any DirectShow compatible device.
- 22. Should video enhance system integrated with VMS systems. For Milestone XProtect users, FIVE allows to process live stream, archived video or exported files in native format without any conversion or quality loss.
- 23. Should convert proprietary video files to a standard, viewable format.
- 24. Should unsupported proprietary DVR formats, FIVE integrates a very easy tool that allows to capture the screen without any loss of quality.
- 25. Should convert a sequence of static images to present and control as if it were video. Transcode video to a different format or transform it into a sequence of images or vice versa.
- 26. Should have multiple video frames may be selected in either a consecutive or random sequence.

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- 27. Should have FIVE secure to easily check for unauthorized modifications by verifying the file hash-code to maintain strict evidence handling procedures to avoid contamination that could lose a case. You can also verify image EXIF and hash-code data.
- 28. Should have standard image editing features allow the user to instantaneously apply basic editing functions such as crop, flip, color to grayscale conversions, channel extraction, zoom and image rotation.
- 29. Should have correct geometric distortions caused by wide angle lenses.
- 30. Should allows the user to convert images taken from an omnidirectional camera to a panoramic format.
- 31. Should have correct the perspective in order to see the picture of the scene from a different angle.
- 32. Should able to resize the image with advanced algorithms, which ensures a higher definition than would be obtained with common interpolation algorithms used in other software.
- 33. Should able to convert an interlaced video into a progressive one without loss of information.
- 34. Should able to shift the fields of an interlaced video to better view moving objects.
- 35. Should able to improve contrast and brightness manually, adjusting intensity curves, or speed workflow with automatic enhancement algorithms.
- 36. Should able to analyze images with various threshold and edge detection filters.
- 37. Should able to measure real world distances, heights, and lengths from images or video frames using FIVE's advanced measuring tools. You can also determine camera height as a cross-check of measurement accuracy.
- 38. Should able to improve image details (unsharp masking, laplacian sharpening).
- 39. Should able to reduce noise (averaging, Gaussian, median, bilateral, Wiener smoothing filters).
- 40. Should able to apply custom kernel filters.
- 41. Should able to reduce compression artifacts with our de-blocking algorithm.
- 42. Should able to remove interferences or image background (such as banknote watermark) with Fourier filter.
- 43. Should have correct optical and motion blur resulting from fast movement or out of focus video.
- 44. Should have correct the blur caused by air turbulence on long range surveillance videos.
- 45. Should able to remove noise from a video with temporal smoothing and frame integration.
- 46. Should able to improve shaking video with local or global image stabilization.
- 47. Should able to correct and modify the camera viewpoint in different frames with perspective alignment.
- 48. Should able to improve the resolution of the frames with a super resolution algorithm.
- 49. Should able to improve a video with bad weather conditions (fog, rain, flat light, sandstorm, etc.) and improve backlight images.
- 50. Should have View 360° dome camera images as panoramic.
- 51. Should able export all frames as a PDF in one easy step.

52. Software should be installed on a computer

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### Part-1/2-Softwares:

## Technical Specifications of Stegnography Detection & Analysis software

- Should detect Steganography Applications and files on computers 1
- Should be capable of detecting Steganography files on web pages 2
- Easy to use in case management with full suite of tools 3
- Should perform Rapid identification of over 500 known steganography programs 4
- Should Detect suspicious files through blind anomaly-based approach 5
- Should Easily identify image artifacts and image characteristics 6
- Should have State-of-the-art image analysis with advanced image filters 7
- Should have State-of-the-art audio analyzer 8
- Should Crack and extract payloads from carrier files with a simple point and click interface 9
- Should make Court ready investigator html reports 10
- Should Scan audio files, JPG, BMP, GIF, PNG etc 11
- Should allow breaking of passwords with use of password dictionary of supported algorithms 12
- Should have Stego Hunting application which should be able to quickly, accurately and easily detect 13 steganography programs as a first look in the investigation process
- Should have capability to scan forensic images of other popular forensic tools such as E01, ad1, dd, raw, ISO 14 and safeback images
- Should have Stego Watch Application Once suspected carrier files are found; Stego Watch should automatically scan the entire file system and results should be brought back into a easy to read interface with 15 suspected files flagged
- Files flagged should be detected with a blind detection technique looking for artifacts within those scanned 16 media files and then displayed with a threat association and notification of any artifacts found
- Stego Break Application should obtain the pass phrase that has been used on a file found to contain 17 steganography

