BID DOCUMENT

Two Packet e-tenders are invited for

Setting Up of Studio, Network Operating Centre (NOC) in IGNOU Campus, New Delhi.
(*In Centre for Online Education (COE) and Computer Division of Block-A*)
And
Rate contract for Setting Up of Studio in Regional Centers of IGNOU on PAN India Basis.

NIT No.: EdCIL/EIS & EPS/IGNOU/Studio/2024-25
PART-I- TECHNICAL BID

EdCIL (India) Limited
(A Govt. of India Mini Ratna Enterprises)
'EdCIL House', Plot No. 18A, Sector- 16A
NOIDA – 201301 (UP), INDIA

Dated: 29.06.2024
This document is serially numbered from page number 01 to 102.

DISCLAIMER

The information contained in this Tender document (the "TENDER") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the Authority or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this TENDER and such other terms and conditions subject to which such information is provided.

This TENDER is not an Agreement and is neither an offer nor invitation by the Authority to the prospective Bidders or any other person. The purpose of this TENDER is to provide interested parties with information that may be useful to them in making their financial offers (BIDs) pursuant to this TENDER. This TENDER includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This TENDER may not be appropriate for all persons, and it is not possible for the Authority, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this TENDER. The assumptions, assessments, statements and information contained in the Bidding Documents, especially the Feasibility Report, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this TENDER and obtain independent advice from appropriate sources.

Information provided in this TENDER to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this TENDER or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the TENDER and any assessment, assumption, statement or information contained therein or deemed to form part of this TENDER or arising in any way for participation in this BID Stage.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this TENDER. The Authority may in its absolute discretion,

but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this TENDER.
The issue of this TENDER does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or BIDs without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its BID including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority, site visits, investigations, studies, or any other costs incurred in connection with or relating to its BID. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the BID, regardless of the conduct or outcome of the Bidding Process.

INDEX

CHAPTER	SUBJECT	PAGE NO.
I	NOTICE INVITING TENDER (NIT)	05-06
II	OFFLINE AND ONLINE BID SUBMISSION DOCUMENTS	07
III	TERMS OF REFERENCE AND DEFINITIONS	08-09
IV	INSTRUCTIONS FOR E-TENDERING	10-16
V	INSTRUCTIONS TO BIDDERS	17-32
VI	TECHNICAL SPECIFICATION AND COMPLIANCE SHEET (ANNEXURE-I)	33-76
VII	ANNEXURE-II TO ANNEXURE- XIV	77-102

CHAPTER-I

EdCIL (INDIA) LTD

(A GOVT. OF INDIA MINI RATNA ENTERPRISE)

SECTOR 16A, NOIDA

NOTICE INVITING TENDER

(e-Tendering mode)

NIT No.:EdCIL/EIS & EPS/IGNOU/Studio/2024-25 Dated: 29.06.2024

1. EdCIL (India) Limited , Ministry of Education, Govt of India, having their Corporate office at EdCIL House, 18A, Sector 16A, NOIDA – 201 301 (U.P) & Registered Office at 5th& 6th Floor, Vijaya Building, 17, Barakhamba Road, New Delhi – 110001,invites two packet open e-tender from eligible Bidders for the work of ***"Setting Up of Studio and Network Operating Centre in IGNOU Campus, New Delhi and Rate Contract for Setting Up of Studio in Regional centers of IGNOU on Pan India basis"***as per details given below:

Name of work	***"Setting Up of Studio and Network Operating Centre in IGNOU Campus, New Delhi and Rate Contract for Setting Up of Studio in Regional centers of IGNOU on Pan India basis"***
Earnest Money Deposit	**Rs. 3,65,000/- (Rs. Three Lakhs Sixty-Five Thousand Only)**In the form of Demand Draft in favour of **EdCIL (India) Limited** payable at **'NOIDA'** as mentioned elsewhere in the tender conditions. **Bidders registered with MSME are exempted from submission of EMD.**
Comprehensive Warranty	***Three-year (03)*** Comprehensive warranty shall be from the date of successful Installation & handing over.
Performance Bank Guarantee	**3%** of the total work value of the successful bidder. PBG is required to be submitted within 15 days from the date of issue of LOA in favour of **EdCIL (India) Limited.** This guarantee shall be valid for a period of 90 days beyond the Comprehensive Warranty of Three (03) Year from the date handing over.
Name of Organization	EdCIL (INDIA) LTD., NOIDA
Tender Type (Open/ Limited/ EOI/ Auction/ Single)	Open
Tender Category (Services/ Goods/ works)	Works
Place of Work	I. Studio: In Center for Online Education (COE) Building Room No:15 and 16. II. Network Operating Centre : Block-A Computer Division: Room No:101. IGNOU Campus, Maidan Garhi, New Delhi-110068

	III. Studio in Regional Centers: PAN India
Time allowed for completion of work	Sixty (60) Days
The Currency in which payment shall be made	Indian Rupees (INR)
Date of Issue/Publishing	29.06.2024
Document Download/ Sale Start Date	29.06.2024
Document Download/ Sale End Date	15.07.2024 at 14:00 Hrs.
Last Date and Time for receipts of Bids	15.07.2024 up to 14:30 Hrs.
Date and Time of Opening of Technical Bids	15.07.2024 at 15:00 Hrs.
Date and Time of Opening of Financial Bids	Shall be communicated at later stages
No. of Covers (1/2/3/4)	02 (Two packet)
Bid Validity days (180/120/90/60/30)	90 days (From last date of opening of tender)
Address for Communication	Chief General Manager (EIS & EPS) EdCIL (India) Limited, 18 A, Sector-16A, Noida-U.P.-201 301, Ph. No.: 0120-4310840
Contact No.	0120-2512001 to 2512006, 0120-4156001,002,4154003
Email Address	cgm.infracivil@edcil.co.in, eprocure@edcil.co.in

2. Tender document shall be downloaded from electronic tender portal link available at EdCIL Tender web page and details mentioned in the tender document. Aspiring bidders who have not get registered in e-procurement should get themselves register/enroll before participating in e-tendering process. Interested bidders are advised to go through instructions provided at “Instructions to Bidders for e-tendering.”
3. No manual bids shall be accepted. Bids should be submitted in the E-Tendering mode only.
4. Bidders are advised to visit the EdCIL Web site for getting themselves updated for information on this tender. Corrigendum and addendum may be issued on the changes required. The Corrigendum/addendum are the part of tender documents and Bidders are supposed to upload the same, duly signed as per the guidelines given in the tender document. Bidders are advised to visit EdCIL e-tender web page regularly to update themselves for any notifications for this tender.

Chief General Manager/ (EIS & EPS)
EdCIL (India) Limited,
18 A, Sector-16A, Noida-201 301
Tel: +91120-4156001,0120-4154003,
0120-2512004,05,06.

CHAPTER- II

Offline and Online Bid Submission Documents

1. Offline Submissions:

1.1 The bidder is requested to submit the following documents offline to the under mentioned address before the start of Public Online Tender Opening Event in a Sealed Envelope at the address.

1.2 The envelope shall bear the project name, the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).

I. Original EMD amount in the form of Demand Draft.

II. Original copy of the power-of-attorney, wherever required.

Note: The Bidder should also upload the scanned copies of all the above-mentioned original documents as Bid-Annexure during Online Bid-Submission.

2. Online Submissions:

2.1 The Online bids (complete in all respect) must be uploaded online in **Two Envelopes** as explained below:

Envelope-1 (Following documents to be provided as single PDF file) *file size shall be less than 5 MB each.			
Sl. No.	**Documents**	**Content**	**File Types**
1.	Technical Bid	Technical specification Sheet as per Annexure-I	.PDF
2.		Organization Declaration Sheet as per Annexure-II	
3.		List of organizations/ clients where the similar nature of work / products have been supplied (in last three years) along with their contact number(s).	.PDF
4.		Supporting documents in support of all claims made at Annexure-III, IV, V, VI, VIII, IX, XII	.PDF
5.		Corrigendum/ Addendum are also to be signed and uploaded.	.PDF

Envelope-2			
Sl. No.	**Documents**	**Content**	**File Types**
1.	Financial Bid	As per Financial Bid forms and Annexures	.PDF and Excel sheet

CHAPTER-III

TERM OF REFERENCE & DEFINITIONS

Contractor	"Contractor" shall mean the successful agency/ bidder, firm or corporation to whom the Purchase/work Order is issued for Setting Up of Studio.
AUTHORIZED SIGNATORY	The bidder's representative (explicitly, implicitly, or through conduct) with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/ authority having the Power of Attorney from the Competent authority of the respective Bidding firm.
BID/TENDER	"Bid" means the response to this document presented in Two packet, Technical Cum Commercial Bid, which are supplied with necessary documents and forms as given in Annexure, complete in all respect adhering to the instructions and spirit of this document.
BIDDER/BIDDER	"Bidder" means any manufacturer/ individual/ proprietor/ partnership firm/ agency/ company/ responding to Request for Proposal and who makes a Bid.
EDCIL	"EdCIL" shall mean Authorized Representative of EdCIL (India) Limited / Authorized representative of Client.
CONTRACT	"The Contract" means the agreement entered into between EdCIL and the selected bidder(s) in terms of clauses mentioned
DAY	"Day" means a normal working day with or without extra hours to work on the designated site of the project/ work.
D.D	Demand Draft
EDCIL	EdCIL (India) Limited, Noida (A Govt. of India Enterprise)
EMD	Earnest Money Deposit
EPF	Employee Provident Fund
ESI	Employees State Insurance.
GOI	Government of India.
GOODS AND MATERIALS	"Goods and Materials" shall mean the articles, materials, Studio equipment, Furniture Items, IT Equipment's, supplier's drawings, data and other property and all services-including design, delivery, installation, inspection and maintenance support specified or required to complete the order and incidental thereto.
GST	Goods and Services Tax
IGNOU	Indira Gandhi National Open University
MSME	Micro, Small and Medium Enterprises.

NSIC	National Small Industry Corporation.
ORDER	"Order" shall mean the Purchase/ Work Order and its attachments and exhibits.
PBG	Performance Bank Guarantee
PURCHASER	"Purchaser" shall mean **IGNOU** where the items are to be supplied, installed and commissioned.
SECURITY DEPOSIT (SD)	Amount of the Order Value deposited by the Bidder and retained till the successful completion of the project (as long as the bidder fulfils the contractual agreement).
SERVICES	"Services" means the services to be delivered by the successful bidder and as required to run the project successfully as per the Contract.
TC	Tender Committee
TENDER	"**TENDER**" means the Request for Proposals

CHAPTER-IV

INSTRUCTIONSFOR E-TENDERING

1. **Instructions for Online Bid Submission:**

1.1 E-tendering is new technology for conducting public procurement in a transparent and secured manner. As per Government of India's directives, EdCIL(India) Limited has adopted E-tendering.

1.2 For conducting electronic tendering, EdCIL (India) Limited has decided to use Electronic tender portal link available with detailed information on e-tendering process at EdCIL website. This portal built using Electronic tender's software is referred to as http://www.tenderwizard.com/EDCIL.

1.3 The bidders are required to submit soft copies of their bids electronically on http://www.tenderwizard.com/EDCIL e-tendering website, usingvalid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Tender Wizard E-Tendering Portal, prepare their bids in accordance with the requirements and submitting their bids online on the Tender Wizard E-Tendering Portal.

1.4 The scope of work to be tendered is available in the complete bid documents which can be viewed /downloaded from Tender Wizard E-Tendering Portal of http://www.tenderwizard.com/EDCIL. Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website http://www.tenderwizard.com/EDCIL. No claim shall be entertained on account of disruptions of internet service being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snags.

1.5 All Corrigendum/Amendment/Corrections, if any, will be published on the website http://www.tenderwizard.com/EDCIL.

1.6 It is mandatory for all the applicants to have Digital Signature Certificate (in the name of person who will sign the bid document) from any of the licensed certifying.

1.7 To participate in the e-tendering submission, it is mandatory for the applicants to get registered their firm/joint venture with the Tender Wizard E-Tendering Portal of http://www.tenderwizard.com/EDCIL.to have user ID & Password from Tender Wizard E-Tendering Portal.

1.8 **Register your organization on Tender Wizard E-Tendering Portal by following link** http://www.tenderwizard.com/EDCIL**well in advance of your first tender submission deadline on Tender Wizard E-Tendering Portal for obtaining credentials by paying Annual registration charges. Vendor Registration is Valid for 1year.**

1.9 Get your organization's concerned executives trained on **Tender Wizard E-Tendering Portal** well in advance of your first tender submission deadline on E-tender Site.

1.10 Submit your tender well in advance by relevant documents along with copy of EMD of tender submission deadline on **Tender Wizard E-Tendering Portal** as there could be last minute problems due to internet timeout, breakdown, etc.

1.11 Tenders should be submitted only through Tender Wizard E-Tendering Portal and obtain the Tender Acknowledgement copy as a proof of successful submission.

1.12 Vendors Training Program: Vendors are requested to contact at Tender wizard Helpdesk for any information regarding E-tendering / training.

1.12.1 For online registration, intended bidders may write us at harishkumar.kb@etenderwizard.com or contact no. 080-49352000/9686115318/9650520101/8800445981.

1.12.2 For any further query related to Training Session, Tender Uploading/downloading or any other query related to tender please contact Tender wizard Helpdesk.

- Telephone: 080-49352000/9686115318 or write us mail on Email Id:- harishkumar.kb@etenderwizard.com, ambasa@etenderwizard.com, twhelpdesk759@gmail.com, twhelpdesk963@gmail.com

2. **Digital Signature Certificates**

For integrity of data and authenticity/non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Signature Certificate (DSC). Also referred to as Digital Signature Certificate(DSC)of Class 2or above, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA)[refer http://www.cca.gov.in].

3. **Registration**

3.1 To use the **Tender Wizard E-Tendering Portal**,vendorsneed to register on the portal by going on the link provided at EdCILtenderwebpage as http://www.tenderwizard.com/EDCIL. Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. In **Tender Wizard Portal** terminology, this person will be referred to as the Super User(SU)of that organization. For further details, please visit the website/portal, and click on the 'Supplier Organization' link under'Registration' (on the Home Page)and follow further instructions as given on the site. Pay Annual Registration Fee as applicable.

3.2 After successful submission of Registration details and Annual Registration Fee, please contact **Tender Wizard** Helpdesk (as given below), to get your registration accepted/activated.

3.3 **Important Note:**

3.3.1 To minimize the problems during the use of **Tender Wizard E-Tendering Portal** (including the Registration process), it is recommended that the user should use as per the instructions given under 'Tender Wizard E-Tendering Portal User-Guidance Centre' located on Home Page, including instructions for timely registration on Portal. The instructions relating to 'Essential Computer Security Settings for Use of Tender Wizard E-Tendering Portal and 'Important Functionality Checks' should be especially taken into cognizance.

3.3.2 Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of users, assigning roles to them, etc.

4. SEARCHING FOR TENDER DOCUMENTS

4.1 There are various search options built in the Tender Wizard E-Tendering Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID/ Tender Search Code (TSC), organization name, location, date, value, etc. There is also an option of advanced search for tenders, where in the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other key words etc. to search for a tender published on theTender Wizard E-Tendering Portal.

4.2 Once the bidders have selected the tenders they are interested in, they may download the required documents/ tender schedules. This would enable the Tender Wizard E-Tendering Portal to intimate the bidders through e-mail alert in case there is any corrigendum issued to the tender document.

4.3 The bidder should make a note of the unique Tender ID/ Tender Search Code (TSC) assigned to each tender, in case they want to obtain any clarification/help from the Help desk.

5. PREPARATION OF BIDS

5.1 Bidder should take into account any corrigendum/addendum published on the portal before submitting their bids.

5.2 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents-including the names and content of each of the documents that need to be submitted. Any deviations from these may lead to rejection of the bid.

5.3 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and generally, they can only be in PDF format. Bid documents may be scanned with 100dpi with black and white option.

6. SUBMISSION OF BIDS

6.1 Bidder should log into the site well in advance for bid submission and complete all formalities of registration (at least two days in advance of the closing date)so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be sole responsible for any delay in uploading of bid within the stipulated time.

6.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

6.3 Bidder has to pay the tender fee/EMD as applicable through demand draft as per tender condition in favour of "**EdCIL (India) Ltd"** payable at **Noida**

and enter details of the instruments. Original copies of demand draft for EMD/ Tender fees are required to be submitted.

6.4 A standard Financial Bid form has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the financial bid format is found to be modified by the bidder, the bid will be rejected.

6.5 The server time (which is displayed on the bidder's dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

6.6 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

6.7 Upon the successful and timely submission of bids, the portal will give a successful bid submission message & bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevantdetails.

7. ASSISTANCE TO BIDDERS

7.1 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority. For any other tender related queries bidders are requested to contact on below given numbers/email.

