# OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY DIBRUGARH :: ASSAM PIN: 786 004



# **BID DOCUMENT**

## FOR

NAME OF THE WORK:

Supply and Installation of Audio-Video Equipment for E-Learning Lab at Directorate of Open and Distance Learning, Dibrugarh University

# **TENDER No: DU/RG/B.01.07/18/2828**

# **CUT-OUT SLIP**

NAME OF THE WORK:

Supply and Installation of Audio-Video Equipment for E-Learning Lab at Directorate of Open and Distance Learning, Dibrugarh University

## TENDER NO. : DU/RG/B.01.07/18/2828 Date: 20/07/2018

SUBMISSION DUE DATE & TIME : 07.08.2018 up-to 11:00 A.M.

FROM:

TO:

NAME: ADDRESS THE REGISTRAR DIBRUGARH UNIVERSIITY DIBRUGARH, ASSAM

(To be pasted on the outer envelope containing "Technical"& "Commercial" bids



# OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

No. DU/RG/B.01.07/18/2828

Date: 20/07/2018

## **Tender Notice**

Sealed Tenders are invited from reputed manufactures/authorized dealers/suppliers for Supply, Installation and Commissioning of Audio-Video Equipment for E-Learning Lab at Directorate of Open and Distance Learning, Dibrugarh University. Detailed specification of the items, terms & conditions etc are given below. Last date of submission of Tender as per annexure with all relevant papers is 07.08.2018 up-to 11:00 A.M. to be submitted at the Tender Box placed at Registrar's Office, Dibrugarh University, Dibrugarh, Assam.

| Availability of Bid papers    | Office of the Registrar, D.U.   |
|-------------------------------|---------------------------------|
|                               | From 20.07.2018 to 06.08.2018   |
|                               | between 10:00 A.M. to 3:00 P.M. |
| Last date for receipt of Bid  | 07.08.2018 upto 11:00 A.M.      |
| Time & Date of opening of Bid | 07.08.2018 at 02:30 P.M.        |
| Place of opening of Bid       | Office of the Registrar, DU     |
| Cost of Document              | 500/- Non refundable            |
| EMD                           | 2.5 % of the Tender Value       |

The tender should be submitted in two separate sealed envelopes *i.e.* **Part - I** TECHNICAL BID and **Part – II** FINANCIAL BID. The technical bid shall be opened on above mentioned date and time and the financial bid of only those bidders who qualify in technical bid shall be opened on the same date or at a later date which shall be intimated to the tenderer whose technical bid are found to be valid. Dibrugarh University reserves all the rights to reject any or all the tenders without assigning any reason thereof.

Sd/-Registrar Dibrugarh University

Copy to:

- 1. The Assistant Registrar (F&A), D.U. for information.
- 2. Dibrugarh University Website
- 3. Notice Board
- 4. Office File

Sd/-Registrar Dibrugarh University

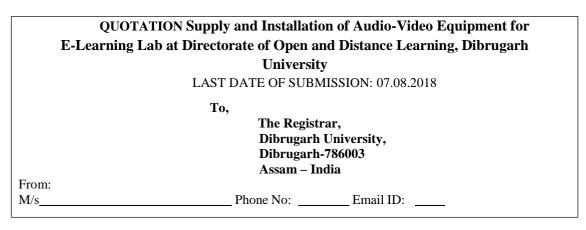
## **INSTRUCTION TO BIDDERS**

#### 1) Important date, time and place:

- (i) Last date & time of submission: 07.08.2018
- (ii) Date & time of opening Technical Bid: 07.08.2018 at 2:30 pm.
- (iii) Place of opening quotations: Office of the Registrar, D.U.

2) The Technical Bid and Price Bid must be separately provided, in two separate properly sealed covers and both these covers will have to be again put in to a single sealed cover.