allow examiner to add own dictionary on selected algorithms 18

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### Part-1/3-Softwares

## Video scanner software Qty-01 nos

### **Technical Specifications**

- Supported OS---- Windows XP, Windows Vista, Windows 7 (x86/x64)
- VideoScanner drive capacity--- 16 GB sufficient for exporting several thousand videos at
- Supported Video Formats---- The internal video engines support all standard video formats (avi, mpg, vob, 3gpp, etc.). The use of system codecs can be manually enabled to support non standard formats.
- Autorecovery mode--- The analysis is automatically restarted after a crash caused by problematic and bug-ridden system codecs or corrupted video files
- Customizable settings-----Input drive / folder, Outputfolder, File formats too look for, Time interval for frame exporting, Recursively scan directories
- Calculate -----M D5 hash code for every file Use only internal codecs or also system
- Software output---- Full report of all files found (HTML format for universal use), Exported images folder, List of analyzed video files, List of unsupported files (with unknown codecs), List of skipped video files (due to codecs or corrupted video files)
- Report file format----- Standard HTML
- Report file details------ For each file the report list file size, resolution, duration, frame rate, codec, full path, MD5 hash code
- Command Line interface----- For advanced users VideoScanner is fully scriptable and customizable using the command line interface

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### Part-1/4-Softwares

## Image authenticate software Qty-01 nos

- any standard image format (jpeg, tiff, bmp, png...) and raw format from digital cameras.
- Different analysis filters, with user customizable configuration and optional post processing parameters (levels, scale to enhance the displayed image).
- Display multiple image comparison and synchronization.
- Comparison Support between two images.
- Output Image Export Options
- Output Data Export Options Export analysis output as plain text, HTML, or TSV.
- Cached Processing
- Batch Processing Automatically
- Batch File Format Analysis Quick automatic analysis
- Format Comparison Quick automatic comparison of the format of all files in a folder with the analyzed image.
- Batch JPEG Comparison Quick automatic comparison
- Excel Integration Export of multiple file analysis table directly to Microsoft Excel spreadsheets for
- Google Images Integration Search for similar images and images from a certain specific camera on Google Images.
- Flickr Integration
- TinEye Integration Search for similar images on TinEye.
- Extraction Of Embedded JPEGs Extract JPEG images embedded in any file type of questioned document authentication
- Samples A rich collection of samples.
- Visual Inspection Visual analysis of the image and comparison with a reference image.
- File Format Automatic inspection of most common parameters that could indicate non originality of the image.
- JPEG Structure Display and comparison of main JPEG markers.
- Hex Viewer Integrated hexadecimal viewer with search and comparison capabilities.
- Hex Strings Extraction of all textual information embedded into an image file.
- EXIF Display and comparison of EXIF information and other embedded metadata.
- JPEG QT/HT Display and comparison of JPEG quantization tables and other compression parameters of main image, embedded thumbnail and preview. Internal cameras and software database with thousands of configurations and support for user generated databases.
- Thumbnail Display of embedded thumbnail and preview images and their difference with the main
- DCT Plot Analysis and comparison of the histogram of DCT coefficients and its Fourier transform for detecting multiple resaves of the image.
- Correlation Plot Analysis and comparison of correlation periodicities in the image pixels to analyze the presence and consistency of demosaicing or interpolation effects.
- JPEG Ghosts Plot of the image with its recompressed version to identify signs of multiple compressions.