EdCIL / Tender Wizard E-Tendering Portal Helpdesk	
Telephone/ Mobile	Customer Support:080-49352000 (MultipleTelephone lines) EmergencyMobileNumbers:9686115318/ 9650520101/8800445981. (Pleasecontactincaseof emergencyduringnon-working hours.)
E-mailID	**To Tender Wizard** harishkumar.kb@etenderwizard.com ambasa@etenderwizard.com twhelpdesk759@gmail.com twhelpdesk963@gmail.com &cc to: eprocure@edcil.co.in

8. Offline Submissions: (AS PER TENDER REQUIREMENT)

8.1 The bidder is requested to submit the following documents in a Sealed Envelope to the above-mentionedaddress (given in NIT)before the start of Public Online Tender Opening Event.

a) **Original Demand Draft as EMD in the form ofDemand Draft.**

b) **Original copy of the power-of-attorney wherever applicable.**

Note: The Bidder should also upload the scanned copies of all the above-mentioned original documents as Bid-Annexure during Online Bid-Submission.

8.2 The envelope shall bear (the project name), the tender number along with the Name of Bidder firm with address and the words 'DO NOT OPEN BEFORE' (due date &time).

9. **Public Online Tender Opening Event (TOE)**

Tender Wizard E-Tendering Portal offers a unique facility for 'Public Online Tender Opening Event (TOE)'. Tender Opening Officers, as well as, authorized representatives of bidders can simultaneously attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. Alternatively, one/two duly authorized representative(s) of bidders (i.e. Supplier organization) are requested to carry a Laptop with Wireless Internet Connectivity, if they wish to come to Buyer Organization for the Public Online TOE

9.1 Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)', including digital counter-signing of each opened bid by the authorized TOE-officer(s). Simultaneous online presence of the participating bidders' representatives for TOE hasbeen implemented on Tender Wizard E-Tendering Portal.

9.2 Tender Wizard E-Tendering Portal has a unique facility of 'Online Comparison Chart' which is dynamically updated as each online bid is opened. The format of the chart is based on inputs provided by the Buyer for each Bid-Part of a tender. The information in the Comparison Chart is based on the data submitted by the Bidders. A detailed Technical and / or Financial Comparison Chart enhance Transparency.

9.3 Tender Wizard E-Tendering Portal has a unique facility of a detailed report titled 'Minutes of OnlineTender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/Downloading'.

10. **CRITICAL DO'S AND DON'TS FOR BIDDERS**

Specifically, for Supplier organizations, the following 'SEVEN **KEY INSTRUCTIONS for BIDDERS**' must be assiduously adhered to:

10.1 Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on **Tender Wizard E-Tendering Portal**.

10.2 Registeryourorganization on **Tender Wizard E-Tendering Portal** well in advance of the important deadlines for your first tender on Tender Wizard

E-Tendering Portalviz. 'Date and Time of Closure of Procurement of Tender Documents' and 'Last Date and Time of Receipt of Bids'. Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of- Marketing Authority (MA) [i.e. a department within the Supplier/ Bidder Organization responsible for responding to tenders], users for one or more such MAs, assigning roles to them, etc. It is mandatory to create at least one MA. This unique feature of creating an MA enhances security and accountability within the Supplier/ Bidder Organization.

10.3 Get your organization's concerned executives trained on Tender Wizard E-Tendering Portal well in advance of your first tender submission deadline on the Portal.

10.4 For responding to any particular tender, the tender (i.e. its Tender Search Code or Tender No)has to be assigned to an MA. Further, an '**Official Copy of Tender Documents'** should be procured/ downloaded before the expiry of Date and Time of Closure of Procurement of Tender Documents.

Note: Official copy of Tender Documents is distinct from downloading 'Free Copy of Tender Documents'. Official copy of Tender Documents is the equivalent of procuring physical copy of Tender Documents with official receipt in the paper-based manual tendering system.

10.5 Submit your bids well in advance of tender submission deadline on Tender Wizard E-Tendering Portal (There could be last minute problems due to internet timeout, breakdown, etc.)

10.6 Tender Wizard E-Tendering Portal will make your bid available for opening during the Online Public Tender Opening Event(TOE) 'ONLYIF' your 'Status pertaining Overall Bid-Submission' is '**Complete**'. For your record, you can generate and save a copy of 'Final Submission Receipt'. This receipt can be generated from 'Bid-Submission Overview Page' only if the 'Status pertaining overall Bid-Submission' is 'Complete'.

11. MINIMUM REQUIREMENTS AT BIDDER'S END

- Computer System having configuration with minimum Windows 7 or above, and Broadband connectivity
- Digital Certificate(s)

Note:

a) The Bid shall be typed in English and signed by the Bidderor a person duly authorized to bind the Bidder to the Contract. The person(s) signing the Bids shall initial all pages of the Bids.

b) All envelopes should be securely sealed and stamped.

c) It is mandatory for the Bidder to quote for all the items mentioned in the tender.

CHAPTER-V
INSTRUCTIONS TO BIDDERS

1. **Bid Timelines**: Bidder shall refer to NIT for the timelines related to Tender documents submission.

2. **Preparation of Bids**: The offer/ bid shall be submitted in **Two packet system** (i.e.) **Technical and Financial bid**. The technical bid shall consist of all technical details along with commercial terms and conditions. Financial bid shall indicate item wise rate for the items mentioned in the bid in the given Excel sheet.

3. **Earnest Money Deposit:**
EMD (Earnest Money Deposit) of Rs. **3,65,000/- (Rs. Three Lakhs Sixty-Five Thousand Only)**shall be submitted separately in the form of Demand Draft in favour of "EDCIL India Limited" payable at Noida from any of the Nationalized/ Scheduled BankinIndia(HDFC, ICICI, Axis, Kotak Mahindra, Indusind bank)with a validity of three months from the last date of submission of tender. The Bid sent without EMD shall be considered as NON-RESPONSIVE and liable to be rejected. No interest shall be allowed on the Earnest Money.
Note: Bidders registered with MSME are exempted for submission of EMD and other guidelines by the MSME Ministry, GOI. applicable as on the date of NIT. Bidders claiming the exemption for EMD,shall submit the valid registration certificate of MSME/ Udyog Aadhar.

4. **Refund of EMD and Submission of Performance Bank Guarantee:**

4.1 The EMD will be returned to unsuccessful Bidder only after the Tenders are finalized.

4.2 Earnest money will be forfeited if the bidder unilaterally withdraws the offer, or unilaterally amends, impairs or rescinds the offer within the period of its validity.

4.3 In Case of Successful Bidder, the EMD shall be refunded after submission of 3% Performance Bank Guarantee from a Nationalized/ Scheduled Bank operating in India.

5. **Performance Bank Guarantee**:

5.1 The successful bidder should be required to deposit Performance Bank Guarantee equivalent to **3% of contract value/Work Order** to EdCIL within 15 days from the date of receipt of issue of LOA for carrying out the work as per agreed conditions.The Performance Bank Guarantee should be issued by a **NationalizedBank/ Scheduled Bank(**HDFC, ICICI, Axis, Kotak Mahindra, Indusind bank**)**in favour of "**EdCIL (India) Ltd. Noida**". This Performance Bank Guarantees hould be retained throughout the currency of the contract and should be extended by the bidder from time to time, as required by EDCIL. This guarantee shall be valid for a period of **90 days** beyond the Comprehensive Warranty/mentainance of Three (03) Year from the date handing over. The bank guarantee format is attached as Annexure-X.PBG shall be released after completion of the contract in all respect.

6. PRE-QUALIFICATION CRITERIA:

(Documents must be provided in support of the following PQ Criteria otherwise bids will be summarily rejected).EdCIL reserves its right to call for clarification, if any on the document/s submitted and no claims/correspondance on whatsoever ground shall be entertained.

S.No.	PQ CRITERIA	Supporting Documents required
I.	The bidder must be a Company (Ltd. Or Pvt. Ltd.)/Proprietary /Partnership Firms/LLP registered with Statutory Authorities in India for the last three years from the date of NIT.	Copy of certificate of incorporation/ Partnership deed/Memorandum/Article of Association/ Registration certificate with Registrar of Companies and any other legally valid supporting document
II.	Bid Bidders having minimum 3 years of experience in execution of such supplies and installation should apply against this invitation for tender. The bidder, offering to the supply of items under the scope of bid, which the bidder does not manufacture or otherwise produce, the bidder has to provide Manufacturer's Authorization Certificate preferably as per format at **Annexure XII.***Bids submitted without authorization certificate will be summarily rejected. Authorization certificate from OEM is essential for supply under scope of work for* following major products must be provided by the bidder. • Camcorder & PTZ Camera Systems • Teleprompter System • Pen Displays • Microphones • Audio Mixers • Video Production Switcher • Commercial Displays • Talkback System	In case of OEM participating as a bidder, a power of attorney issued by the company's Director/ Board of Directors in favour of the authorized signatory for this tender to be submitted along with the bid. Latest Authorization letter specific to the current NIT/Tender Document from OEM to the Bidder authorizing to do business on OEM's behalf for supplies and services mentioned in this tender as associate or authorized business partner for OEM's Manufactured items

	• Digital Recorders/Players • Multichannel Recorder • 3G-SDI Router & Control Panel • Multi-viewers • NAS Storage Bids without Authorization Letter from OEM or from OEM Appointed Distributor shall be summarily rejected.	
III.	The average annual turnover of the bidder firm should be minimum **Rs. 11.00 Crores** (Rs. Eleven crore only) during the last three financial years (2020-21,2021-22, 2022-23). In this regard, the bidder should submit copies of audited Balance sheets including profit and loss accounts for the last three financial years as above. The agency should have positive profit for all 3 years. A registered CA's certificate indicating turnover statement for the relevant period is also to be accompanied.	Certificate from the Chartered Accountant and/or copy of audited balance sheets/P&L Accounts for the last three years(2020-21,2021-22, 2022-23).
IV.	Bidders must have successfully executed (during the last three completed financial year (2021-22,2022-23,2023-24) at least one or more work/s of Setting Up of Studio and/or similar Audio Video labs One single order of Setting Up of Studio and/or similar Audio Video works having Value of **Rs 2.95 Crores (Rs. Two Crores Ninety-Five Lakhs)** (OR) Two orders of Setting Up of Studio and/or similar Audio Video works having Value of **Rs. 2.20 Crores (Rs Two Crores Twenty Lakhs)** (OR) Three orders of Setting Up of Studio and/or similar Audio Video works having Value of **Rs. 1.50 Crores (Rs. One Crores Fifty Lakhs)**	Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.
V	At Least One Order of value of **Rs. 1.50 Crore** should be **for** Supply,	Copies of work orders and completion/ Installation

	Installation, Testing and Commissioning of Studio work **or similar (Audio/Video labs of modern design & equipment)** Central Govt./ State Govt./ PSU's/ Autonomous bodies/ Govt. Premier Institutions such as IIT's/ NIT's/ IIIT's/IGNOU Central Universities/ Govt. Institutions/ Government schools etc. **during last three years.**	certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.

Note: The project cost for abovesaid criteria shall be considered as on last date of receipt of the bid by adding 7% increment for each completed year.

7. For deciding eligibility of tender, it is mandatory for Bidders to submit EMD,Financial Turnover (Balance Sheets with Profit & Loss Account of preceding Three years as per Pre Qualification criteria). Similar nature of work experience certificates of requisite magnitude (as per Pre Qualification Criteria) and Pre-Contract Integrity Pact, failing which the tender shall be summarily rejected.

Notwithstanding anything stated above, the EdCIL/ EdCIL reserves the right to assess bidder's capability and capacity to perform the contract, should circumstances warrant such an assessment in the overall interest of the work by EdCIL.

8. All other documents like PAN Card, PF Registration, Goods and Services Tax Registration Certificate, Timeline schedule, List of plant &machinery, list of permanent technical persons, Bank details etc. as per pre-qualifying are also required to be submitted along with tender. The missing documents if any must be submitted within 10 days from the date it is sought by EdCIL. The missing documents if called for after the scrutiny of technical bid should not be of a date later than the date of submission of bid.

9. Financial Bid shall be opened only the Technical Qualified Bidder/s.No separate intimation for the opening of the Financial Bid shall be given to Technical Qualified Bidder/s.

10. The Tender notice and Notice Inviting Tender shall form the part of contract document. The successful Bidders shall be required to execute **an agreement with EdCIL in prescribed Proforma within a period of 15 days after** date of issue of LOA for carrying out the work as per the agreed conditions. Failure to do so shall constitute a breach, in which case,EdCIL would be at liberty to not only terminate the contract but also forfeit EMD and Performance Guarantee if any. The cost of stamp paper for the agreement will be borne by Bidder.

11. The contract agreement shall consist of: The Press Notification, Tender Notice, Notice Inviting Tender, Instructions to Bidders, all the documents of tender & contract for works including special conditions of contract, technical specifications and drawings, if any, forming the part of tender documents as issued/ downloaded by the Bidder from the websites at the time of invitation of

tender and acceptance thereof together with any correspondence with them leading there to and also the correspondence related with verification of credentials.

12. Compliance with Laws:

The contract operations and proceeding in connection with the works at all times be conducted during the continuance of contract in accordance with the laws, ordinances, rules and regulations for the time being in force and the contractors shall further observe and comply with the bylaws & regulations of the Government of India, State Government, local Municipalities and other authorities having jurisdiction over area involved in connection with the works of site & over operations such as those as carried out by the agency and shall give all notices required by such by-laws & regulations.

13. The Bidder shall submit drawings, analysis of rates or any other relevant documents pertaining to project if called upon to do so.

14. Works will be carried out according to the Conditions of Contract, Specifications etc.

15. Completion Period:

15.1 The work should be completed within 60 days of receipt of LOA (Letter of Acceptance).

15.2 Bidder is required to submit a Time schedule for major mile stones for various activities indicating the time required for the same during the submission of Performance Bank Guarantee.

16. <u>Milestones/Schedule</u>:

In the event of failure of supply of the goods within the stipulated delivery schedule/Milestones, the EdCIL has all the right to foreclose/terminate the contract by reserving right to encash the Performance Bank Guarantee.

The milestone for the Delivery and installation is as per following table.

<u>Schedule of Inspections and Delivery</u>

Activity	Days
1. Submission of the Prototypes/drawing/models/samples (wherever applicable)	D+ 7
2. Modification/Revision in the for S.No: 1 above if any	D+ 14
3. Preparation of sample for inspection/acceptance test before production.	D+20
4. Completion of Production and Pre-delivery Inspection (PDI).	D+ 25
5. Supply/Delivery completion	D + 45
6. Installation, Commissioning & Completion of setup Studio including all civil and Electrical	D + 60

works as per BOQ and specifications.	
➢ D- Denotes the date of issue of Purchase Order to the successful Bidder. ➢ If the PDI is delayed due to any reason beyond the control of bidder, the revised timeline for Supply/Delivery completion may be considered in sole discretion of EdCIL's Client/EdCIL.	

Note:

1. ***The agency has to visit the site and update himself to site requirements & prepare layout diagram wherever required as per the requirement of the EdCIL/EdCIL's client.***
2. ***The successful bidder has to depute their full-time supervisor during execution till handing over for successful completion of the work.***

17. Delivery Documents:
Till the EdCIL takes a final Handover, the agency shall be responsible for Supply, transportation, Installation and commissioning of the Goods/ Electrical/ Electronic Goods/Equipment. The agency should mail the following documents to the EdCIL:

17.1 Copies of the Supplier invoice showing contract number, goods 'description, quantity unit rate, total amount;

17.2 Acknowledgment of receipt of goods from the EdCIL(s)/Client by the transporter;

17.3 Manufacturer's/ Supplier's warranty certificate, wherever applicable;

The above documents should be received by the EdCILbefore arrival of the goods(except where the Goods have been delivered directly to the EdCILwith all documents) and, if not received, the agency will be responsible for any consequent expenses.

18. Delayed Delivery: If the Deliveryof the Furniture items is not made within the due date for any reason under the control of the successful bidder, the EdCIL reserves the right to *impose* ***Liquidated damages (LD) @ 0.5% plus GST per week effective from the 61th day from the date of issuance of LOA*** and the maximum LD shall be 10% of the contract value/ rate. The LD shall be applied only on the portion of items not delivered within the stipulated time period for reasons under the control of the supplier.

Once the maximum LD is reached, EdCIL has the right to terminate the contract without any liability to cancellation charges and encash the submitted performance guarantee/s submitted by successful bidder.

19. Inspection and Tests:
EdCIL reserves the right to inspect(Pre-Delivery Inspection) the goods and any other equipment's before shipment at supplier's plant/ warehouse to check

whether the goods/ equipment's are in conformity with the technical specifications as mentioned in tender BOQ.

The acceptance test (if required) will be conducted by the EdCIL, their consultant or other such person nominated by the EdCIL at its option at suppliers location in the presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There should not be any additional charges for carrying out acceptance test. The supplier should maintain Quality of the goods as per the BOQ and specifications. No defect, malfunction, partial or complete failure of any part of the item is expected to occur. The Supplier should maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the EdCIL, the successful completion of the test specified.

In the event of the goods items failing to pass the acceptance test, a period not exceeding one week will be given to rectify the defects and to clear the acceptance test, failing which the EdCIL reserve the right to get the goods/item replaced by the Supplier at no extra cost to the EdCIL.

Successful conduct and conclusion of the acceptance test for the installed goods and items should also be the responsibility and at the cost of the Supplier.