- (i) In technical Bid the vendor must provide the followings:
- (a) Details of the technical features of the offered equipment as per specifications provided.
- (b) Standard Technical literature on each of the items offered;
- (c) Up-to-date Authorized Dealership Certificate on the offered products in case of dealer/s;
- (d) Details of nature and maximum period of warranty offered
- (e) Vendor and list of service Centre details in India and GST number
- (f) Up-to-date GST clearance certificate must be enclosed.
- (g) Earnest Money Deposit
- (h) List of reputed organizations/Institutions, where similar orders have been executed, if any (copies of the purchase/work orders and completion certificate will have to be enclosed);
- (i) Bidder should have Past Experience of Supply and Supply Installation Testing and Commissioning (SITC) of similar or better projects equivalent to 5 nos. in last 3 years. Value of one such project should not be less than 90% of the current project value.
- (j) Preference will be given to those Bidders who having ISO certification.
- (k) All bidders need to be submit Video-Audio Schematic diagram along with Technical Bid
- (ii) Price Bid shall be inclusive of GST.
- 3) Address for correspondence: The address of the firm submitting the quotation and the Officer to whom the quotation is addressed must appear distinctly on sealed covers. Further, on sealed cover, the following are to be written:



- 4) **Bid not Transferable:** The bid documents are not transferable
- 5) **The seal and signature** of the authorized official of firms must appear on all the papers and envelops.
- 6) **Late and delayed tender:** Late and delayed tender will not be accepted. In case any unscheduled holiday occurs on the prescribed closing/opening date the next working day shall be the prescribed date of closing/opening.
- 7) **Conditional tenders not accepted:** All the terms and conditions mentioned herein must be strictly adhered to by all the vendors. Conditional tenders shall not be accepted on any ground and shall be rejected straightway. Printed conditions mentioned in the tender bids submitted by vendors will not be binding on Dibrugarh University.

### **TERMS & CONDITIONS**

- 1. **Rates:** Rates quoted for indigenous items should be FOR DU, on **DOOR DELIVERY basis**, with break-ups.
- 2. **Validity of Quotation:** Quoted rates must be valid for **120 days** from the last date of submission of quotation.
- 3. **Warranty:** The quoted equipment and components must be warranted for a minimum of one year.
- 4. **Literature a must:** All the quotations must be supported by the printed technical leaflet / literature and the specifications mentioned in the quotation must be reflected/supported by such printed technical leaflet/literature. The model and specifications quoted should invariably be highlighted in the leaflet/literature for easy reference.
- 5. **Dealership Certificate:** Dealers or Agents quoting on behalf of Manufacturer must enclosed valid dealership certificate.

#### 6. **Earnest Money:**

An EMD of 2.5 % of the Tender Value in the form of Bank Guarantee **OR** an Account payee Demand Draft from a Commercial Bank drawn in favour of **"The Registrar, Dibrugarh University**", will have to be submitted along with the Technical Bid. Offers received without Earnest Money or valid Certificate shall be summarily rejected.

EMD of unsuccessful bidder will be returned within one month of placement of Purchase Order.

#### 7. **Delivery:**

- a) Time Limit: Maximum within 60 (sixty) days from the date of issue of purchase order.
- **b) Safe Delivery:** All aspects of safe delivery shall be the exclusive responsibility of the vendor. At the destination site, the package will be opened only in the presence of D.U. user/representative and vendor's representative. The intact condition of the package and the seal/indicators for not being tempered with shall form the basis for certifying the receipt in good condition.

c) Insurance: The supplier is to establish 'All Risk Transit Insurance' coverage till door delivery at DU.

- d) **Part Delivery:** Part delivery is not allowed.
- 8. **GST:** Up-to-date GST Registration Certificate.
- 9. **Payment:** 50% Payment shall be made after Delivery of material and 50% after successful installation, commissioning and demonstration of goods at DU, generally through A/c payee cheque/RTGS/NET Banking.
- 10. No correspondence shall be entertained in case your quotation is rejected in ground of not complying with our instructions, terms and conditions.
- 11. Security Deposit: 10 % Security Deposit shall have to be deposited by the concerned firm to whom the Work Order shall be awarded in the form of Demand Draft or Performance bank Guarantee drawn in favour of the Registrar, D.U. or the same shall be deducted from the total Bill Value.
- 12. **Acceptance of quotations:** The acceptance of the quotation will rest solely with the Registrar, DU, who in the interest of the Institute is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reasons.