- Histogram Analysis of the histogram of the image that can help to spot excessive intensity
- Color Space Analysis of the color space usage of the image in the HSV and Lab coordinates that can help to spot excessive color adjustment.
- PRNU Identification Creation of a PRNU (sensor noise) reference pattern from a user supplied set of pictures and identification of the device that generated the image by comparison with the reference
- Color Channels Analysis of single image channels in different color spaces (RGB, YCbCr, YUV, HSV,
- ELA Identification of spliced areas of the image that have been compressed differently (error level
- DCT Map Display of the image DCT values that can help to spot tampered uniform areas of the
- Correlation Map Identification of discontinuities in the correlation between pixels of the image.
- Noise Map Display of inconsistencies in the noise level of the image.
- PRNU Map Identification of inconsistencies in the PRNU noise of the image.
- PRNU Tampering Automatic identification of tampered areas of the image by comparison with the PRNU reference pattern of the image.
- LGA Identification of luminance discontinuities (luminance gradient analysis).
- Clones Blocks Identification of similar areas of the image that can be the result of cloning.
- Clones Keypoints Identification of groups of similar points in the image that can be the result of cloning.

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### Part-1/5-Softwares

### Facial Recognition software Qty----01

- 1. Facial Capturing form different media and Processing
- 2. Creation of photo like composites
- 3. Generation of numeric code for every composite
- 4. Tone hair colour, side to side hair flip
- 5. Data Generation of Facial markings: scars, moles, piercing, tattoos
- 6. Facility for improvement of Time progression
- 7. Detachable hats and headwear facility
- 8. Ability to export composite as JPEG file and in other image formats
- 9. Matching-Side by side show/ comparison capability
- 10.Improved zooming and positions tools
- 11. Runs on Window Based computer system
- 12. Analyze the linear images
- 13. Full or partial face identification
- 14. Capable to detect and register the numerous characteristic of each face
- 15. Capable to store, retrieve and compose the facial features from the database and display matching score

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## Part-1/6-SoftwaresCDAC product &SOFTWARES-

- 1. Cyber Chech Suite (HDD/Storage Device Anslyser) ---01 nos
- 2. Mobile Check Suite (Mobile Anslyser)---01 nos
- 3. Net Force Suite
- (E-mail Anslyser)---01 nos
- 4. Advik
- (Cell Daa Recovery)---01 nos
- 5. SIMXtractor
- (SIM Anslyser)---01 nos
- 6. True Imager
- (Data Duplicator)---01 nos
- 7. Win Lift
- (Volatile Data Anslyser)---01 nos
- 8. Forensic Tool Kit (HDD/Storage Device Anslyser)---01 nos
- 9. Oxygen Forensic Suite (Mobile/SIM Anslyser)---01 nos
- 10. MobilEdit Enterprises (Mobile Anslyser)---01 nos
- 11. MobilEdit Copier (Phone Data Copier)---01 nos
- 12. UFFED\_(Mobile/SIM Hardware Base Data Anslyser)---01 nos
- 13. X1 Discovery-----(social media analysis)-----01 nos 14. Clear it-----(video analysis software )---01 nos

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### Part-(2)Hardware

### Part-2/1(Hardware)Computer work station---Qty---02nos

### SI no Technical Specification

- 1. Intel i7, Quad Core Processor (2.4 GHz or higher)
- 2. 16 GB DDR 3 RAM
- 2 X 256 GB Solid State Drive
- 1 x 1.0 TB Data Drive
- 5. 32" LCD Monitor x 2
- 6. At least 4 GB Graphics Supporting Card
- 7. 4 USB Ports
- 8. Wireless Keyboard & Mouse
- 9. 4 Removable Drive Bays
- 10. Windows 7 Operating System or higher
- 11. Integrated Hardware Write Blocker for IDE/SATA/SAS/USB/LAPTOP Drives
- 12 Firewire Card
- 13. Forensic Multi Card Reader-----10 nos
- 14. Should be provided with toolbox containing Adopters & Cables to image and process Internal /External Drives, screw driver set consisting of bits for opening computer enclosures that may have been locked down.
- 15. 5 KVA UPS online with 5 Hours backup
- 16. Minimum 2 years onsite warranty
- 17. Onsite training to be provided alongwith guide and operating manual
- 18. Audio System 5.1 Channel Speaker with Four Step Speaker Hardware capability to Audible very low frequency to high Frequency variation and multi step noise removable filter.
- 19. Forensic Simcard Reader -10 nos