20. Rates:

20.1 The rate should be quoted per unit (with breakup).

20.2 The rate must include all items as per specifications and charges related to transportation, delivery upto the project site and taxes. The offer/bid should be inclusive of taxes and duties, which will be paid as applicable.The inter se merit position of the bids however shall be decided based on the composite rate of the goods including taxes, transportation, and Warranty with all other incidental expenses indicated.

20.3 The rates must be quoted in the Performa given in Financial Bid failing which the Bid would be treated as unresponsive. Any discount or any other offers affecting the package rate must be mentioned in Financial Bid only. Discount or any other offers affecting the Package rate mentioned at any other place of the bid other that Financial Bid will not be considered.

20.4 The quoted rate should include cost for ***Three-year (03)*** **Comprehensive warranty** from the date of successful Installation & handing over.

21. Notices: For the purpose of all communication, the following address to be used :

EdCIL:

Chief General Manager (EIS & EPS),
EdCIL (India) Limited,
18 A, Sector-16A,
Noida-201 301
Tel: 91-120-2512001 to 2512006

Supplier:
(To be filled in by the supplier)

22. Resolution of Disputes: The dispute resolution mechanism to be applied pursuant should be as follows:

22.1 In case of Dispute or difference arising between the EdCIL and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference should be settled in accordance with the Indian Arbitration &Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof should apply to the arbitration proceedings.

22.2 The dispute should be referred to the Competent Authority, EdCIL and if he/she is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed should be final, conclusive and binding on all parties to this order.

22.3 The venue of the arbitration should be the place from where the order is issued.

23. Right to Use Defective Goods

23.1 If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the EdCIL should have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the EdCIL's operation.

23.2 Replacement of Goods broken, damaged or short: In the event of any material or part thereof found broken or damaged or received short during transit or during installation or Commissioning or testing at site, before commissioning in service the suppliers should replace the same free of cost. However, EdCIL will recover amount equivalent to the cost of such damaged / broken / short supplied materials and will repay when actual replacement is given.

23.3 Substitution and Wrong Supplies: Unauthorized substitution or materials delivered in error of wrong description or quality or supplied in excess

quantity or rejected goods should be returned to the supplier at their own cost and risk.

24. Supplier Integrity

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

25. Training and demonstration

1. The supplier is required to undertake the demonstration of the goods/items within7 days of the arrival of materials at site.

2. Supplier shall provide the training to the IGNOU Staff after completion of the said work.The supplier shall ensure deployment of their staff for training for atleast for two weeks and shall obtain IGNOU certification for the same.for recording sessions and make sure that IGNOU staff become capable to shoot and make recording without any external help.

26. Insurance

26.1 The Supplier should make all arrangements towards safe and complete delivery at site. Such responsibility on part of the supplier will include taking necessary transit insurance and erection policy, freight, state level permits etc. as applicable on the items of this tender.

26.2 It is the total responsibility of supplier to complete all formalities to transit of goods from the place of dispatch to the site .

26.3 The transportation of goods through unregistered common carrier is illegal. The bidder should ensure to comply the carriage by latest Road Act and any other relevant.

26.4 The supplier will keep EdCIL informed about various stages of deliveries & installation.

27. Incidental Services (wherever required): The incidental services also include:

27.1 Furnishing of 01 set of detailed operations & maintenance manual.

27.2 Arranging the shifting/moving of the item to their location of final installation within Site at the cost of Supplier through their Indian representatives.

28. Warranty and DLP as applicable:

28.1 Warranty& Defect Liability Period should be as follows:
Three-year Comprehensive warranty and Defect Liability period shall be from the date of successful Installation & handing over of Site,

28.2 **The model of equipment/items offered shall be available with OEM/in the market for the next 5 years after completion of the work to support maintenance. However in case the said product is not available due to the closure of the OEM, then the bidder shall provide an equivalent alternative product for the smooth functioning of the system.**

28.3 The Supplier should, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier should at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as shall be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests.

28.4 The warranty should be comprehensive on site with responsibility of the agency to ensure attending the warranty queries/issues received from EdCIL's Client/EdCIL. Supplier should give written information (about the Engineers/ technical representative name and cell numbers) before handing over of the complete work to EdCIL and to the end client's nominated representative/s to attend the issues related to the warranty of the goods supplied under the contract.

28.5 The EdCIL/EdCIL's Client should promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier should immediately within 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier should take over the replaced parts/goods at the time of their replacement. No claim whatsoever should lie on the EdCIL for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the EdCIL should proceed to take such remedial action as should be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the EdCIL should have against the supplier under the contract.

29. Governing Language

The contract should be written in English language. English language version of the Contract should govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, should be written in the same language.

30. Applicable Law

The Contract should be interpreted in accordance with the laws of the Union of India and all disputes should be subject to place of jurisdiction.

31. Notices

31.1 Any notice given by one party to the other pursuant to this contract/order should be sent to the other party in writing or e mail and confirmed in writing to the other party's address.

31.2 A notice should be effective when delivered or on the notice's effective date, whichever is later.

32. Taxes

Suppliers should be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the contracted Goods to the EdCIL. EdCIL shall not make any payment towards any taxes or any other incidental charges payable by the supplier for supply of material up to the place of delivery.

Under Income Tax Act, 1961, a deduction for income tax along with surcharge as applicable will be made from sums paid on account and final payments for carrying out the work under this contract

33. Payment Terms:

For Studio Items

i) 80% on delivery & installation of Studio Items in good conditions and to the entire satisfaction of the EdCIL.
ii) 20% payment on Commissioning & Handing over.

For Civil,Electrical,& HVAC Works

i) Payment shall be made on actual measurement for Civil,Electrical and mechanical works certified by authorized representative, EdCIL.
ii) Contactor shall submit the measurement book along with each running account bill.

Note:

a) The ownership of supply shall be with IGNOU, however EdCIL will process the Invoice and payment shall be released to the supplier by EDCIL after receipt of advance amount from IGNOU from time to time.
b) Valid GST invoice should be prepared as Bill to EDCIL India Limited quoting EDCIL's GST NO and Ship to IGNOU.
c) The contractor will submit running account bills of value not less than value of Rs. 75.00 lakhs for release of payment against the items supplied/executed. (excluding secured advance, if any).

34. Plant &Machinery:

34.1 It will be the responsibility of the Contractor/Supplier to arrange all plant &machinery, etc, required by him for execution of works.

34.2 The contractor will also arrange for getting permission (for their use) if required from local or other concerned authorities for use as well as for their transportation to site.

34.3 All expenditure incurred in this connection will be borne by the Contractor/Supplier.

35. User list: Brochure/ documents in printed form duly signed and stamped detailing technical specifications and performance, list of industrial and educational establishments where the items have been supplied must be provided.

36. Manuals/Drawings

36.1 At the time of handing over of completed works,goods and items are taken over by the EdCIL/ client, the Supplier should provide the operation and maintenance manuals/drawings if any. These should be in such details as will enable the EdCIL to operate, maintain, adjust and repair all parts of the delivered goodsas stated in the specifications.

36.2 The Manuals should be in English language in such form and numbers as stated in the contract.

36.3 Unless and otherwise agreed, the the contract work should not be considered to be completed for the purpose of taking over until such manuals and drawing have been supplied to the EdCIL/Client.

37. Application Specialist: The Bidder should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office.

38. Site Preparation:

38.1 The supplier should visit the site and see where the items is to be installed and should offer his advice and render assistance to the EdCILin the preparation of the site and other pre-installation requirements.

38.2 The supplier should inform to the EdCIL/Client about the site preparation, if any, needed for the installation of items, immediately after the receipt of the purchase order.

38.3 Bidder is advised to make own arrangement for electricity, water, plant &Machinery for the purpose of installation &commissioning.

38.4 The contractor will have to make his own arrangements for obtaining water to be used for execution of the works or EdCIL may supply water if available, for execution of work respectively of Conditions of Contract.

38.5 If for reasons of urgency, the work has to be executed at night, contractor shall make his own arrangement for illuminating the site. Nothing extra will be paid for doing works at night.

38.6 The contractor must take all precautions to avoid accidents by exhibiting day and night necessary caution boards, speed limit boards, red flags and red lights and providing barriers. He shall be responsible for all damage and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during execution of work.

39. Defective supply of items

39.1 If any of the goods and items supplied by the Bidder is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the items or its part. The rates of such items should be refunded by the Bidder with 18% interest if such payments for such goods and items have already been made.

39.2 All damaged or unapproved items/goods should be returned at suppliers cost and risk and the incidental expenses incurred thereon should be recovered from the supplier. Defective part in items, if found before installation and/or during warranty period, should be replaced within 07 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, EdCIL INDIA LTD shall consider "Banning" the supplier and PBG shall be forfeited

40. Termination for Default

The EdCIL should, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

40.1 If the Supplier fails to deliver any or all of the items/Goods within the period(s) specified in the order, or within any extension thereof granted by the EdCIL; or

40.2 If the Supplier fails to perform any other obligation(s) under the Contract.

40.3 If the Supplier, in the judgment of the EdCIL has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

40.4 For the purpose of this Clause:

- "**Corrupt practice**" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

- "**Fraudulent practice**" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid rates at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;'"

- In the event the EdCIL terminates the Contract in whole or in part, the EdCIL should procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier should be liable to the EdCIL for any excess costs for such similar Goods or Services. However, the Supplier should continue the performance of the Contract to the extent not terminated.

41. **Disputes and Jurisdiction**: Any legal disputes arising out of any breach of contract pertaining to this tender should be settled in the court of competent jurisdiction located within New Delhi.

42. **Compliance**: The bidder to comply with the technical specifications, BOQ items as provided.In case of works/items not mentioned in BOQ the same has to be executed as per BIS standards, CPWD guidelines.

43. **Acceptance/ Rejection of bids:**

EdCIL reserves the right to reject any or all offers without assigning any reason. EdCIL based on the requirement without assigning any reason to the Bidder/s may split work/Scope/Bid offer in stages or in parts according to the need of work or for ease of execution of work. EdCIL reserves right to take decision according to requirement and no claim on whatsoever ground shall be entertained from the bidder. Final decision of EdCIL shall be binding on the bidder.

44. **Award of Contract:**

EdCIL reserves the right to accept or reject any proposal and to annul the bidding process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the Bidders. In case of annulment, all proposals submitted and specifically, proposal securities shall be promptly returned to the Bidder.

45. **Rates in Figures and Words:**

45.1 Rates Quoted by the Bidder in tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct.

45.2 If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the bidder in figures and in words tally but the amount is not worked out correctly, the rates quoted by the Bidder will unless otherwise proved be taken as correct and not the amount.

45.3 In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s) and amount blank, it will be presumed that the Bidder has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.

45.4 In the case of any tender where unit rate of any item/items appear unrealistic, such tender / item(s) will be considered as unbalanced and in case the tender is unable to provide satisfactory explanation such a tender/ item(s) is liable to be disqualified and rejected.

46. Minor Civil, Electrical & mechanical works:

46.1 The rates of the extra items / substituted items shall be governed as follows:

46.1.1 Wherever required, on commencement/execution of items of work (extra items / substituted items), as mentioned under, the Contractor will be paid 50% as per DSR 2023/Market Rates.

46.1.2 On approval of rates of the items (extra items / substituted items) by EdCIL, the Contractor shall be paid full 100% rates after verifying the RA Bill

47. Contractor to Keep Site Clean:

The splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract.

48. Work to be Executed in Accordance with Specification, Drawings, Orders etc.

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications.

49. Security & Safety Measures

The contractor shall take all precautions to avoid all accidents by exhibiting caution boards day and night, red flags, red lights and providing barriers etc. The contractor shall take care of all safety precautions pertaining to Supply, Installation and commissioning of goods/items, Civil works and their manpower.

50. Material

The contractor shall be required to get necessary tests carried out on materials/work from an approved laboratory as per the directions of the Chief General Manager or his authorized representative, EdCIL wherever required.

51. Force Majeure:

The Supplier should not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

- For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events shall include, but are not limited to, acts of the EdCIL either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- If a Force Majeure situation arises, the Supplier should promptly notify the EdCILin writing of such conditions and the cause thereof. Unless otherwise directed by the EdCIL in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and should seek all reasonable alternative means for performance not prevented by the Force Majeure event.

52. Authorization Certification :Supplier should submit Authorization Certificates for the items mentioned in the PQ Sl No.3 in the technical bid.

53. Acknowledgement: It is hereby acknowledged that bidders have gone through all the conditions mentioned above and bidders agree to abide by them.

CHAPTER VI

ANNEXURE-I

Technical Specifications and Compliance Sheet

Note:

1. **The model of equipment/items offered shall be available with OEM/in the market for the next 5 years after completion of the work to support maintenance. However in case the said product is not available due to the closure of the OEM, then the bidder shall provide an equivalent alternative product for the smooth functioning of the system.**
2. **In case of any conflict in the specifications and compatibility issues with the setup, Client/EdCIL's decision shall be final.**

TECHNICAL SPECIFICATIONS - MULTI-CAM STUDIO

S.No.	FEATURE	SPECIFICATIONS	QTY/ UOM	COMPLIANCE (YES/NO)
BROADCAST QUALITY 4K CAMCORDER			2	
1	Type	Professional Broadcast Quality 4K Tripod Mountable Camcorder System		
2	Sensor Size	Min. 2.54cm (1in) CMOS or better		
3	Total Pixels	Approx.13.4MP or better		
4	Effective Pixels per Sensor	Approx. 8.29 MP (3840 x 2160) or better		
5	Subject Illumination Range	Approx. 0.1 lx to 100,000 lx or better		
6	Colour Sampling	YCC 4:2:0 8bit		
7	Zoom Ratio	Min. 15x Optical or better		
8	Focal Length (35mm Equivalent)	Approx. 25 - 382 mm Standard IS/IS Off or better		
9	Max. Aperture	f/2.8 - 4.5 or better		
10	Aperture Blades	9 blades or better		
11	Filter Diameter	58mm or better		
12	Image Stabilization System	Optical system (lens shift) + electronic stabilization Dynamic, Standard, Powered or better		
13	ND Filter	Min. 3 densities: ND 1/4, ND 1/16, and ND 1/64, turret switched, motor-driven or better		
14	Key Feature	Balanced Optical Stabilisation or 5-Axis Image Image Stabilisation or better		
15	Focus System	4D AF/ Dual Pixel AF with detection range of 80% vertical/80% horizontal of field of view Contrast AF or better		
16	AF Modes	Continuous, AF-Boosted MF or better Face Detection and Tracking, Face Only AF or better		
17	Manual Focus Assist	Dual Pixel Focus Guide, Peaking, Magnification		
18	Iris Control	Touchscreen, Auto		
19	Exposure Metering	Center-weighted average metering AUTO, P, Av, Tv, Portrait, Sports, Low Light and IR modes Segment evaluative metering Night Scene, Snow, Beach, Sunset, Spotlight modes Or better		
20	Auto ISO / Auto Gain Control Setting	Auto / Manual		

21	Auto Gain Control Limit	0 - 38dB (1dB increments) Wide DR Mode: 9 -38dB (1dB increments) Or better		
22	Shutter Speed Control Modes	Auto, P, Tv, Manual		
23	White Balance	Auto		
24	White Balance Preset	Daylight (Approx. 5,600K), Tungsten (Approx. 3,200K)		
25	White Balance Manual Setting	Colour Temperature range: 2,000–15,000K		
26	Shooting Modes - Program AE	Auto, Manual, Program AE), shutter-priority AE, Aperture-priority AE, Manual Exposure), Portrait, Sports, Night Scene, Snow, Beach, Sunset, Low Light, Spotlight, Fireworks (IR mode) or better		
27	Recording	Support for MXF-based XF-AVC & MP4 or better recording formats with support; 4K UHD (3840 x 2160) 25P YCC 420 or better Full HD (1920 x 1080) 50P YCC420 or better Should support OSD Recording.		
28	LCD	Capacitive LCD touch panel with Min. size of 3.5-inch diagonal and with approx. 2,760,000 dots (1280 x RGB x 720) or better		
29	Viewfinder	Min. 0.35 inch or bigger Tiltable Electronic View Finder with Min. 1.70 million dots or better		
30	Motion Recording	Slow and Fast (S&F) Motion Recording with upto 0.5x Slow Motion and upto 1100x fast motion or better		
31	Focus Assist	Peaking / Magnify or better		
32	Markers	Grid (white/grey), Level (white/grey), 4:3 (white/grey) or better		
33	Audio Input	Min. 2 x XLR 3-pin jack with 48V phantom power, Line and Mic options, 3.5mm microphone input jack (Supply Voltage 2.4V DC) Built-in Mic or better		
34	Headphone Output	Min. 1 x 3.5mm stereo mini jack		
35	HDMI Output	Min 1 x HDMI interface. Should support Timecode superimpose onto HDMI output or better		
36	USB	Type-C Hi-Speed USB (USB 2.0) equivalent. Point-to-point class and UVC supported.		
37	SDI Output	Min. 1 x 3G-SDI		
38	Filter	RGB Primary Colour Filter		
39	DC Input	USB-C or DC Adapter		
40	Remote Control Terminal	Min. 1 x 2.5mm mini jack		
41	Memory Card Slots	Min. 2 SD card slots (double slots for simultaneous or relay recording) with support for min. U3 class memory cards or better		
42	Recording File System	FAT32/exFAT or better		
43	Internal Recording Format (PAL) XF-AVC	3840 x 2160 / 25.00P (160 Mbps) or better 1920 x 1080 / 50.00P, 50.00i, 25.00P (45 Mbps) or better		
44	Internal Recording Format (PAL) MP4	3840 x 2160 / 25.00P(150 Mbps) or better 1920 x 1080 / 50.00P, 25.00P (35, 17 Mbps) or better		
45	MP4:	3840 x 2160 / 25.00P(150 Mbps) or better 1920 x 1080 / 50.00P, 25.00P (35, 17 Mbps) or better		
46	External Recording Output	SDI/HDMI output (When Shooting): UHD recording mode: 1920 x 1080 / 25.00P, 50.00P (for Slow&Fast), 50.00i (PsF mode); 1280 x 720 / 50.00P YCC 4:2:2 8-bit or better Full HD recording mode: 1920 x 1080 50.00P/25.00P/50i ; 1280 x720 50.00P YCC4:2:2 10-bit or better		