## 13. Force Majeure:

If the performance of the obligation of either party is rendered commercially impossible by any of the events hereafter mentioned that party shall be under no obligation to perform the agreement under order after giving notice of 15 days from the date of such an event in writing to the other party, and the events referred to are as follows:

Any law, statue or ordinance, order action or regulations of the Government of India,

Any kind of natural disaster, and

Strikes acts of the Public enemy, war, insurrections, riots, lockouts, sabotage.

### 14. **Termination for default:** Default is said to have occurred

(a) If the equipment or any of its component is found having poor workmanship, faulty designs, and bad quality of materials used.

(b) If the supplier fails to deliver all of the services within the time period(s) specified in the purchase order or any extension thereof granted by D.U.

(c) If the supplier fails to perform any other obligation(s) under the contract.

### 15. Applicable Law:

The contract shall be governed by the laws and procedures established by Govt. of India subject to exclusive jurisdiction of Competent Court and Forum in Dibrugarh.

Any dispute arising out of this purchase shall be referred to the Registrar, DU, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed by the Authority of the Institute. The decision of such Arbitrator shall be final and binding on both the parties.

16. Training: The Vendor will provide free training at DU after successful installation of the Machines/Equipment.

#### 17. Agency Commission:

The percentage of ex-works value to be paid to Indian agent in equivalent Indian currency as agency commission as applicable will have to be clearly stated in the quotation.

- 18. Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document as per Annexure enclosed.
- 19. Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender Document or submission of a bid not substantially responsive to the Tender document in every respect will be at the tenderer's risk and may result in the rejection of the bid.

#### 20. Important Note:

- (a) Tenderers are advised to read carefully the Terms and Conditions of supply before recording the rates in this Schedule.
- (b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
- (c) The University reserves the right to:
- (i) Accept/reject any/all tenders without assigning any reason thereof.
- (ii) Revise the quantities at the time of placing the order without change in the rate quoted by the bidder.
- (iii) Add/modify/relax or waive any of the conditions stipulated in the tender document whenever deemed necessary
- (iv) Award the contract to one or more tenderers for the items covered by the tender.