20. Headphones-----05 nos

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## Part-2/2(Hardware) LaserJet Color Printer--- Oty--02nos

Black speed: 16 PPM, Color speed: Upto 4 PPM, Function: Print Only

Technical specs

### **GENERAL**

4-pass color laser Print technology Up to 15,000 pages Duty cycle (monthly, A4) Up to 15,000 pages Duty cycle (monthly, letter)

Yes Print colours Yes Mac compatible Yes ADF Yes Scanner/Copier

PRINT

Up to 17 ppm Print speed black Up to 4 ppm Print speed color

Manual (driver support provided) Duplex printing

Automatic Paper handling

Paper trays, maximum Paper trays, standard

## MACHINE DIMENTIONS & WEIGHT

Yes, 1 USB cable

Introductory LaserJet Black, Cyan, Yellow, Magenta print cartridges (pre-Cable included installed); Imaging drum; CDs containing software and electronic What is in the box

documentation; Documentation (Install Guide, Support flyer, Warranty

guide); power cord; USB cable

3 Years Warranty

Environmental

10% to 90% Operating humidity range

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### Part-2/3Hardware

Name of Equipment:PROJECTOR---Qty---02 nos

### **Specifications:**

### **Projection System**

Resolution------1024x768
 Projection Mode----Mode----- High/Standard/Low

Power Consumption------Power in Watts -- 290W

#### **System Specifications**

- Contrast Ratio-----2 200:1
- Computer Compatibility-----MAC / PC
- Video Compatibility------HDTV / DTV

### Display

- Throw Ratio-----1.4 1.82:1
- Projection Screen Size (Diagonal)----30 (76.2 cm) to 300 (762 cm) (measured diagonally)
- Brightness-----2300 Lumen
- Projection Lens------Approx. 1.3 times zoom lens, manual
- Lamp Type-----UHP lamp, 210W

#### **Dimensions**

- Width in mm-----313.4 mm
- Depth in mm-----278.3 mm
- weight in Kgs-----3.2 Kg
- Height in mm-----129.6 mm

#### Power Management

Power Supply------AC 100V to 240V

#### Temperature

Operating Temperature-----0 degree C to 40 degree C
 Audio-----1W x 1 (monoaural)
 Ports-----DVI/USB Port/WiFi/HDMI

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### Part-2/4(Hardware)Name of Equipment:

## Technical specification-Portable Work station— 10 nos

- Processor -2.5GHz dual-core,Intel Core i5 processor (Turbo Boost up to 3.1GHz) with 3MB L3 cache
- Memory--4GB of 1600MHz DDR3
- Storage-500GB 5400-rpm hard drive
- Graphics -Intel HD Graphics 4000
- Display -Dual display and video mirroring: up to 2560 by 1600 pixels on an external display, both at millions of colors
- Native Mini DisplayPort output
- Adapter -DVI output using Mini DisplayPort to DVI Adapter VGA output using Mini DisplayPort to VGA Adapter Dual-link DVI output using Mini DisplayPort to Dual-Link DVI
- Adapter HDMI audio and video output using third-party Mini DisplayPort to HDMI Adapter
- Camera-720p FaceTime HD MagSafe power port
- Ethernet -Gigabit Ethernet port
- FireWire- 800 port (up to 800 Mbps)
  - USB -Two USB 3 ports (up to 5 Gbps)
  - Thunderbolt port- (up to 10 Gbps)
- 3.5 mm headphone jack
- card slot -- SDXC card slot
- Optical drive-8x SuperDrive
- Wi-Fi-802.11n Wi-Fi wireless networking;
- Bluetooth-Bluetooth 4.0 wireless technology
- Audio-Stereo speakers with subwoofer Omnidirectional microphone
- Headphone jack -3.5 mm headphone jack
- Support iPhone headset with microphone Support for audio line out (digital/analog)
- keyboard -Full-size backlit keyboard Multi-Touch trackpad for precise cursor control; supports inertial scrolling, pinch, rotate, swipe, three-finger swipe, four-finger swipe, tap, double-tap, and drag capabilities
- Power backup-Up to 7 hours
- Built-in 63.5-watt-hour lithium-polymer battery
- Power Adapter -60W MagSafe Power Adapter with cable management system; voltage-: 100V to 240V AC
- Frequency:- 50Hz to 60Hz
- Relative humidity: -0% to 90% noncondensing