47	Slow/Fast Motion (PAL)	3840 x 2160 / 25.00P: x2, x4, x10, x20, x60, x120, x600, x1200 or better 1920 x 1080 / 50.00P: x2, x4, x10, x20, x60, x120, x600, x1200 or better 1920 x 1080 / 25.00P: x0.5 or better		
48	Still Photos	JPEG up to 3840x2160		
49	Audio Recording Format	MPEG-2 AAC-LC (16-bit 2ch) / LPCM (16-bit 4ch) or better		
50	Audio Control	Manual/Auto		
51	Reference Tone	1KHz, -12dB / -18dB / -20dB / Off		
52	Microphone Attenuation	On/Off (20dB)		
53	Microphone Level Meter	Required		
54	OEM Supplied Accessories	Lens hood with barrier, Mic holder unit, Handle Unit, Battery Pack, USB/DC Power Adapter, AC Cable or better		
55	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sony/ Panasonic/ Canon**		

TRIPODS WITH DOLLY FOR CAMERA AND TELEPROMPTER LOAD			1	
1	Type	Tripod system for PTZ camera and teleprompter hardware mounting. Offered tripod should have suffecient load bearing capacity for integrated system.		
2	Payload	16kg or better		
3	Counterbalance	Fix		
4	Drag mode	2 STEP		
5	Tilt angle	+85° / -65° or better		
6	Pan angle	360°		
7	Height	91.5 to 187cm		
8	Ball diameter	100mm		
9	Section	2 STAGE		
10	Camera Adapter	Camera Plate		
11	Dolly	Versatile Length Dolly		
12	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Manfrotto/ Libec/ Hako/ Kratos		

TRIPOD FOR CAMERA LOAD			1	
1	Section	Two-Stage Aluminum Tripod System		
2	Payload	6kg or better		
3	Height	76 cm to 155cm		
4	Section	2 STAGE		
5	Dolly	Versatile Length Dolly		
6	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Manfrotto/ Libec/ Hako/ Kratos**		

TELEPROMPTER SYSTEM			1	
1	Type	Tripod Mountable Teleprompter System with 17" monitor, wireless hand controller and other required hardware and Scripting software system.		
	Software			

2	Feature Support	Import of scripts from standard word processors and text files In-built text editor . Scripts should be formatted using standard functionality including different fonts, font sizes, color of fonts & background. Should support all languages and scripts (Unicode and non Unicode). Preset or control of text scroll speed by Anchor using the hand controller. Should supports MS PowerPoint Should allow the run order to be managed. Should have the facility to block content at the TP level.		
	Hardware			
3	Display Device Size	Minimum 17" LCD/LED Monitor		
4	Talent Monitor	Compatible HD Talent Monitor with mounting kit		
5	Mounting Hardware	Tripod mountable hardware slide support for camera with 2 risers		
6	Mirror	Height adjustable mirror housing with 1/2 stop mirror glass		
7	Controller	Wireless Hand Control		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Autoscript/ Cue Script/ Cronus/ Samvad**		

DESKTOP COMPUTER SYSTEM FOR TELEPROMPTER SYSTEM			1	
1	Type	Desktop Computer System		
2	Processor	Intel i3, 12 generation or better		
3	RAM	Min 8 GB or better		
4	Media Drive	Min 500 GB M.2 2230, PCIe NVMe, SSD or better		
5	Ports	Min 2 x USB3.0 and 1 x USB2.0		
6	Peropherals	Wired Keyboard and Mouse Min 18.5" or bigger HDMI FHD display		
7	Softwares	OS - Windows 10 Pro or better (Perpetual License) and Microsoft Office 365 license (Subscription License for 3 Years)		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**HP/ Dell/ Lenovo**		

PEN TABLET			1	
1	Type	Pen Display for Teachers		
2	Display Size / Resolution	54.6 cm (21.5 in) / Full HD 1920 x 1080 or better		
3	Active Area	476 x 268 mm (18.7 x 10.5 in) or better		
4	Tablet Size	570 x 359 x 40 mm (22.4 x 14.1 x 1.6 in) or better		
5	Weight	6 Kg or lesser		
6	Colour Performance	72% NTSC (CIE1931) typical / 96% sRGB (CIE 1931) typical or better		
7	Viewing Angle	178/178 typical		
8	Contrast Ratio	1000:1 typical		
9	Response Rate	22 ms or better		
10	Aspect Ratio / Brightness	16:9 / 210 cd/m2 typical		
11	Color Temperature / Custom Color	9300K, 6500K, 5000K, Custom RGB or better		
12	Connectivity	HDMI, USB 2.0, AC adapter		
13	Pen	Battery-free writing Pen with 2 customizable side switches and 8,192 pressure levels in both pen tip and eraser		
14	Pen Tilt Recognition /	±60 levels / 60 degrees		

	Range			
15	Pen Tilt Recognition / Range	17 customizable, application-specific Keys, Touch Ring, Rocker Ring/Home Button, Precision Mode, Display Toggle, Radial Menu and dedicated pan, scroll, zoom, brush size		
16	Stand	Adjustable Stand (included) for 16°–82° angle or better		
17	Ergonomics	Right or left-handed use; Adjustable Stand included Pen with comfortable, ergonomic grip		
18	Compatibility / System Requirements	Windows 7 or later (latest service pack/build), Mac OS X 10.12 or later (latest update); Internet access for driver download		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Huion/ Wacom/ XP-Pen**		

DESKTOP COMPUTER SYSTEM PEN TABLET			1	
1	Type	Desktop Computer System		
2	Processor	Intel i7, 12 generation or better		
3	RAM	Min 16 GB DDR4 or better		
4	Media Drive	Min 500 GB M.2 2230, PCIe NVMe, SSD or better		
5	Ports	Min 2 x USB3.0 and 1 x USB2.0		
6	Peropherals	Wireless Keyboard and Mouse		
7	Softwares	OS - Windows 11 Pro English or better (Perpetual License) and Microsoft Office 365 license (Subscription License for 3 Years)		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**HP/ Dell/ Lenovo**		

TOUCH SCREEN MONITOR			1	
1	Type	IR Touch Monitor		
2	Display Size	Min 22" or bigger		
3	Viewable Area	Min 21" or bigger		
4	Panel Type:	VA technology or better		
5	Resolution	Full HD 1920 x 1080 or better		
6	Static Contrast Ratio	3,000:1 (typ) or better		
7	Dynamic Contrast Ratio	20M:1 or better		
8	Light Source	LED or better		
9	Brightness	250 cd/m² (typ) or better		
10	Colors	16.5M or better		
11	Color Space Support	8 bit true or better		
12	Aspect Ratio	16:9		
13	Response Time (Typical GTG)	6.5ms or better		
14	Viewing Angles	172 Deg horizontal, 172 Deg vertical		
15	Backlight Life (Hours)	30000 Hrs (Min)		
16	Curvature	Flat		
17	Refresh Rate (Hz)	Min. 75 Hz or better		
18	Flicker-Free	Required		
19	Color Gamut	NTSC: 72% size (Typ)		
20	Touch Screen	IR, 10-point multi-touch		
21	Surface Treatment	Glossy, Hard Coating (7H)		
22	Cover Glass Thickness	2mm		
	INTERFACES			
23	VGA	Min. 1 or more		
24	USB 2.0 Type A	Min 2 or more		

25	USB 2.0 Type B	Min 1 or more		
26	3.5mm Audio In	Min 1 or more		
27	3.5mm Audio Out	Min 1 or more		
28	HDMI	Min. 1 or more		
29	DVI-D	Min 1 or more		
30	Cover Glass Thickness	1.5mm or better		
31	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**HP/ Dell/ Viewsonic**		

WIRELESS LAPEL/LAVELIER MICROPHONE			4	
1	Transmitter Type	Professional Wireless Lavelier Miniature Battery Operated Transmitter with Microphone, Should support Pilot Tone, quick setup via infrared link of all frequency and setup data from receiver and Low battery data transmission to receiver		
2	Switching bandwidth	≤30.5 MHz or better		
3	RF output power	10 or 50 mW		
4	Modulation	Wideband FM		
5	Audio input	3-pin mini-XLR socket (max. 2.5 Vrms)		
6	Audio bandwidth	35 – 20000 Hz (± 3 dB) or better		
7	T.H.D.	<0.7 % or better		
8	SNR (A-weighted)	> 120 dB(A) or better		
9	Receiver Type	Wireless Lavellier Microphone Receiver with 30.5 MHz tuning range, Half 19" all metal case diversity receiver, Should support Automatic setup function designed for less experienced operators, Up to 16 pre-programmed frequencies per group, Pilot Tone to prevent unexpected start-up noise, Infrared link of all frequency and setup data to the transmitter, Transmitter battery status monitoring, Programmable warning functions using a two-color display backlighting to indicate critical operation conditions (low battery, audio peak, RF low.		
10	Switching bandwidth	≤30.5 MHz or better		
11	Sensitivity	6.3 dbuV / -100 dBm or better		
12	Diversity System	Microprocessor-controlled diversity		
13	Modulation	Wideband FM		
14	Audio bandwidth	35 – 20000 Hz (± 3 dB) or better		
15	T.H.D.	<0.3 % or better		
16	SNR (A-weighted)	Typical 120 dB(A) or better		
17	Audio outputs	1 x XLR sockets balanced 1 x TS 1/4" / 6.3 mm jack sockets unbalanced		
18	Dimensions	1/2 19 inch 1U rack		
19	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sennheiser/ Harman/ Audio Technica**		

WIRELESS HANDHELD DYNAMIC MICROPHONE			1	
1	Transmitter Type	Professional Wireless Dynamic Super Cardiod Battery Operated Handheld Microphone with Inbuilt Transmitter. Should support Pilot Tone, quick setup via infrared link of all frequency and setup data from receiver and Low battery data transmission to receiver		
2	Switching bandwidth	≤30.5 MHz or better		
3	RF output power	10 or 50 mW		
4	Modulation	Wideband FM		
	Microphone Capsule	Dynamic (Super Cardiod)		
5	Max SPL	≤ 144 dB		

6	Audio bandwidth	35 – 20000 Hz (± 3 dB) or better		
7	T.H.D.	<0.7 % or better		
8	SNR (A-weighted)	> 120 dB(A) or better		
9	Receiver Type	Wireless Lavellier Microphone Receiver with 30.5 MHz tuning range, Half 19" all metal case diversity receiver, Should support Automatic setup function designed for less experienced operators, Up to 16 pre-programmed frequencies per group, Pilot Tone to prevent unexpected start-up noise, Infrared link of all frequency and setup data to the transmitter, Transmitter battery status monitoring, Programmable warning functions using a two-color display backlighting to indicate critical operation conditions (low battery, audio peak, RF low.		
10	Switching bandwidth	≤30.5 MHz or better		
11	Sensitivity	6.3 dbuV / -100 dBm or better		
12	Diversity System	Microprocessor-controlled diversity		
13	Modulation	Wideband FM		
14	Audio bandwidth	35 – 20000 Hz (± 3 dB) or better		
15	T.H.D.	≤0.3 % or better		
16	SNR (A-weighted)	Typical 120 dB(A) or better		
17	Audio outputs	1 x XLR sockets balanced 1 x TS 1/4" / 6.3 mm jack sockets unbalanced		
18	Dimensions	1/2 19 inch 1U rack		
19	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sennheiser/ Harman/ Audio Technica**		

VIDEO SHOOTING LIGHTS			20	
1	Type	Bi-Color Video Shooting Light Panel with 5600-3200K Color Temperature, LCD Display, Brightness Adjustment, Control Options from On Board Adjustment with LCD Panel and Handheld Remote/DMX or All.		
2	Brightness Control	100% to 10% or better		
3	Attachments	Four reflective adjustable barndoors and adjustable yoke.		
4	Power Supply	DC Powered		
5	Heat Dissipation	Required		
6	Diffuser	Min. 1 x Diffusion Filter		
7	Power Output	70W or better		
8	CRI Rating	95 or better		
9	Color Temperature	Should be adjustable between 3200K-5600K or better		
10	Control	Lights without Hand Held Remote Controllers should be supplied with DMX Controller and Accessories as per Workflow Requirement.		
11	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Leksa/ Shenoy/ Kodak/ Canare**		

VIDEO PRODUCTION SWITCHER			1	
1	Type	Full HD 3G-SDI or better 8-Channel Digital Video Production Switcher with integratred or separate hardware control panel.		
2	Live Streaming	Should support direct live streaming using Real Time Messaging Protocol (RTMP) over ethernet or a shared internet connection over USB-C		
3	Recording	Should support direct recording to optional internal M.2 flash memory or to external media via USB-C expansion ports.		

4	Recording Format	Should support program recorded as a H.264 .mp4 file at the streaming quality setting with AAC audio.		
5	Media Format	Supports media formatted ExFAT (Windows/Mac). APFS or HFS+ (Mac).		
6	SDI Video Inputs	Min. 8 or More		
7	SDI Video Outputs	Min. 8 or more		
8	SDI Rates	1.5G, 3G or better		
9	HDMI Video Outputs	Min. 1 or more		
10	Total Audio Inputs	Min. 2 x XLR balanced analog audio, 1 x BNC 32 Ch MADI digital audio, 2 x RCA stereo analog audio or better		
11	Total Audio Outputs	4 x 1/4 inch Jack analog audio, 1 x BNC 64 Ch MADI digital audio, 1 x 5 pin XLR Talkback.		
12	SDI Audio Inputs	Min. 2 Channel Embedded audio on all SDI inputs or better		
13	SDI Audio Outputs	Min. 2 Channel Embedded audio on all SDI outputs or better		
14	Timecode Connections	Min. 1 x BNC In, 1 x BNC Out or more		
15	Reference Input	Min. 1 x or more BNC In, 1 x or more BNC Out, Tri-Sync or Black Burst or better		
16	Video Input Re-Sync	On all 8 inputs		
17	Frame Rate and Format Converters	On all 8 inputs.		
18	SDI Aux Outputs	Min. 2 or more		
19	SDI Program Outputs	Min 1 or more		
20	Webcam Output	Min. 1 x USB-C supporting 720p or 1080p at PGM frame rate.		
21	Total Multi Views	Min. 1 x 12G-SDI and 1 x HDMI 2.0 or more		
22	Control Panel Connection	Direct connection between panel and chassis, or via network or integrated panel.		
23	Internal Timecode Generator	Required		
24	Ethernet	Min. x RJ45. Supports 10/100/1000 BASE-T.		
25	Computer Interface	Min. 1 x USB-C supports USB 2.0 for external drive recording, webcam out, software control and software updates.		
26	HD Video Input Standards	720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60		
27	SDI Compliance	SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M level A and B or better		
28	Video Sampling	4:2:2 or better		
29	Color Precision	10-bit or better		
30	Number of Mix Effects Rows	Min 1 or more		
31	Direct Cross Points	Min 8 or more		
32	Shifted Cross Points	Min 15 or more		
33	Crosspoint Label	Min 4 rows 16 character LCD		
34	Preview Transition	Min 1 or more		
35	Source Select Bus	Min 1 or more		
36	Dedicated Macro Buttons	Min 10 or more		
37	Transition Type Buttons	Min 5 or more		
38	Transition Rate	Should support setting via system LCD menu display		
39	Key Buttons	Min 8 or more		
40	Fader Bar	Min 1 or more		
41	Record Buttons	Min 2 or more		
42	Stream Buttons	Min 2 or more		
43	DSK Transition Selectors	Min 6 or more		