# **TECHNICAL SPECIFICATIONS – E-LEARNING STUDIO**

| Sl. No. | Specifications   | Preferred Brand   | Qty |
|---------|--|-------------------|-----|
| 1.      | SITC of Integrated Broadcast Quality Robotic PTZ   | Sony/Panasonic/   | 01  |
|         | Camera   | Ross              |     |
|         | Lens   |                   |     |
|         | • Lens Zoom Ratio: 25 x (optical) or better  |                   |     |
|         | <ul> <li>10x Digital Zoom Minimum</li> </ul>   |                   |     |
|         | Camera   |                   |     |
|         | ○ HD – 1080/50i & 1080/50p (1920X1080 resolution)  |                   |     |
|         | <ul> <li>Imaging Device (Type): MOS/CMOS sensor</li> </ul>   |                   |     |
|         | $\circ$ Size - 1/3" or better  |                   |     |
|         | <ul> <li>Focus System: Auto / Manual</li> </ul>  |                   |     |
|         | • Minimum Illumination: 0.7 lx (50 IRE, F1.6, 48   |                   |     |
|         | dB,1/50 without accumulation) or better at 50 Hz   |                   |     |
|         | <ul> <li>Horizontal Resolution:1000 TV Lines</li> </ul>  |                   |     |
|         | • SNR: 50dB or Better  |                   |     |
|         | <ul> <li>Output Format: 1080/50i</li> </ul>  |                   |     |
|         | • Pan/Tilt Operation Speed: Max 300°/sec During Preset,  |                   |     |
|         | Max 90 °/sec Manual Operation  |                   |     |
|         | • Pan Range / Angle: $\pm 175^{\circ}$ or better   |                   |     |
|         | • Tilting Range: $-30^{\circ}$ to $+90^{\circ}$  |                   |     |
|         | • Preset Positions: More than 50   |                   |     |
|         | • Control Interface: IP/RS422  |                   |     |
|         | <ul> <li>Video Outputs: HD/SD SDI</li> </ul>   |                   |     |
|         | <ul> <li>Power Requirements: DC 12 V</li> </ul>  |                   |     |
|         | (Should be supplied with suitable power supply adaptor   |                   |     |
|         | operating at 230 V±10%, 50 Hz AC)  |                   |     |
|         | Provision to hang PTZ camera with ceiling mount with X-Y   |                   |     |
|         | ceiling track rail to provide eye contact with the lecturer /  |                   |     |
|         | teacher  |                   |     |
| 2.      | SITC of Remote Control for PTZ Camera  | Sony/Panasonic/Ro | 01  |
| 2.      | • Protocol and Interface: IP or RS-422   | ss                | 01  |
|         | <ul> <li>Preset Memory: More than 50</li> </ul>  | 55                |     |
|         | <ul> <li>LAN: 10BASE-T/100BASE-T (for IP control)/RJ45 x 1</li> </ul>  |                   |     |
|         | • TALLY/GPI:   |                   |     |
|         | • TALLY INPUT x 5 channels / D-sub 15 pin  |                   |     |
|         | <ul> <li>GPI INPUT x 4 channels / (female) x 1</li> </ul>  |                   |     |
|         | <ul> <li>GPI OUTPUT x 4 channels</li> </ul>  |                   |     |
|         |  |                   |     |
|         | <ul> <li>Adjustment functions in Control Panel:</li> <li>Dan/Tilt Zoom Ecous Iris Cain Dedestal Shutter</li> </ul>                                 |                   |     |
|         | • Pan/Tilt, Zoom, Focus, Iris, Gain, Pedestal, Shutter   |                   |     |
|         | • Detail, White Balance (Auto, R/B Gain)   |                   |     |
|         | • Black Balance (Auto, R/B Pedestal), Switch scene   |                   |     |
|         | files  |                   |     |
| 3.      | SITC of Compact Digital Video Production Switcher  | Sony/Panasonic/   | 01  |
| 2.      | • Full HD/SD- SDI Digital Video Production Switcher  | Ross/Datavideo    | ~-  |
|         | <ul> <li>Compatible formats: HD/SD-1080/50i, 720P, 576/50i</li> </ul>  |                   |     |
|         | <ul> <li>Video Inputs: Total 5 or more with 4 HD/SD-SDI or</li> </ul>  |                   |     |
|         | more & 1 HDMI/DVI or more  |                   |     |
|         | <ul> <li>Video Input Interface: 4:2:2, HD/SD SDI, BNC, 75</li> </ul>   |                   |     |
|         | ohms   |                   |     |
|         | <ul> <li>Video Outputs: Total 3 or more HD/SD SDI x 2, 1 or</li> </ul>   |                   |     |
|         | more HDMI/DVI output   |                   |     |
|         | • Video Output Interface: BNC, $75\Omega$ , 4:2:2 HD –SD SDI   |                   |     |
|         | 1080/50i 1.5 Gbps or 576/50i 270 Mbps.   |                   |     |
|         |  |                   |     |
|         |  |                   |     |
|         |  |                   |     |
|         | <ul> <li>Frame Sync on All inputs and can be use without SPG</li> <li>Control Panel: All in one Electronic &amp; Hardware control panel</li> </ul> |                   |     |