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### Part-3(Infrastructure)

### Part-3/1(Infrastructure)-Video Recording Chamber

- (a) Size-6m(L)\*5m(W)\*4m(H) suitable wall /roofs /ground fabrication
- (b) Colour LED light Pannel-03 nos (Up, right and left side with front view )
- (c) Each LED Pannel Watt----80 W( Each 20W of White and RGB Colour.)
- (d) Video Camera HD ----01 nos.
- (e) Still Camera HD --01nos

## <u>Part-3/2 (Infrastructure) Name of Equipment :</u>LAB WORK STATION----Qty-02 nos <u>Specification</u>-

1-TABLE TYPE= 01 (Eight in numbers)

Each table contains

- (a)-One side three drawers and other side cup boards with two self,
- (b)-Table top -Approx.19 mm Granite black, colour made of with 19 mm board
- (c)- Draws made by 19mm board with cup board and with haminate.
- (d)- Structure in teak wood frame teak finish
- (e)- Mica and teak with colour polishing as required of high standard.
- (f)- Size= 6'(L)×2'6"(W)×30"(H)
- (g)- Legs space = 3"× 3"
- (h)- Wooden one slab between two draws and upon footrest.
- (i)- Assembled and pre inspection of material required.
- 2- Stoolstype= **0**1 (eight in numbers)
- (a)- Stool With 4 Legs with footrest enable of height 65 cm and 45 cm respectively.
- (b)- Stools four legged cushioned with foam and round pipe with footrest enamel painting and Black high quality Raxin Cushion
- 3- Official fixed Chairs-----08 nos.
  - (a) Having variblehightfrom 45 cm to 65 cm
  - (b) Seat and back good quality supported heavy synthetic covers.
- 4-Wall Fitted wooden Storages -----06 Racks
  - (a) Wooden base with good quality mica White surfaces with 30 Cms deep.
  - (b) Two part Vertical of each part 50 Cms.
  - (c) Three part Horizontelod size 75 Cms.
  - (d) Sliding Type Doors With Locks.

### Part-3/3(Infrastructure)FinishingSetupe--

<u>1-</u>Airconditioning, False Ceiling and Extevsion cables and lighting Ground and walls Fabrication-----200 Cubic meter Volume.

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### Note:-

- (1) All items of kits should be quoted for branded quality and standard make and model with ISI/ISO or equivalent mark Certification.
- (2) All items of hardware should be covered 3 years extensive warranty.
- (3) Upgraded version of all Quoted software will be required
- $(4) \ {\tt Computer\ hardware/workstation\ should\ be\ branded\ and\ not\ locally\ make\ or\ assembled}.$
- (5) Demonstration or tutorial of any items must be required for all parts/Items.
- (6) Validity & Expiry of contents of hardware minimum 3 years.
- (7) Tenderer must quote the financial bid for above every Part(Hardware)/Softwares separately, however the purchase committee reserves the right to drop or cancel any item for cost/ budget consideration after deciding L-1 bid.
- $(8) L-1 \ bid \ will be \ decided \ on \ basis \ of \ total \ cost \ of \ all \ kits, \ not \ on \ the \ individual \ Part \ (Hardware) \ / Softwares \ cost.$

(9) Instrument equivalent of proprietary items.

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