44	Fade to Black Buttons	Min 1 or more		
45	Upstream Keyers	Min 4 or more		
46	Downstream Keyers	Min 2 or more		
47	Advanced Chroma Keyers	Min 4 or more		
48	SuperSource	Min 1 or more		
49	DVEs	Min 2 or more		
50	Linear/Luma Keyers	Min 7 or more		
51	Transition Keyer (Stinger/DVE)	Min. 1 Stinger, 1 DVE or better		
52	Total Number of Layers	Min 8 more		
53	Pattern Generators	Min 6 or more		
54	Control Panel	Integrated or seprate panel with full control of switching and settings		
55	Routable Windows	Min 8 or more		
56	Windows Source Labels	Required		
57	Media Players	Min 2 or more		
58	Media Player Channels	Fill and key for each media player.		
59	Media Pool Still Image Capacity	Min 16 or more		
60	Media Pool Still Image Format	PNG, TGA, BMP, GIF, JPEG and TIFF or better		
61	Media Pool Clip Capacity	Min 2 x up to 1080p60 or better		
62	Media Player Clip Length in 1080 HD	Min 200 frames or better		
63	Media Pool Video File Format	TGA Sequence or better		
64	Media Pool Audio File Format	WAV, MP3 and AIFF or more		
65	Audio Mixer	Min 48 Channel mixer, Selectable On/Off/Audio-Follow-Video, Level and Peak metering, Master gain control, 6 band parametric EQ, Dynamics including Expander, Gate, Compressor and Limiter or better		
66	Software Control Panel	Should be included		
67	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Panasonic/ Data Video/ Ross Video/ Blackmagic Design**		

AUDIO MIXER			1	
1	Mixing Channels	Min.16 Mic/Line input channels Audio Mixer		
2	Inputs	Mic/Line: Min.16 x XLR or TRS or Both		
3	Outputs	Main: Min. 2 x XLR Balanced Outputs or better		
4	Group	3 x Aux Busses, 1 x Aux/FX Busses		
5	Aux	4 AUX Sends including FX		
6	EQ Bands	4-band		
7	USB	2-in/2-out USB connectivity for playback and recording (24-bit/48kHz)		
8	Phantom Power	+48V phantom power		
9	Line Inputs	LINE: 12 mono + 4 stereo		
10	Digital I/O	USB Device		
11	Faders	100mm Throw		
12	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Yamaha/ Harman/ Allen & Heith**		

COMMERCIAL LED DISPLAY PANEL			1	
1	Type	Commercial/Professional LED display panel		

2	Screen Size (diagonal)	Min. 109cm Diagnal or better		
3	Aspect Ratio	16:9		
4	Panel Backlight	Provisioning &Fixing of 550gsm 50x50 cm thick carpet tiles with rubber base density. Should Includes Pasting with high quality SR adhesive.		
4	Panel Backlight	Providing provision for placing the 43 " Comemrcial Display on the Studio wall as per asthetic looks.		
6	Response Time	Max 9 ms or better		
7	Contrast Ratio	3000:1 or better		
8	Brightness	400 Nits		
9	Operation Hours	24 x 7		
10	Speakers	In Built with the Panel with 10+10W RMS		
11	RF IN	Min 1 or more		
12	AV IN	Min 1 mini or more		
13	USB INPUT (2.0 SUPPORT)	Min. 1 x USB 2.0, 1 x USB 3.0 or more		
14	HDMI INPUT	Min. 2 or More		
15	HDCP 2.2	Required		
16	SPDIF OUT	Optical		
17	RJ-45	Min 1 or More		
18	Dolby Audio	Required		
19	Bluetooth &WIFi	Required		
20	Android Version	Min. 11 or better		
21	Memory Flash	16GB or better		
22	RAM	2GB or better		
23	Power Consumption	Maximum 120W		
	Approved Makes	**Sony/ Panasonic/ Samsung/ LG**		

PROFESSIONAL HEADPHONES FOR PCR AUDIO MONITORING			2	
1	Type	Professional headphones for PCR audio monitoring		
1	Headphone type	Closed-back		
2	Wearing Style	Over-ear		
4	Audio frequency bandwidth	20 - 20000 Hz or Better		
5	Sensitivity headphones	100 dB SPL or Better		
6	Rated Impedance	55 Ohms or Better		
7	Audio Interface	TypeStereo plug: 3.5mm (1/8") with 6.3 mm (1/4") screw-on adapter		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sennheiser/ Harman/ Audio Technica**		

INTERCOM SYSTEM			1	
1	Type	Min. 8 Channel Wired/Wireless Intercom System with Min. 1 x Base Unit, 5 x Belt Packs with Carry Cases and required cables as per workflow		
2	MIC / Headset	Stereo Socket for Headphone / Microphone combination		
3	Tally	Min. 2 x Sockets for Tally A and B		
4	Headset Impedance	10-500 Ohms 100 mW (min) or better		
5	Headphone	Min 1 x Stereo Headphone Socket		
6	Microphone	3 PIN XLR / ¼" (6.3mm) or compatible Jack Microphone Socket, Switchable Condenser / Dynamic Input or better		
7	THD	$\leq$ 3% or better		
8	S/N	$\geq$ 50dB or better		
9	Frequency Response	550-3.6 kHz, <+/- 3dB or better		
10	Built-in Speaker	Required		
11	Operating Range	Min. 100 meters or better between base station and bet pack		

8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**RTS/ Datavideo/ Fisher AV**		

WIRED EARPIECE FOR ASSISTIVE LISTENING			5	
1	Type	Wired/Wireless Complete Kit for In-Ear Monitoring/Assistive Listening including but not limitied to Telethin Driver, Acoustic Eartube with Coiled Cable with audio cable and jack.		
2	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Telex/ Sennheiser/ Audio Technica**		

AMPLIFIED/POWERED SPEAKERS FOR PCR MONITORING & STUDIO FEEDBACK			3	
1	Type	2 Way Powered Reference Monitor for PCR & Studio audio monitoring		
2	Frequency Range	55 Hz-20 kHz or better		
3	Max Peak SPL	90 dB or better		
4	SIGNAL TO NOISE RATIO	75dBA		
5	LF Driver Size	5" or better		
6	HF Driver Size	0.95" or better		
7	Low-Frequency Amplifier Power	40 watts or Better		
8	High-Frequency Amplifier Power	25 watts or Better		
10	Input Types	1 x XLR, 1 x TRS Balanced		
11	AC Input Voltage	100-240 VAC +/- 10% 50/60 Hz		
12	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Yamaha/ Harman/ Presonus**		

SINGLE LINE TELEPHONE HYBRID			1	
1	Type	Single Line Digital Hybrid for connecting audio signals to a standard analog telephone line.		
2	Required Feature	Min. 1 x XLR Input or better		
3	Required Feature	Min. 1 x XLR Input or better		
4	Required Feature	Inbuilt DSP OR Manual/Inbuilt Gain Controls		
5	Telephone Line Connection	RJ9 or RJ11 Interface or system compatible interface		
6	Handset Connection	Handset Connection or system compatible interface		
7	Required Feature	Should support either Mute or Call Drop feature from front panel		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Telos/ AEQ/ JK Audio/ T-HYB**		

PROFESSIONAL DIGITAL VIDEO RECORDER & PLAYER			1	
1	Type	Full HD or better Digital Video Recorder & Player		
2	Video Input	1x SDI or more 1 x HDMI 2.0 or more		
3	Video output	2x SDI or more 1x HDMI 2.0 or more		
4	Built in Speaker	Mono or Stereo		
5	Audio Output	Compatible Headphone Jack		
6	Screen	Min. 2" LCD or better		
7	Audio Input	SDI & HDMI Embedded		
8	Audio output	SDI & HDMI Embedded		

9	Ethernet	Min. 1 x 1Gb/s or better		
10	Gen-Lock / Reference-in	Tri-Sync or Black Burst		
11	HD Video Standards - SDI	720p50, 720p59.94, 720p60 1080i50, 1080i59.94, 1080i60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30 Or Better		
12	HD Video Standards - HDMI	525i59.94 NTSC, 625i50 PAL, 720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 2Kp23.98 DCI, 2Kp24 DCI, 2Kp25 DCI, 2Kp29.97 DCI, 2Kp30 DCI, 2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 4Kp23.98 DCI, 4Kp24 DCI, 4Kp25 DCI, 4Kp29.97 DCI, 4Kp30 DCI Or Better		
13	SDI Compliance	SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M level A and B, SMPTE 2081-1, SMPTE 2081-10, SMPTE 2084 and SMPTE 2108-1.		
14	Audio Sampling	Television standard 24-bit, 48 kHz sample rate or better		
15	Video Sampling	4:2:2 YUV or better		
16	Color Precision	10-bit or better		
17	Media	Min. 2 x 2.5 inch disc slots Min. 2 x SD card slots Min. 1 x USB-C 3.0 expansion port for external recording		
18	Supported Codecs	ProRes HQ QuickTime, ProRes 422 QuickTime, ProRes LT QuickTime, ProRes Proxy QuickTime for all formats up to 2160p30. Playback only of ProRes 4444 QuickTime up to 1080p60 with auto routing of fill and key over SDI A and B outputs. DNxHD 220x, DNxHD 220x MXF, DNxHD 145, DNxHD 145 MXF, DNxHD 45, DNxHD 45 MXF for 720p and 1080p HD formats up to 60fps. DNxHR HQX, DNxHR HQX MXF, DNxHR SQ, DNxHR SQ MXF, DNxHR LB, DNxHR LB MXF for 2K DCI and 2160p formats up to 30fps. H.264 SDI 4:2:2 10-bit, H.264 High 4:2:0 8-bit, H.264 Medium 4:2:0 8-bit, H.264 Low 4:2:0 8-bit for all formats up to 1080p60. OR better		
19	Configuration	Should be front panel configurable. External Control via RS422 or USB or Ethernet Interface.		
20	Display	Built in LCD for video, audio and timecode monitoring and menu settings.		
21	Media	Bidder should quote two numbers of compatible iTB or better Solid State Drives with any required Enclosure for recording and transferring the content.		
22	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Datavideo/ AJA/ Blackmagic Design**		

VIDEO STREAMING HARDWARE ENCODER			1	
1	Type	Live Video Streaming Hardware Encoder with HDMI/SDI Input and IP Output. Should support RTMP or SRT Protocols or better		
2	SDI/HDMI Video Inputs	Min. 1 or more		

3	Other Interfaces	Min. 1 x USB or more		
4	Ethernet	Ethernet should support 10/100/1000 BaseT for live streaming		
5	HD Video Input Standards	1080p 60/59.94/50 1080p 30/29.97/25/24/23.98 720p 60/50		
6	Direct Streaming	Should support direct live streaming over ethernet using RTMP or SRT Protocols or better		
7	Control Panel	Should have front panel control or better		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Kiloview/ Matrox/ Blackmagic Design/ Datavideo**		

UP/DOWN/CROSS SCALING CONVERTER			3	
1	Type	3G-SDI/ HDMI Scaling Cross Converter		
2	Input	HDMI Type A x 1, SD/HD/3G-SDI x 1, Analog Audio (1/8" Jack) x 1 or better		
3	Output	SD/HD/3G-SDI x 1, HDMI Type A x 1, Audio SDI/HDMI Embedded or better		
4	SDI Input Formats	1080p 60/59.94/50/30/29.97/25/24/23.98 1080Psf 30/29.97/25/24/23.98 720p 60/59.94/50/30/29.97/25/24/23.98 625i 50 525i 59.94 or better		
5	SDI Video Rate	SD/HD/3G-SDI or better		
6	SDI Color Space & Precision	YUV 4:2:2 or better		
7	HDMI Input Formats	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50/30/29.97/25/24/23.98 576p 50, 576i 50 480i 60/59.94 or better		
8	HDMI Color Space & Precision	YUV 4:2:2 or better		
9	SDI/HDMI Output Format	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50 or better		
10	Power	DC Power Adapter		
11	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**AJA/ Avmatrix/ Blackmagic Design/ Yellobrik**		

SDI RECLOCKING DISTRIBUTON AMPLIFIER			1	
1	Tyoe	1×4 SDI Reclocking Distribution Amplifier		
2	Input	Minimum 1 x 3G/HD/SD-SDI input		
3	Output	Minimum 4 x 3G/HD/SD-SDI buffered & re-clocked distribution outputs . Should also support DVB-ASI outputs.		
4	Audio	Should support embedded Audio SDI		
5	Feature	Should support automatic cable equilisation and signal retiming		
6	Power	DC power through threadable locking connector		
7	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**AJA/ Avmatrix/ Blackmagic Design/ Yellobrik**		

IP PHONE (VoIP HOTLINE NETWORK)			1	
1	Type	IP Desk Phone with PoE (Power Over Ethernet)		
2	Display	TFT liquid crystal display (LCD), graphical, grayscale, backlit with Min. resolution of 320 × 240 pixelor better		
3	Corded receiver	Hearing aid compatible (HAC) or better		
4	Audio codecs	G.711 (A-law, μ-law), G.722, G.726, G.729 or better		
5	DTMF	SIP-INFO, in-band, out-of-band or better		
6	Power options	Power over Ethernet (PoE) or Power adapter		
7	User interfaces and setup	Configuration and setup via menu-driven web user interface Configuration and setup via menu-driven phone user interface or better		
8	Other Features	Password-protected login Secure web server/client (HTTPS)		
9	Network technologies	OpenVPN, VLAN (IEEE 802.1Q) or better		
10	VoIP related protocols and techniques	SIP (RFC 3261), SDP (RFC 3261), RTP (RFC 8866), RTCP (RFC 3550), RTCP-XR, SIP REFER or better		
11	Secure VoIP protocols	SIPS (SIP over TLS), SRTP (RFC 3711), SRTCP or better		
12	Network protocols	IPv4 / IPv6 (dual stack), DHCP, NTP, LDAP, HTTP or better		
13	2 SIP identities / accounts	Up to 2 simultaneous calls or better		
14	Directory support	Local directory with up to 300 entries or better		
15	Outgoing call features	Speed dialling via function keys, URL dialling, Local dial plan, Redial (via dialed calls list), Automatic redial on busy, Caller identification (CLIP) or better		
16	Incoming call features	Call waiting/swapping, Call barring/blocking: deny list, anonymous calls, Do Not Disturb (DND) mode, Auto answer, Call diversion or better		
17	Related features	Call history lists of missed, received, dialed, rejected, and deflected calls or better		
18	Connected call features	Mute microphone, Hold, Blind call transfer, Attended call, transfer, 3-way local conferencing or better		
	Approved Makes	**Cisco/ Snom/ Avaya/ Poly**		

8 PORT GIGABIT PoE ETHERNET SWITCH			1	
1	Type	8 Port Gigabit PoE Etehrnet Switch		
2	Ports	Min.8 or more 10/100/1000 Mbps fast ethernet ports		
3	PoE	Flex or Fixed PoE for powering Camera and other offered devices. PoE power should be suitable for proposed equipment.		
4	Flow Control	Flow control is required for protection against data loss		
5	Distance	Min. Distance of 100 Meters or more		
6	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Netgear/ Cisco/ D-Link/ TP-Link**		

ACOUSTICS & SEMI CIVIL WORKS				
1	**Work**	**Semi Civil / Acoustical Treatment & Soundproofing work of Technical Area Including Studio Area and PCR Area**		
	Studio Size	**Total Technical Area of Each Section Qty 2 x (24' x 16' x 12') Feet (L x W x H) (For reassurance of measurements, Bidders are suggested to do a site survey before bidding. Changes in cost due to measurements will not be accepted at a later stage)**		

1.1	Gypsum Partition between Studio & PCR	Providing and Fixing of Gypsum Partitions Between Studios and PCR Area on GI Frame with Rockwool of 48 kg density to be filled betweenparttion wall and 12 mm thick ply which will be finished with Laminate. Above 3 feet - Rockwool of 48 kg density to be filled between Wall and the perforated Gypsum.	192	SqFt
1.2	Soundproofing Treatment of Walls & Partitions	Providing & Fixing of Sound Proofing Treatment - Upto 3 feet from floor- Rockwool of 48 kg density to be filled between wall and 12 mm thick ply which will be finished with Laminate. Above 3 feet - Rockwool of 48 kg density to be filled between Wall and the perforated Gypsum. The complete treatment should be done by provisioning a frame on walls made of GI Studs.	1344	SqFt
1.3	Windows Concealment	Concealment of Glass Windows from inside with Byson Board and Gypsum Treatment over GI Frame with Rockwool of 48 kg density to be filled between base and the perforated Gypsum as being proposed for acoustic.	144	SqFt
1.4	Acoustical Treatment of Ceiling	Providing and Fixing of Acoustic Grid Ceiling 2' x 2' with 15 mm grid system (NRC 0.7) and supports as required.	384	SqFt
1.5	Acoustical Door for Studio & PCR	Providing and fixing of Acoustic 55 mm thick single leaf Door of size 7' x 3' with vision panel of 1' x 1' and the door hardware including door closer, handle, lock and a door stopper	2	Nos.
1.6	Observation Window	Providing of 8 mm thick Sandwitched (Dual) Toughened Glass Window for Observation between Studio and PCR of size 4' x 3'. Includes Wood Framing & Sealing.	12	SqFt
1.7	Real Croma Set	Providing and fixing of L or U shaped Green Chroma. All sizes shall be provided and shall be final as per instructions of project incharge. Croma set to be made up of plywood frame with curved bend joints between wall and floor. Should be finished with pasting of a high quality mat fiinish carpet of green color with indutrail SR solution and with proper levelling.	1	No.
1.8	Anchor Table	Providing and Fixing of Curved Anchor Table of Size 12'x3'x2.5' (WxDxH) with laminate finish and proper edge binding in suitable ply. The table should have provision for housing Buyer's Logo from Front in minimum size of 1'x1'.	1	Nos.
1.9	Technical Table for PCR	Providing and Fixing of Technical Table at PCR of size 12' x 3' x 2.5' (WxDxH) with laminate finish and proper edge binding in suitable ply.	1	Nos.
1.10	Studio Lightening Grid	Providing and Installation of MS (Round Tube of 50mm dia) for Studio Lighting grid of 4'x4' spacing. The structure should be painted in black colour with proper base of primer allpied before the paint.	256	Rft
1.11	Carpet Flooring	Provisioning &Fixing of 550gsm 50x50 cm thick carpet tiles with rubber base density. Should Includes Pasting with high quality SR adhesive.	384	Lot
1.12	Cable Tray	Providing & Fixing of cable tray 3"x3" covered on top with removable cover for AV cabling placed on the ground along walls or partitions.	50	Rft
1.13	Mounting Arrangements for Commercial Displays	Providing provision for placing the 43 " Commercial display on the PCR wall as per asthetic looks.	1	No.
1.14	Paint Work	Providing & applying on all exposed raw surface etc., with Plastic Emulsion Paint of 'Asian Paints', 'Nerolac' or equivalent make as per the manufacture's specification with a brush &roller,. After leveling the surface to a smooth finish with the help of putties, etc.	3500	SqFt