|    | <ul> <li>Upconverter from SD to HD signal on min 2 Inputs</li> <li>Should have color correction feature on min 2 inputs</li> <li>Should have internal Chroma, Linear, Luminance Key and at-least 1 PIP</li> <li>Built-in multi-viewer with in-monitor labels and tally</li> <li>Power supply: 230 V AC ± 5%, 50 Hz</li> <li>Operating: 5 deg. to 35 deg. C</li> </ul>   |                       |    |
|----|---|-----------------------|----|
| 4. | <ul> <li>SITC of Interactive Display Panel</li> <li>Panel: Min 65 -inch or more LED display</li> <li>Aspect Ratio: 16:9</li> <li>No. of pixels(HxV): 1920x1080 pixels</li> <li>Contrast Ratio: 4000:1</li> <li>Brightness: 350cd/m2 or better</li> <li>Response Time: 7ms or better</li> <li>Panel Life: Approx. 50000 hours or Better</li> <li>Touch Panel/Detection Method: Built in touch/infrared blocking detection method</li> <li>Multi touch operation: Upto 12 touch in PC Mode</li> <li>Terminal Inputs : HDMI IN x 2, DVI-D IN x 1, Video IN x 1,</li> <li>Component Video/RGB IN x 1, PC IN x 1, Audio IN x 2,</li> <li>Output : VGA Out x 1,</li> <li>Control : LAN x 1, RS232C IN,</li> <li>USB memory viewer Type A X 1, External Speaker Out</li> <li>Other features</li> <li>Should be able to operate without PC</li> <li>Should be able to operate without PC</li> <li>Should be able to operate without PC</li> <li>Interactive Display</li> <li>Wireless mirroring of Android/Windows Devices (Miracast)</li> <li>Interactivity with Mac</li> <li>Additional Slot for Analog /Digital inputs-for future expansion</li> <li>Picture in Picture</li> <li>Picture in White board</li> </ul> | Sony/Panasonic/LG     | 01 |
| 5. | <ul> <li>SITC of Display Panel</li> <li>Screen Size (diagonal): 32 inches</li> <li>Aspect Ratio: 16:9</li> <li>Panel Backlight: LED</li> <li>Display Resolution: 1366 x 768 pixels</li> <li>Viewing Angle: 176 degree or better</li> <li>Speakers: 20w In Built with the Panel</li> <li>HDMI Input: 2 or more</li> <li>Other Inputs: USB, RCA, VGA</li> </ul>   | Sony/Panasonic/LG     | 01 |
| 6. | <ul> <li>SITC of Up/Down/Cross Converter</li> <li>For VGA/HDMI Output from Computer to SDI Devices</li> <li>Input: VGA x 1, HDMI x 1, HD/SD-SDI x 1</li> <li>Output: SDI x 2, HDMI x 1, SDI Loop thru BNC</li> <li>Supported video output formats:</li> <li>1080p60/59.94/50, 1080p30/29.97/25/24/23.98,<br/>1080i60/59.94/50, 720p60/59.94/50, 525i, 625i</li> <li>Audio Format (Input):</li> <li>Analog Audio L/R : stereo audio</li> <li>SDI / HDMI embedded audio</li> <li>Audio Format (Output):</li> <li>SDI embedded audio up to 8CH, 48KHz, PCM audio</li> <li>HDMI embedded audio up to 8CH, 48KHz, PCM audio</li> </ul>   | AJA/Datavideo/<br>BMD | 01 |