1.15	Chairs for Guests & Anchor	Chair made of good quality products of MSPL Standard Models. Seat plywood made of 12 mm Hot Pressed Back PP Structure.Upholestry PVC structure moulded with prime quality high stretch fabric. Seat and back are firmly connected to the base frame mechanism.Chair height 1080.440W X 420Dbase seat 65 mm thick moulded with PU foam D-45kg/m3 H-20 & 440w X 470H back seat 70 mm thick PP structure moulded fabric mesh. Back seat shell PP structure. 415/515 Armrest fitted to the seat with armrest connecting brackets. Armrest made of prime quality PP structure.Arm rest height from seat 180mm. Height from seat to ground 500 mm. Understructure base steel frame. The product shall be BIFMA member having AIOTA(All India Occupational Therapists Association) for Office Furniture range for ergonomic design.	4	Nos.
1.16	Computer Chair for Technician	Medium Back Chair made of good quality products of MSPL standard Models..Seat -Plywood made of 12 mm Hot Pressed. Upholstery PVC Structure moulded with prime quality high stretch fabric . PHA (Gas Lift) 105 mm (TDC 171 mm & BDC 66) understructure Base Revolving Pedestal chrome plated steel base with PP hub cap mechanism Torsion Bar adjustment can be operated in seating position.Mechanism provided upright position locking.Chair max height 1125 & min depth 715, 490W X 480D.Base seat 70 mm thick moulded with PU foam D-45kg/m3 H-18, 460W X 560H.Back seat of fabric mesh.Adjustable arm ,Armrest made of PU +LBkt.Seat Height can be adjusted with a pneumatic gas lift.Pedastal pitch centredia 715 mm with casters. Casers made of molded black nylon metal bolt inserted & fitted with 50 nos,twin wheel casters 50 mm dia.	1	Nos.

ELECTRICAL WORKS FOR TECHNICAL AREA			1	Lot
1	Work	**ELECTRICAL WORKS FOR TECHNICAL AREA**		
1.1	Instructions	**Electrical devices should be ISI marked and should be from renowned manufacturers only. Local or inferior quality products will not be accepted. Bidders are suggested to do a site survey before bidding. Changes in cost due to any reason beyond the scope of this tender, will not be accepted at a later stage.**		
1.2	Cable Laying	Providing and Laying of 1", 1.5" & 2" PVC Pipes for high rise electrical installations and concealment of cables at required areas.	1	Lot
1.3	Power Extensions	Providing and Laying Power Extension for Airconditioners.	1	Lot
1.4	Shooting Lights Wiring	Providing and Laying of Shooting Light Wiring, Raceay& Shooting Light Sockets for 20+4 points on lighting grid	24	Nos.
1.5	General Lights	Providing and fixing of LED Ceiling Lights (600x600mm) in STUDIO	4	Nos.
1.6	General Lights	Providing and fixing of LED Ceiling Lights (600x600mm) in PCR	2	Nos.
1.7	Distribution Box	Providing and Fixing MCB Junction (Distribution Box)	1	No.
1.8	Power Points	Providing of Power points - Qty 8 of 15 Amps and Qty 8 of 5 Amps on Studio walls	16	Nos.
1.9	Power Points	Providing of Power points - Qty 10 of 15 Amps and Qty 10 of 5 Amps on PCR walls	20	Nos.
1.10	Others	Providing Panel Connectivity with UPS System & Further to Technical Area	1	Lot
1.11	Misc.	Miscellaneous Power Cables, Power Extension Strips & Points etc. as per Workflow Requirement	1	Lot
	Approved Makes	**Havels, Polycab, Finolex, Syska, Philips**		

AIR-CONDITIONING IN STUDIO & PCR	3	

1	Type	1.5 Ton or better Inverter Split AC with 5 Star or better energy Star Rating. Should Include Required Installation with Additional Copper Pipes, Power Cables, Power Sockets Etc.		
2	Full Load Capacity (100%)	5300 W or better		
4	Compressor Type	High EER Rotary		
5	Capacity TR	1.5 Ton or better		
8	Star Rating	5 Star or better		
9	Coil Type	Copper		
10	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Daiken/ Mitsubishi/ Samsung/ LG**		

ON LINE UPS SYSTEM WITH BATTERIES			1	
1	Type	Online UPS - 10 KVA Capacity 3 Phase In, 1 Phase Output Includes Installation		
2	Batteries	SMF Battery Bank for 25 Mins Power Backup		
3	Accessory	Should include Battery Rack		
4	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**APC/ Luminous/ Tata Libert/ Eaton**		

FIRE EXTINGUISHER			1	
1	Type	Dry Chemical Powder (DCP) Type 5 Kg Fire Extinguisher		
2	Specifics	Standard Dry Chemical fire extinguishers with sodium bicarbonate-based extinguishing agent to combat Class B and Class C fires		
	Approved Makes	**Industry Standard with Safety Certification**		

CCTV Camera			2	
1	Type	The technical area should be equipped with Min. 2MP Full HD Smart Wi-Fi CCTV surveillance. 1 Nos. of CCTV cameras should be placed inside Studio and 1 No. of CCTV camera should be placed inside PCR. The cameras should be Wi-Fi enabled and should support Micro SD Card based recording. The cameras should be equipped with 32 GB of memory card and should have protected access on mobile devices.		
2	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**CP-Plus/ Hikvision/ Bosch/ Philips**		

SYSTEMS INTEGRATION MATERIAL			1	Lot
1	Cabling	It is required to set-up the facility for Full HD/HD operations, therefore all the cabling should seamlessly support required operations.		
2	Installation Material	All installation materials including power cables, interconnection cables, equipment/data racks, connectors, ferruels, ties and other accessories (including nuts, bolts, screws etc.) required for installation of the complete system shall be quoted		
3	System Completeness	Completeness of the system as per bill of material of the tender, will be responsibility of the bidder. If any material is found short within the scope of the tender and during installation because of which equipment is not functional, completion certificate may not be issued		

4	Misc. Sub-System	Additional converters, adapters, mounts or fixtures etc have to be supplied by the bidder to complete the workflow, even if the same are not part of the bill of material.		
	Approved Makes	**Canare, Beldon, Ravtron, Manhattan, Cisco, Netgear, TP-Link**		

TECHNICAL SPECIFICATIONS - REGIONAL CENTER - PRODUCTION FACILITY WITH LIVE STREAMING

S.No.	FEATURE	SPECIFICATIONS	QTY/ UOM	COMPLIANCE (YES/NO)
SITC OF BROADCAST QUALITY FHD ROBOTIC PTZ CAMERA SYSTEM			**1**	
	CAMERA			
1	Type	Professional Broadcast Quality PTZ Camera. Should support video output from SDI, HDMI & LAN (Streaming) and Linear Audio Input. The camera should support Live streaming from LAN Interface. Should support control IR Remote controller, Web Interface & IP/Serial Control Ports.		
2	Video format/Resolution	1080p 60/59.94/50/30/29.97/25 1080i 60/59.94/50 720p 60/59.94/50 or better		
3	Image Sensor	1/2.8 inch high quality HD CMOS sensor or better		
4	Effective Pixels (approx.)	2.07 Mega pixels or better		
5	S/N Ratio	>55dB or better		
6	Min. Illumination	0.5Lux (F1.8, AGC ON) or better		
7	Electronic Shutter	Auto / Manual		
8	Zoom Ratio	20x Optical Zoom, 10x Digital Zoom or better		
10	White Balance	Auto, Manual, One Push, 3000K, 4000K, 5000K, 6500K		
11	Mirror / Flip Image	Required		
12	Focus Mode	Auto / Manual		
13	Panning / Tilting Range	Pan: ±170° , Tilt: +90° to -30° or better		
14	Panning / Tilting Speed	Pan: 0.1~60°/sec, Tilt: 0.1~30°/sec or better		
16	Focal Length	f=5.5 (wide) to 98 (tele) mm, F1.6 to F3.5 or better		
17	Field of View (Horizontal, Wide)	Approx. 54.7° (Wide End) / 3.3° (Tele End) or better		
18	Video Output	Min 1 x 3G-SDI, 1 x HDMI or more		
19	Audio Input	Min 1 x 3.5mm Line in		
21	Protocol	VISCA/Pelco-D/Pelco-P or better		
22	Remote Control Interface	RJ-45 for IP control, RS-232, RS-485		
23	Streaming	Inbuilt streaming encoder		
24	Video Compression Format	H.264, H.265 or better		
25	Audio Compression Format	AAC, G.711A or better		
26	HD IP Interface	100M IP port(100BASE-TX)		
27	Network Protocol	RTSP, RTMP, SRT or better		
28	Firmware Update	Via Web Interface		
29	IR Control	Through Handheld IR Remote Control and should be Included		
30	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sony/ Ross Video/ Panasonic/ Datavideo**		

TRIPOD FOR CAMERA LOAD BEARING			1	
1	Type	Tripod system for PTZ camera mounting. Offered tripod should have suffecient load bearing capacity for camera system.		
2	Section	Two-Stage Aluminum Tripod System		
3	Payload	5kg or better		
4	Height	76 cm to 155cm		

5	Section	2 STAGE		
6	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Manfrotto/ Libec/ Hako/ Kratos**		

PEN TABLET			1	
1	Type	Pen Display for Teachers		
2	Display Size / Resolution	54.6 cm (21.5 in) / Full HD 1920 x 1080 or better		
3	Active Area	476 x 268 mm (18.7 x 10.5 in) or better		
4	Tablet Size	570 x 359 x 40 mm (22.4 x 14.1 x 1.6 in)		
5	Weight	6 Kg or lesser		
6	Colour Performance	72% NTSC (CIE1931) typical / 96% sRGB (CIE 1931) typical		
7	Viewing Angle	178/178 typical		
8	Contrast Ratio	1000:1 typical		
9	Response Rate	22 ms or better		
10	Aspect Ratio / Brightness	16:9 / 210 cd/m2 typical		
11	Color Temperature / Custom Color	9300K, 6500K, 5000K, Custom RGB or better		
12	Connectivity	HDMI, USB 2.0, AC adapter		
13	Pen	Battery-free writing Pen with 2 customizable side switches and 8,192 pressure levels in both pen tip and eraser		
14	Pen Tilt Recognition / Range	±60 levels / 60 degrees		
15	Pen Tilt Recognition / Range	17 customizable, application-specific Keys, Touch Ring, Rocker Ring/Home Button, Precision Mode, Display Toggle, Radial Menu and dedicated pan, scroll, zoom, brush size		
16	Stand	Adjustable Stand (included) for 16°–82° angle or better		
17	Ergonomics	Right or left-handed use; Adjustable Stand included Pen with comfortable, ergonomic grip		
18	Compatibility / System Requirements	Windows 7 or later (latest service pack/build), Mac OS X 10.12 or later (latest update); Internet access for driver download		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Huion/ Wacom/ XP-Pen**		

DESKTOP COMPUTER SYSTEM PEN TABLET			1	
1	Type	Desktop Computer System		
2	Processor	Intel i7, 12 generation or better		
3	RAM	Min 16 GB DDR4 or better		
4	Media Drive	Min 500 GB M.2 2230, PCIe NVMe, SSD or better		
5	Ports	Min 2 x USB3.0 and 1 x USB2.0		
6	Peropherals	Wireless Keyboard and Mouse		
7	Softwares	OS - Windows 11 Pro English or better (Perpetual License) and Microsoft Office 365 license (Subscription License for 3 Years)		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**HP/ Dell/ Lenovo**		

TOUCH SCREEN MONITOR			1	
1	Type	IR Touch Monitor		
2	Display Size	Min 22" or bigger		
3	Viewable Area	Min 21" or bigger		
4	Panel Type:	VA technology or better		
5	Resolution	Full HD 1920 x 1080 or better		

6	Static Contrast Ratio	3,000:1 (typ) or better		
7	Dynamic Contrast Ratio	20M:1 or better		
8	Light Source	LED or better		
9	Brightness	250 cd/m² (typ) or better		
10	Colors	16.5M or better		
11	Color Space Support	8 bit true or better		
12	Aspect Ratio	16:9		
13	Response Time (Typical GTG)	6.5ms or better		
14	Viewing Angles	172 Deg horizontal, 172 Deg vertical		
15	Backlight Life (Hours)	30000 Hrs (Min)		
16	Curvature	Flat		
17	Refresh Rate (Hz)	Min. 75 Hz or better		
18	Flicker-Free	Required		
19	Color Gamut	NTSC: 72% size (Typ)		
20	Touch Screen	IR, 10-point multi-touch		
21	Surface Treatment	Glossy, Hard Coating (7H)		
22	Cover Glass Thickness	2mm		
	INTERFACES			
23	VGA	Min. 1 or more		
24	USB 2.0 Type A	Min 2 or more		
25	USB 2.0 Type B	Min 1 or more		
26	3.5mm Audio In	Min 1 or more		
27	3.5mm Audio Out	Min 1 or more		
28	HDMI	Min. 1 or more		
29	DVI-D	Min 1 or more		
30	Cover Glass Thickness	1.5mm or better		
31	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**HP/ Dell/ Viewsonic**		

SITC OF LED DISPLAY PANELS FOR STUDIO PREVIEW			**1**	
1	Screen Size (diagonal)	High Definition or better LED Display panel		
2	Screen Size (diagonal)	43” +/- 1 inches		
3	Aspect Ratio	16:9		
4	Panel Backlight	LED		
5	'Display Resolution	1920 (V) x 1080 (H)		
6	Viewing Angle	170 degree or better		
7	Speakers	In Built with the Panel with 10W RMS		
8	HDMI	2 or more		
9	Other Interfaces	USB, RCA		
10	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sony/ Panasonic/ Samsung/ Philips**		

PROFESSIONAL HEADPHONES FOR PCR AUDIO MONITORING			2	
1	Type	Professional headphones for PCR audio monitoring		
1	Headphone type	Closed-back		
2	Wearing Style	Over-ear		
4	Audio frequency bandwidth	20 - 20000 Hz or Better		
5	Sensitivity headphones	100 dB SPL or Better		
6	Rated Impedance	55 Ohms or Better		
7	Audio Interface	TypeStereo plug: 3.5mm (1/8") with 6.3 mm (1/4”) screw-on adapter		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sennheiser/ Harman/ Audio Technica**		

VIDEO PRODUCTION SWITCHER	1	

1	Type	8 Input Full HD Video Production Switcher		
2	Video Inputs	Min. 8 x 3G-SDI, 10-bit or better		
3	Video Outputs	Min. 4 x SDI Program Outputs or More Min. 2 x PGM Outputs or more		
4	Audio Inputs	Min. 2 x stereo interfaces or more		
5	Audio Outputs	Min. 1 x stereo interfaces or more		
6	Video Input Re-Sync	Required all 8 SDI inputs or better		
7	Frame Rate and Format Converters	Required all 8 SDI inputs or better		
8	Ethernet	Ethernet should support 10/100/1000 BaseT for live streaming, software control, software updates or better		
9	Computer Interface	Min. 2 x USB outputs for external drive recording, webcam out, software control, software updates or better		
10	HD Video Input Standards	720p50, 720p59.94, 720p60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 1080i50, 1080i59.94, 1080i60 or better		
11	HD Video Output Standards	1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 or better		
12	Video Streaming Standards	1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 or better		
13	Video Sampling	4:2:2 YUV or better		
14	Color Precision	10-bit or better		
15	Upstream Keyers	Min. 4 or more		
16	Downstream Keyers	Min. 2 or more		
17	Advanced Chroma Keyers	Upto 4 or more		
18	Linear/Luma Keyers	Upto 4 or more		
19	Total Number of Layers	Min. 7 or more		
20	Pattern Generators	Min. 4 or more		
21	Color Generators	Min. 2 or more		
22	Audio Mixer	Integrated and should support Selectable On/Off/Audio-Follow-Video per channel plus separate gain control per channel or better		
23	Analog Input	Unbalanced stereo		
24	Analog Input Delay	Up to 6 frames or better		
25	Recording	Should support direct ISO recording of input and PGM video and audio over external media connected through USB port.		
26	Multi View Monitoring	Required with support for 16, 10 or 4 views including Program, Preview, 8 inputs, SuperSource, Clean Feed, Media Player, Streaming Status, Recording Status and Audio Meters.		
27	Recording Media	**Bidder should supply 1TB Compatible SSD Drives with any required enclosures for recording & transferring the content.**	2	
28	Recording Media	**Bidder should supply 21" HDMI Monitor for Multiviewer**	1	
29	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Panasonic/ Ross Video/ Datavideo/ Blackmagic Design**		

TABLET FOR SWITCHER SOFT CONTROL PANEL			1	
1	Type	Min. 10.5" Diagnal Tablet with Retina Display for Video Production Switcher Software Based Control Panel		
2	Capacity	Min. 64 GB or more		

3	Display	Liquid Retina display or better Min. 10.9″ (diagonal) LED backlit Multi-Touch display with IPS technology or better 2360x1640-pixel or better resolution at 264 pixels per inch (ppi) or better 500 nits brightness or better		
4	Processor	Min. 6-core CPU, 4-core graphics, 16-core Neural Engine or better		
5	Back Camera	Min. 12MP Wide camera, f/1.8 aperture, Digital zoom up to 5x, Five-element lens, or better		
6	Video Recording	4K video recording at 24 fps, 25 fps, 30 fps or 60 fps 1080p HD video recording at 25 fps, 30 fps or 60 fps 720p HD video recording at 30 fps or 60 fps or better		
7	Speakers	Integrated speakers are required		
8	Dual microphones for calls, video recording and audio recording	Integrated Dual microphones for calls, video recording and audio recording or better		
9	Wi-Fi	Wi-Fi 6 (802.11ax); speeds up to 1.0 Gbps, Simultaneous dual band, Bluetooth 5.2, or better		
10	Touch ID	Required		
11	Charging & Expansion	USB port with Power Adapter for Charging and individually as Display Port, or better		
12	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Apple or Equiv.**		

VIDEO ENCODER - SRT SUPPORT			1	
1	Type	Live Video Streaming Hardware Encoder with HDMI/SDI Input and IP Output. Should support RTMP or SRT Protocols or better		
2	SDI/HDMI Video Inputs	Min. 1 or more		
3	Other Interfaces	Min. 1 x USB or more		
4	Ethernet	Ethernet should support 10/100/1000 BaseT for live streaming		
5	HD Video Input Standards	1080p 60/59.94/50 1080p 30/29.97/25/24/23.98 720p 60/50		
6	Direct Streaming	Should support direct live streaming over ethernet using RTMP or SRT Protocols or better		
7	Control Panel	Should have front panel control or better		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Kiloview/ Matrox/ Blackmagic Design/ Datavideo**		

AUDIO MIXER			1	
1	Mixing Channels	Min.6 Mic/Line input channels Audio Mixer		
2	Inputs	Mic/Line: Min.6 x XLR or TRS connectors or Both		
3	Outputs	Main: Min. 2 x XLR Balanced Outputs or better		
4	Aux	2 AUX Sends including FX		
5	EQ Bands	4-band		
6	USB	2-in/2-out USB connectivity for playback and recording (24-bit/48kHz)		
7	Phantom Power	+48V phantom power		
8	Line Inputs	LINE: 12 mono + 4 stereo or better		
9	Digital I/O	USB Device		
10	Faders	100mm Throw		
11	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		

	Approved Makes	**Yamaha/ Harman/ Allen & Heith**		

ON TABLE CARDIOD BOUNDARY MICROPHONE			**1**	
1	Type	Wired on-table boundary microphone with half-cardioid pickup pattern		
2	Connector	clip contact, should trigger signal at the logic connector: Logic in (LED control), GND, Logic out (switch signal) or better		
3	Acoustics	boundary layer microphone		
4	Transducer principle	Pre-polarized condenser microphone		
5	Frequency response	40 Hz – 20 kHz or better		
6	Max. sound pressure level	140 dB or better		
7	Pick-up pattern	Cardioid		
8	Nominal impedance	200 Ω or better		
9	Phantom powering	P 24 - P 48 or better		
10	Operating temperature	-10 ° to +50 °C or better		
11	Equivalent noise level	29 dB (A) or better		
12	Equivalent noise level weighted as per CCIR	39 dB (CCIR) or better		
13	Dynamic range	111 dB (A)		
14	Current consumption	5.3 mA		
15	Output voltage	Logic out: High level output voltage > 2.4 V, low level output voltage < 0.4 V		
16	Output voltage	Logic in: High level input voltage > 2.0 V, Low level input voltage < 0.8 V		
17	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sennheiser/ Harman/ Audio Technica**		

WIRELESS LAPEL/LAVELIER MICROPHONE			1	
1	Transmitter Type	Professional Wireless Lavelier Miniature Battery Operated Transmitter with Microphone, Should support Pilot Tone, quick setup via infrared link of all frequency and setup data from receiver and Low battery data transmission to receiver		
2	Switching bandwidth	≤30.5 MHz or better		
3	RF output power	10 or 50 mW		
4	Modulation	Wideband FM		
5	Audio input	3-pin mini-XLR socket (max. 2.5 Vrms)		
6	Audio bandwidth	35 – 20000 Hz (± 3 dB) or better		
7	T.H.D.	<0.7 % or better		
8	SNR (A-weighted)	> 120 dB(A) or better		
9	Receiver Type	Wireless Lavelier Microphone Receiver with 30.5 MHz tuning range, Half 19” all metal case diversity receiver, Should support Automatic setup function designed for less experienced operators, Up to 16 pre-programmed frequencies per group, Pilot Tone to prevent unexpected start-up noise, Infrared link of all frequency and setup data to the transmitter, Transmitter battery status monitoring, Programmable warning functions using a two-color display backlighting to indicate critical operation conditions (low battery, audio peak, RF low.		
10	Switching bandwidth	≤30.5 MHz or better		
11	Sensitivity	6.3 dbuV / -100 dBm or better		
12	Diversity System	Microprocessor-controlled diversity		
13	Modulation	Wideband FM		
14	Audio bandwidth	35 – 20000 Hz (± 3 dB) or better		
15	T.H.D.	<0.3 % or better		
16	SNR (A-weighted)	Typical 120 dB(A) or better		

17	Audio outputs	1 x XLR sockets balanced 1 x TS 1/4" / 6.3 mm jack sockets unbalanced		
18	Dimensions	1/2 19 inch 1U rack		
19	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Sennheiser/ Harman/ Audio Technica**		

WIRELESS IN-EAR MONITORING SYSTEM			1	
1	Type	Wireless In-Ear Monitoring System with Desktop Style Transmitter and Battery Powered Beltpack		
2	Total Harmonic Distortion	≤ 1% or better		
3	Frequency Response	45 Hz to 14 KHz or better		
4	Modulation Mode	FM		
5	Nominal/Peak Deviation	±15 kHz / ±24 kHz or better		
6	Dynamic Range/ Signal-to-noise ratio	≥88 dB or better		
7	**Transmitter**			
8	Input Connection	Min. 2 x XLR or better		
9	Antenna Output	BNC-type or SMA Type, 50 ohms		
10	**Receiver**			
11	Headphone Output Jack	3.5 mm (1/8") TRS stereo mini-jack		
12	Antenna Input	BNC-type or SMA Type, 50 ohms		
13	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Audio Technica/ Harman/ Shure/ Sennheiser**		

SINGLE LINE TELEPHONE HYBRID			1	
1	Type	Single Line Digital Hybrid for connecting audio signals to a standard analog telephone line.		
2	Required Feature	Min. 1 x XLR Input or better		
3	Required Feature	Min. 1 x XLR Input or better		
4	Required Feature	Inbuilt DSP OR Manual/Inbuilt Gain Controls		
5	Telephone Line Connection	RJ9 or RJ11 Interface or system compatible interface		
6	Handset Connection	Handset Connection or system compatible interface		
7	Required Feature	Should support either Mute or Call Drop feature from front panel		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Telos/ AEQ/ JK Audio/ T-HYB**		

UP/DOWN/CROSS SCALING CONVERTER			4	
1	Type	3G-SDI/ HDMI Scaling Cross Converter		
2	Input	HDMI Type A x 1, SD/HD/3G-SDI x 1, Analog Audio (1/8" Jack) x 1 or better		
3	Output	SD/HD/3G-SDI x 1, HDMI Type A x 1, Audio SDI/HDMI Embedded or better		
4	SDI Input Formats	1080p 60/59.94/50/30/29.97/25/24/23.98 1080Psf 30/29.97/25/24/23.98 720p 60/59.94/50/30/29.97/25/24/23.98 625i 50 525i 59.94 or better		
5	SDI Video Rate	SD/HD/3G-SDI or better		
6	SDI Color Space & Precision	YUV 4:2:2 or better		

7	HDMI Input Formats	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50/30/29.97/25/24/23.98 576p 50, 576i 50 480i 60/59.94 or better		
8	HDMI Color Space & Precision	YUV 4:2:2 or better		
9	SDI/HDMI Output Format	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50 or better		
10	Power	DC Power Adapter		
11	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**AJA/ Avmatrix/ Blackmagic Design/ Yellobrik**		

SDI RECLOCKING DISTRIBUTON AMPLIFIER			1	
1	Tyoe	1×4 SDI Reclocking Distribution Amplifier		
2	Input	Minimum 1 x 3G/HD/SD-SDI input		
3	Output	Minimum 4 x 3G/HD/SD-SDI buffered & re-clocked distribution outputs . Should also support DVB-ASI outputs.		
4	Audio	Should support embedded Audio SDI		
5	Feature	Should support automatic cable equilisation and signal retiming		
6	Power	DC power through threadable locking connector		
7	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**AJA/ Avmatrix/ Blackmagic Design/ Yellobrik**		

IP PHONE (VoIP HOTLINE NETWORK)			1	
1	Type	IP Desk Phone with PoE (Power Over Ethernet)		
2	Display	TFT liquid crystal display (LCD), graphical, grayscale, backlit with Min. resolution of 320 × 240 pixelor better		
3	Corded receiver	Hearing aid compatible (HAC) or better		
4	Audio codecs	G.711 (A-law, μ-law), G.722, G.726, G.729 or better		
5	DTMF	SIP-INFO, in-band, out-of-band or better		
6	Power options	Power over Ethernet (PoE) or Power adapter		
7	User interfaces and setup	Configuration and setup via menu-driven web user interface Configuration and setup via menu-driven phone user interface or better		
8	Other Features	Password-protected login Secure web server/client (HTTPS)		
9	Network technologies	OpenVPN, VLAN (IEEE 802.1Q) or better		
10	VoIP related protocols and techniques	SIP (RFC 3261), SDP (RFC 3261), RTP (RFC 8866), RTCP (RFC 3550), RTCP-XR, SIP REFER or better		
11	Secure VoIP protocols	SIPS (SIP over TLS), SRTP (RFC 3711), SRTCP or better		
12	Network protocols	IPv4 / IPv6 (dual stack), DHCP, NTP, LDAP, HTTP or better		
13	2 SIP identities / accounts	Up to 2 simultaneous calls or better		
14	Directory support	Local directory with up to 300 entries or better		
15	Outgoing call features	Speed dialling via function keys, URL dialling, Local dial plan, Redial (via dialed calls list), Automatic redial on busy, Caller identification (CLIP) or better		

16	Incoming call features	Call waiting/swapping, Call barring/blocking: deny list, anonymous calls, Do Not Disturb (DND) mode, Auto answer, Call diversion or better		
17	Related features	Call history lists of missed, received, dialed, rejected, and deflected calls or better		
18	Connected call features	Mute microphone, Hold, Blind call transfer, Attended call, transfer, 3-way local conferencing or better		
	Approved Makes	**Cisco/ Snom/ Avaya/ Poly**		

8 PORT GIGABIT PoE ETHERNET SWITCH			1	
1	Type	8 Port Gigabit PoE Etehrnet Switch		
2	Ports	Min.8 or more 10/100/1000 Mbps fast ethernet ports		
3	PoE	Flex or Fixed PoE for powering Camera and other offered devices. PoE power should be suitable for proposed equipment.		
4	Flow Control	Flow control is required for protection against data loss		
5	Distance	Min. Distance of 100 Meters or more		
6	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Netgear/ Cisco/ D-Link/ TP-Link**		

VIDEO SHOOTING LIGHTS			6	
1	Type	Bi-Color LED (Bowen Mount) Video Shooting Light with 5600-3200K Color Temperature, LCD Display, Brightness Adjustment, Control Options from On Board Adjustment with LCD Panel and Handheld Remote.		
2	Brightness	100% to 10% or better		
3	Display	LCD		
4	Reflector Mount	Bowens Mount		
5	Color Temperature	3200-5600K		
6	Power Supply	AC 100V -240V		
7	Max. Power	150W or better		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Leksa/ Shenoy/ Kodak/ Canare**		

ACOUSTICS & SEMI CIVIL WORKS				
1	**Work**	**Semi Civil / Acoustical Treatment & Soundproofing work of Technical Area Including Studio Area and PCR Area**		
	Studio Size	**Total Technical Area of Each Section 20 x 15 x 12 Feet (L x W x H) (± 10%) (For reassurance of measurements, Bidders are suggested to do a site survey before bidding. Changes in cost due to measurements will not be acceptable at a later stage)**		
1.2	Soundproofing Treatment of Walls & Partitions	Upto 3 feet from floor- Rockwool of 48 kg density to be filled between wall and 12 mm thick ply which will be finished with Laminate. Above 3 feet - Rockwool of 48 kg density to be filled between Wall and the perforated Gypsum. The complete treatment should be done by provisioning a frame on walls made of GI Studs.	840	SqFt
1.3	Windows Concealment	Concealment of Glass Windows from inside with Byson Board and Gypsum Treatment over GI Frame with Rockwool of 48 kg density to be filled between base and the perforated Gypsum as being proposed for acoustic.	1	Lot
1.4	Acoustical Treatment of Ceiling	Providing and Fixing of Acoustic Grid Ceiling 2' x 2' with 15 mm grid system (NRC 0.7) and supports as required.	300	SqFt

1.5	Double Acoustical Door for Studio	Providing and fixing of Acoustic 55 mm thick single leaf Door of size 7' x 3' or 8' x 4' (as per requirement) with vision panel of 1' x 1' and the door hardware including door closer, handle, lock and a door stopper	2	Nos.
1.6	Real Croma Set	Providing and fixing of 8x8 feet Staright Green Chroma Set over wall. Croma set to be made up of plywood frame between wall and floor. Should be finished with pasting of a high quality mat fiinish carpet of green color with indutrail SR solution and with proper levelling.	1	No.
1.7	Anchor Table	Providing and Fixing of Curved Anchor Table of Size 7'x3'x2.5' (WxDxH) with laminate finish and proper edge binding in suitable ply. The table should have provision for housing Buyer's Logo from Front in minimum size of 1'x1'. Bidder should provide min. 2 x Table Layouts for approval of Project Incharge.	1	No.
1.8	Technical Table for PCR	Providing and Fixing of Technical Table at PCR of size 8' x 3' x 2.5' (WxDxH) with laminate finish and proper edge binding in suitable ply.	1	No.
1.90	Studio Lightening Grid	Providing and Installation of MS (Round Tube of 50mm dia) for Studio Lighting grid of 4'x4' spacing. The structure should be painted in black colour with proper base of primer allpied before the paint.	120	SqFt
1.10	Carpet Flooring	Provisioning &Fixing of 550gsm 50x50 cm thick carpet tiles with rubber base density. Should Includes Pasting with high quality SR adhesive.	300	SqFt
1.11	Mounting Arrangements for Commercial Displays	Providing provision for placing the 43 " Comemrcial Display on the Studio wall as per asthetic looks.	1	No.
1.12	Cable Tray	Providing & Fixing of cable tray 3"x3" covered on top with removable cover for AV cabling placed on the ground along walls or partitions.	Appro x 35	Rft
1.13	Paint Work	Providing & applying on all exposed raw surface etc., with Plastic Emulsion Paint of 'Asian Paints', 'Nerolac' or equivalent make as per the manufacture's specification with a brush &roller,. After leveling the surface to a smooth finish with the help of putties, etc.	Appro x 1000	SqFt
1.14	Chairs for Guests & Anchor	Chair made of good quality products of MSPL Standard Models. Seat plywood made of 12 mm Hot Pressed Back PP Structure.Upholestry PVC structure moulded with prime quality high stretch fabric. Seat and back are firmly connected to the base frame mechanism.Chair height 1080.440W X 420Dbase seat 65 mm thick moulded with PU foam D-45kg/m3 H-20 & 440w X 470H back seat 70 mm thick PP structure moulded fabric mesh. Back seat shell PP structure. 415/515 Armrest fitted to the seat with armrest connecting brackets. Armrest made of prime quality PP structure.Arm rest height from seat 180mm. Height from seat to ground 500 mm. Understructure base steel frame. The product shall be BIFMA member having AIOTA(All India Occupational Therapists Association) for Office Furniture range for ergonomic design.	1	No.
1.15	Computer Chair for Technician	Medium Back Chair made of good quality products of MSPL standard Models..Seat -Plywood made of 12 mm Hot Pressed. Upholstery PVC Structure moulded with prime quality high stretch fabric . PHA (Gas Lift) 105 mm (TDC 171 mm & BDC 66) understructure Base Revolving Pedestal chrome plated steel base with PP hub cap mechanism Torsion Bar adjustment can be operated in seating position.Mechanism provided upright position locking.Chair max height 1125 & min depth 715, 490W X 480D.Base seat 70 mm thick moulded with PU foam D-45kg/m3 H-18, 460W X 560H.Back seat of fabric mesh.Adjustable arm ,Armrest made of PU +LBkt.Seat Height can be adjusted with a pneumatic gas lift.Pedastal pitch centredia 715 mm with casters. Casers made of molded black nylon metal bolt inserted & fitted with 5 nos,twin wheel casters 50 mm dia.	1	No.