| <ul> <li>7. SITC of Professional Audio Mixer <ul> <li>10 Channel Audio mixer</li> <li>8 input Mic/Line Inputs</li> <li>2 Stereo Line Input</li> <li>3 Band EQ</li> <li>2 configurable auxiliary buses</li> <li>XLR-type and ¼" metal jack connector sockets</li> <li>RCA phono stereo playback inputs and record outputs</li> <li>3-band EQ with a swept mid band</li> <li>Ten-segment LED output metering</li> <li>Headphone output</li> </ul> </li> </ul> | 01 |
|---|----|
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| <ul> <li>3 Band EQ</li> <li>2 configurable auxiliary buses</li> <li>XLR-type and <sup>1</sup>/<sub>4</sub>" metal jack connector sockets</li> <li>RCA phono stereo playback inputs and record outputs</li> <li>3-band EQ with a swept mid band</li> <li>Ten-segment LED output metering</li> </ul>  |    |
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| • Ten-segment LED output metering   |    |
|   |    |
|   |    |
|   |    |
| 8. <u>Network Video Streaming Device</u> Datavideo/matrox   | 01 |
| • The Equipment should support the following protocols:   |    |
|   |    |
| A) HLS (HTTP Live Streaming)  |    |
| B) RTP/RSTP   |    |
| C) RTMP(Local/Publish)  |    |
| • The Equipment can be set up and controlled using  |    |
| almost any device with a web browser. User are  |    |
| allowed to configure real time audio and video  |    |
| streaming on the web based graphical user interface.  |    |
| • The encoded video stream can deliver to a single  |    |
| browser, a group of clients on a local area network   |    |
| (LAN) or even a content delivery Network(CDN).  |    |
| • Features:   |    |
| Broadcast quality HD/SD H.264 network streaming   |    |
| Quick and easy setup, H.264 Encoding  |    |
|   |    |
| Video Input (Choose from any):  |    |
| HD/SD-SDI(BNC), HDMI, CVBS(BNC)   |    |
|   |    |
| Audio Inputs:   |    |
|   |    |
| SDI embedded, Unbalanced RCA phono socket/  |    |
| Balanced 3 pin XLR  |    |
|   |    |
| Encoded Video stream:   |    |
| H.264/AVC up to High Profile level 4.0 Up to  |    |
| 1920x1080 @ 30 fps  |    |
| Configurable bitrate up to 6Mbps.   |    |
| Control:  |    |
|   |    |
| Web user interface for configuration and control  |    |
| Recording:  |    |
| Should have USB port to connect USB storage device  |    |
| for recording   |    |
| 9.         SITC of Wireless Lapel Microphone         AKG/Azden/   | 01 |
| Receiver Sennheiser   | 01 |
| • Switching bandwidth: 30 MHz   |    |
| <ul> <li>Modulation: FM</li> </ul>  |    |
|   |    |
|   |    |
|   |    |
| • SNR: typ. 105 dB(A)<br>• Andre autorates $1 \times YLP$ as about halowed $1 \times TS 1/2^{2}/2$  |    |
| • Audio outputs: 1 x XLR sockets balanced, 1 x TS $\frac{1}{4}$ /   |    |
| 6.3 mm jack sockets unbalanced  |    |
| Transmitter (Battery Operated)  |    |
| <ul> <li>Switching bandwidth: 30 MHz</li> </ul>   |    |
| • RF output power: 10 or 50 mW  |    |
| • Modulation: FM  |    |
| • Audio input: TB3M / 3-pin mini-XLR socket (max. 2.5   |    |
| Vrms)   |    |

|     |   | 1                      |    |
|-----|---|------------------------|----|
|     | <ul> <li>Audio bandwidth: 45 – 20 000 Hz</li> <li>T.H.D.: ≤0.8 %</li> </ul>   |                        |    |
|     | $\circ$ T.H.D.: ≤0.8 %<br>$\circ$ SNR: > 105 dB(A)  |                        |    |
|     |   |                        |    |
| 10. | <ul> <li>SITC of Compact 2 Way Powered Speaker (Pair)</li> <li>Frequency Range: 100 Hz-18 kHz or better</li> <li>Max Peak SPL: 110 dB or better</li> <li>LF Driver Size: 127 mm (5")</li> <li>HF Driver Size: 19 mm (.75")</li> <li>High frequency control and Volume control</li> <li>Power Amp: 70 W (Pair) /35 Per channel</li> <li>Input Types: XLR, TRS Balanced, RCA</li> <li>AC Input Voltage: 100-240 VAC +/- 10% 50/60 Hz</li> </ul> | JBL/Yamaha/Bose        | 01 |
| 11. | SITC of Professional HDD Based Digital Video<br>Becorder  | AJA/Datavideo/<br>Sony | 01 |
|     | <ul> <li><u>Recorder</u></li> <li>Supported Video Resolutions:</li> </ul>   | Solly                  |    |
|     | <ul> <li>Ig20x1080 50i/59.94i/60i</li> </ul>  |                        |    |
|     | <ul> <li>1280x720 50P/59.94P/60P</li> </ul>   |                        |    |
|     | <ul> <li>702x576i or 720x480i</li> </ul>  |                        |    |
|     | <ul> <li>Video Input: 1x SDI</li> </ul>   |                        |    |
|     | • Video Output: 1xSDI. 1xHDMI   |                        |    |
|     | • Audio Input: 2xBalanced XLR   |                        |    |
|     | • Audio Output: 2xBalanced XLR  |                        |    |
|     | • Recording file format: MOV, MXF   |                        |    |
|     | • Saving of recorded file (minus 2 seconds at the end of  |                        |    |
|     | the file) in case of accidental power failure   |                        |    |
|     | • Recorder should use the NTFS file system  |                        |    |
|     | • Recorder should have time code input and output   |                        |    |
|     | • Recorder should have gen-lock input and pass-through  |                        |    |
|     | • Should have Power-On Record and Power-On Play   |                        |    |
|     | • Recorder should be able to do timelapse recording   |                        |    |
|     | • Should have Ref-in/loop-through, Black Burst, and Tri-  |                        |    |
|     | level Signal  |                        |    |
|     | • HDD should have USB 2.0 to connect to a PC or MAC   |                        |    |
|     | <ul> <li>based NLE system</li> <li>Bidder should quote two numbers of 1TB HDD with</li> </ul>   |                        |    |
|     | • Bidder should quote two numbers of TTB HDD with<br>the recorder with HDD enclosure  |                        |    |
|     |   |                        |    |
| 12. | SITC of Audio Embedder  | AJA/Datavideo/         | 01 |
|     | • SDI 2-CH Audio Embedder   | BMD                    |    |
|     | • 1 input to 1output SDI w/embedded Audio   |                        |    |
|     | <ul> <li>3G supported up to 1080 50P/59.94P/60P)</li> <li>Audio input: RCA or <sup>1</sup>/<sub>4</sub>" Jack inputs</li> </ul>   |                        |    |
|     | <ul> <li>SDI outputs with embedded Audio</li> </ul>   |                        |    |
|     |   |                        |    |
| 13. | SITC of HD/SD-SDI Distribution Amplifier  | AJA/Datavideo/         | 01 |
|     | • 1 input to 4 Output HD/SD SDI Distribution Amplifier  | BMD                    |    |
|     | <ul> <li>(no scaling).</li> <li>HD/SD SDI Connections</li> </ul>  |                        |    |
|     | <ul> <li>Low Power Consumption</li> </ul>   |                        |    |
|     | • Metal Case  |                        |    |
| 14. | SITC of Adobe Premiere Latest version (1 Year<br>Subscription)  | ADOBE CC<br>Premiere   | 01 |
|     |   |                        |    |
| 15. | SITC for Workstation for Non Linear Edit and Offline  | HP/DELL/               | 01 |
|     | Graphics Suits  | Supermicro             |    |

| HDMI and analog<br>24" full HD LCD/LED<br>Keyboard & Mouse |
|--|
|--|

# TECHNICAL SPECIFICATIONS FOR OPTIONAL MODULES

| 16. | SITC of Laptop/Desktop for Interactive Display015" Display (Laptop) or 21" Desktop0I3 Processor08GB RAM01TB HDD0GFX card (2 GB or more)0Complete System  | Dell/HP/Lenovo                          | 01     |
|-----|--|---|--------|
| 17. | <ul> <li><u>Installation Material</u></li> <li>It is required to set-up the facility for HD operation therefore all the cabling should support HD operations</li> <li>All installation materials including racks, power cables, interconnection cables, connectors and other accessories required for installation of the complete system shall be quoted</li> </ul> | Canare/Beldon/Neutrik/<br>Amphenol etc. | 01 Lot |
| 18. | Creative Pen Tablet         o       Size – A4 (11'X16')         o       Pressure sensitive         o       Multi-touch         o       Cordless, battery free stylus         o       USB PC and MAC connection   | Wacom or Equivalent                     | 01     |

# <u>Annexure – Compliance Certificate</u>

Ref: NIQ No. DU/RG/B.01.07/18/..... Date: ...../2018

| Sl. No. | Description of item quoted | Remarks | Justification if not<br>complied NIQ       |
|---------|----------------------------|---------|--|
|         |                            |         | Specification<br>(Extra sheet may be used) |
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| Signature           | : |
|---------------------|---|
| Name of Firm/Vendor | : |

Official Seal of Firm/Vendor :