ELECTRICAL WORKS FOR TECHNICAL AREA				
1	Work	**ELECTRICAL WORKS FOR TECHNICAL AREA**		
1.1	Instructions	**Electrical devices should be ISI marked and should be from renowned manufacturers only. Local or inferior quality products will not be accepted. Bidders are suggested to do a site survey before bidding. Changes in cost due to any reason beyond the scope of this tender, will not be accepted at a later stage.**		
1.2	Cable Laying	Providing and Laying of 1", 1.5" & 2" PVC Pipes for high rise electrical installations and concealment of cables at required areas.	1	Lot
1.3	Power Extensions	Providing and Laying Power Extension for Airconditioners.	1	Lot
1.4	General Lights	Providing and fixing of LED Ceiling Lights (600x600mm)	6	Nos.
1.5	Distribution Box	Providing and Fixing MCB Junction (Distribution Box)	1	No.
1.6	Shooting Lights Wiring	Providing and Laying of Shooting Light Wiring, Raceay& Shooting Light Sockets for 6+2 power points of 5Amps on lighting grid	8	Nos.
1.7	Power Points	Providing of Power points - Qty 6 of 15 Amps and Qty 6 of 5 Amps on Studio walls	12	Nos.
1.8	Power Points	Providing of Power points - Qty 10 of 15 Amps and Qty 10 of 5 Amps on PCR walls	20	Nos.
1.9	Others	Providing Panel Connectivity with UPS System & Further to Technical Area. Power cable of required specs as per CPWD/PWD guidelines shall be used.	1	Lot
1.10	Misc.	Miscellaneous Power Cables, Power Extension Strips & Points etc. as per Workflow Requirement	1	Lot
	Approved Makes	**Havels, Polycab, Finolex, Syska, Philips**		

AIR-CONDITIONING IN STUDIO & PCR			2	
1	Type	1.5 Ton or better Inverter Split AC with 5 Star or better energy Star Rating. Should Include Required Installation with Additional Copper Pipes, Power Cables, Power Sockets Etc.		
2	Full Load Capacity (100%)	5300 W or better		
4	Compressor Type	High EER Rotary		
5	Capacity TR	1.5 Ton or better		
8	Star Rating	5 Star or better		
9	Coil Type	Copper		
10	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**Daiken/ Mitsubishi/ Samsung/ LG**		

ON LINE UPS SYSTEM WITH BATTERIES			1	
1	Type	Online UPS - 6 KVA Capacity 1 Phase In, 1 Phase Output Includes Installation		
2	Batteries	SMF Battery Bank for 25 Mins Power Backup		
3	Accessory	Should include Battery Rack		
4	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**APC/ Luminous/ Tata Libert/ Eaton**		

FIRE EXTINGUISHER			1	
1	Type	Dry Chemical Powder (DCP) Type 5 Kg Fire Extinguisher		
2	Specifics	Standard Dry Chemical fire extinguishers with sodium bicarbonate-based extinguishing agent to combat Class B and Class C fires		
	Approved Makes	**Industry Standard with Safety Certification**		

CCTV CAMERA			3	
1	Type	The technical area should be equipped with Min. 2MP Full HD Smart Wi-Fi CCTV surveillance. 1 Nos. of CCTV cameras should be placed inside Studio and 1 No. of CCTV camera should be placed inside PCR. The cameras should be Wi-Fi enabled and should support Micro SD Card based recording. The cameras should be equipped with 32 GB of memory card and should have protected access on mobile devices.		
2	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**CP-Plus/ Hikvision/ Bosch/ Philips**		

SYSTEMS INTEGRATION MATERIAL			1	Lot
1	Cabling	It is required to set-up the facility for Full HD/HD operations, therefore all the cabling should seemlessly support required operations.		
2	Installation Material	All installation materials including power cables, interconnection cables, equipment/data racks, connectors, ferruels, ties and other accessories (including nuts, bolts, screws etc.) required for installation of the complete system shall be quoted		
3	System Completeness	Completeness of the system as per bill of material of the tender, will be responsibility of the bidder. If any material is found short within the scope of the tender and during installation because of which equipment is not functional, completion certificate may not be issued		
4	Misc. Sub-System	Additional converters, adapters, mounts or fixtures etc have to be supplied by the bidder to complete the workflow, even if the same are not part of the bill of material.		
	Approved Makes	**Canare, Beldon, Ravtron, Manhattan, Cisco, Netgear, TP-Link**		

TECHNICAL SPECIFICATIONS - NOC - MONITORING, RECORDING, TURNAROUND AND PLAYOUT PRODUCTION FACILITY

S.No.	FEATURE	SPECIFICATIONS	QTY/ UOM	COMPLIANCE (YES/NO)
NETWORK VIDEO STREAMING DECODER			8	
1	Stream Input Protocols	H.264 & H.265 Network Video Streaming Decoder		
2	Stream Input Protocols	Should support RTMP, RTSP, SRT, HLS, UDP or more protocols		
3	Video Output	Min 1 x 3G-SDI or more		
4	Network	Min. 1x RJ45 LAN Interface		
5	Video Resolution	1080p 60/59.94/30/29.97/25/24 720p 60/59.94/50 Or better		
6	Control	Should be with integrated front panel control or handheld remote controller. Should have support for OEM provided control software or control through web user interface.		
7	Other Ports	Min. 2 x USB or more		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Matrox/ Kiloview/ Datavideo/ Magewell		
3G-SDI MULTIVIEWER			2	
1	Type	16 Channel 3G-SDI Multiviewer		
2	Inputs	Min. 16 x 3G-SDI or more		
3	Outputs	Min. 2 x SDI & 1 x HDMI or more		
4	Loop Outputs	Min. 16 or more 3G-SDI		
5	HD Video Standards	720p50, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60, 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30, 1080i50, 1080i59.94, 1080i60		
6	SD Video Standards	525i59.94 NTSC, 625i50 PAL		
7	SDI Video Sampling	YUV 4:2:2 or better		
8	SDI Compliance	SMPTE 259M, SMPTE 292M, SMPTE 296M or better		
9	Control	Built-in Front Panel for Controls RJ45 Ethernet or USB 2.0 for firmware updates Or better		
10	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Apantac/ Avmatrix/ Blackmagic Design		
3G-SDI ROUTER			1	
1	Type	Rackmountable 32x32 3G-SDI Router		
2	Video Formats	1.5 Gbps, 3 Gbps SDI, 270 Mbps DVB-ASI or better		
3	Video Input Digital	3G-SDI Inputs, Min 16x BNC, SMPTE-259/292/424 or better		
4	Video Output Digital	3G-SDI Outputs, Min 16x BNC, SMPTE-259/292/424, Noninverting or better		
5	Ancillary Data	Should pass all SDI embedded ancillary data including audio		
	SDI Compliance	SMPTE-259/292/424 or better		

6	Control Panel	Should support 1RU/2RU external Control Panel Should be supplied Software Control Panel		
7	Reference Input	External with min 1x BNC or more Blackburst or tri-level sync or better		
9	Network Interface	Min. 1x RJ-45, 10/100/1000 Ethernet, Should support Ethernet external control panels, direct connect or networked,		
10	USB Interface	Min. 1x USB/Mini-USB or better		
11	Power Supply	Redundant Dual Power Supply		
12	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Imagine/ AJA/ Ross Video/ Blackmagic Design		

REMOTE CONTROL PANEL FOR ROUTER			**1**	
1	Type	1RU Remote Control Panel for Router		
2	User Interface	Min. 40 buttons with removable overcap for lens chips		
3	Network Interface	Min. 1x RJ-45, 10/100/1000 Ethernet for remote router control via web interface or OEM supplied control software		
4	USB Interface	Min. 1x USB/Mini-USB for configuration		
5	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Imagine/ AJA/ Ross Video/ Blackmagic Design		

4K ULTRA DISPLAY PANEL FOR STAGE FOLDBACK PREVIEW			**2**	
1	Type	55" 4KUHD Resolution LED Display with Android 11		
2	PANEL TECHNOLOGY	VA, D-LED		
3	ASPECT RATIO	16:09		
4	RESOLUTION	(3840*2160)UHD		
5	CONTRAST RATIO	3000:1		
6	OPERATION HOURS	24x7		
7	RESPONSE TIME	8ms		
8	DISPLAY AREA(H x V)	1209.6(H)*680.4(V)mm		
9	RF IN	Min 1 or more		
10	AV IN	Min. 1 or more		
11	USB INPUT (2.0 SUPPORT)	USB 2.0x1; USB 3.0x1 o rmore		
12	HDMI INPUT	Min. 3 or more		
13	HDCP 2.2	Required		
14	SPDIF OUT	Optical or better		
15	RJ-45	Min 1 or more		
16	USB DEVICE SUPPORT	USB Supported HDD		
17	SUPPORTED FORMATS	PICTURE FORMAT: PNG/BMP VIDEO FORMAT: H.265/H.264/H.263/MPEG1/MPEG2/MPEG4/AV1 AUDIO FORMAT: MPEG1/2/MPEG4/AC3/EAC3/AAC/MP3/WMA/FLAC		
18	AUDIO OUTPUT POWER (RMS)	10+10W		
19	DOLBY AUDIO	Required		
20	HDR10	HDR10/HLG or better		
21	BLUETOOTH Ver. (TV)	Required		
22	INTERNET LINK	Required		
23	WIFI TYPE(STANDARD)	802.11a/b/g/n/ac 2.4G/5G 2T2R, Build-in or better		
24	WIFI BAND TYPE	2.4GHz/5GHz or better		
25	CPU	Cortex-A55 x4,1.3GHz or better		
26	GPU	Mali G31 MP2,Open GL ES3.2 or better		
27	OS & VERSION INFO	Android TV 'R' - 11.0 or better		

28	MEMORY FLASH	16GB EMMC or better		
29	RAM	2.0GB , DDR3 2133Mhz or better		
	Approved Makes	Sony/ Panasonic/ Samsung/ Philips		

PROFESSIONAL HEADPHONES FOR PCR AUDIO MONITORING			2	
1	Type	Professional headphones for PCR audio monitoring		
1	Headphone type	Closed-back		
2	Wearing Style	Over-ear		
4	Audio frequency bandwidth	20 - 20000 Hz or Better		
5	Sensitivity headphones	100 dB SPL or Better		
6	Rated Impedance	55 Ohms or Better		
7	Audio Interface	TypeStereo plug: 3.5mm (1/8") with 6.3 mm (1/4") screw-on adapter		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Sennheiser/ Harman/ Audio Technica		

LIVE PRODUCTION SERVER (SOFTWARE & HARDWARE)			**8**	
	Software			
1	Type	Live Production Software		
2	Resolution	4096 x 2160 or better		
3	Overlay Channels	4 or better		
4	Recording	Min. 2 recordings		
5	Streaming	Required with min. 3 simultaneous live streams or better		
6	Fullscreen Output	Required		
7	External Output	Required		
8	Designer	Min. 100+ Built-In Animated Titles, ScoreBoards, Tickers etc. Custom Animated Titles and Import PSD's		
9	Playlist	Required		
10	Professional Colour Correction	Required		
11	Video List	Required		
12	MultiCorder	Required		
13	Instant Replay	1 Camera		
14	External Outputs	Min. 2 or more		
15	Fullscreen Outputs	Min. 2 or more		
16	Virtual Outputs	Min. 4 or more		
17	Scripting	Required		
18	PTZ Control	Required		
19	SRT Outputs	Min. 4 or more		
20	Vertical HD (1920p)	Required		
21	License Type	Perpetual one time purchase with software updates for 12 months		
	Workstation Hardware			
23	Chassis	Rack Mountable/Desktop Style with 1+1 Power Supply		
24	CPU	Min. 12 Core Intel Processor or better		
25	Motherboard	Compatible with above CPU		
26	LAN	10G Dual Ports or better		
27	RAM	Min. 32 GB or better		
28	OS Drive	Min. 2 x 480/500 GB SSD Enterprise Version on SW/HW RAID		
29	Video Drive	Min. 2 x 8 TB 7200RPM Enterprise SAS		
30	Peripherals	**21" VGA/HDMI Monitor (Compatible with KVM Extender), USB/Wired Keyboard & Mouse**		

31	I/O Card	Capture & Playout Card SDI Video Inputs Min 2 x 12Gb/s SD/HD/2K/4K. Supports single/dual link 4:2:2/4:4:4. 2D/3D switchable. SDI Video Outputs Min 2 x 12Gb/s SD/HD/2K/4K. Supports single/dual link 4:2:2/4:4:4. 2D/3D switchable.		
	Approved Makes for Hardware	Dell/ HP/ Supermicro		

POINT TO POINT KVM EXTENDER			**9**	
1	Type	KVM Tranmitter and Receiver pair for Extending local PC VGA/keyboard/Mouse to Remote side. Should support Cat 5e/Cat 6/Cat 6A cable to connect the local and remote units SHould support up to 1280x1024 resolution with access to a computer from the remote console with min. distance of 90 meters.		
	Transmitter			
2	KVM Ports	Min. 1 x USB Type B or C or more Min. 1 x HDB-15/VGA or more		
3	Tx to Rx	Min. 1 x RJ-45 supporting CAT 5e/ CAT 6/ CAT6A cable or better		
4	LED Indicators	Link & Power or better		
5	Operating Temperature	0 to 45 Deg or better		
	Receiver			
6	Console Ports	Min. 2 x USB or more Min. 1 x HDB-15/VGA or more		
7	Tx to Rx	Min. 1 x RJ-45 supporting CAT 5e/ CAT 6/ CAT6A cable or better		
8	LED Indicators	Link & Power or better		
9	Operating Temperature	0 to 45 Deg or better		
10	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	ATEN/ KVM-Tec/ IHSE		

MULTICHANNEL RECORDER			**2**	
1	Type	Multi-Channel HD Recorder with support for recording to network storage (SMB)		
2	Video Input	Min. 4x 3G-SDI BNC, SMPTE-259/292/424, 4:2:2 10-bit Min. 4x HDMI Or better		
3	Video Output	Min. 5x 3G-SDI BNC, SMPTE-259/292/424, 4:2:2 10-bit Min. 1x HDMI Or better		
4	Audio Input	* Min. 4x 2-channel, 24-bit SDI embedded audio, 48 kHz sample rate, synchronous or better * Min. 4x -channel, 24-bit HDMI embedded audio, 32 kHz, 44.1 kHz, 48 kHz sample rates, synchronous or better * Min. 2x XLR input, Line/Mic/+48V Phantom Power Mic Levels +24 dB full scale digital, +/- 0.3 dBFS 20 Hz to 20 kHz response, THD+N <= -90 dB or better		

5	Audio Output	* Min. 4x 2-channel, 24-bit SDI embedded audio, 48 kHz sample rate, synchronous or better * Min. 1x 2-channel, 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous or better Min 1 x Stereo unbalanced headphone jack with volume control or better * Min. 2-channel unbalanced RCA connectors or better		
6	Video Conversion	Deinterlacing for recording, PsF to progressive or better		
7	Timecode	SDI RP188/SMPTE 12M, LTC input, TC Super Out or better		
8	External Reference Input	Min. 2x BNC, Looping, nonterminating or better		
9	Network Interface	Min. 1x LAN connector (RJ-45 connector, 10/100/1000) or better		
10	Video Formats	(HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 (HD) 1080i 50, 59.94, 60 (HD) 1080PsF 23.98, 24, 25, 29.97, 30 (HD) 720p 50, 59.94, 60 (SD) 525i 59.94 (SD) 625i 50 Or better		
11	Video Codec Support	Should supports H.264/MPEG-4 with up to 25 Mbps recorded output or better		
12	Audio Codec Support	Min. 4x audio compression codecs with Min. 2-channel audio support for each, up to 320 kbps, MPEG-4 AAC-LC or better		
13	Codec Container	MP4 or more		
14	Removable Storage	Min. 4x USB 3.2 Gen 1 (5 Gbps) ports or better with support for USB 2.0 (480 Mbps), USB 3.0 (5 Gbps) or better. Should support FAT16, FAT32, exFAT or more File Systems.		
15	Network Storage	Should support recording on Min. 1 x Network Storage (SMB) via GigE interface		
16	Control/User Interface	Dedicated backlit controls and menu buttons or better TFT LCD display with Video Monitor and Menu/Status Overlays or better		
17	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Datavideo/ AJA/ Atomos/ Blackmagic Design		

NEARLINE NAS STORAGE			**1**	
1	Type	240TB Raw Capacity NAS Storage with Dual Controller		
2	CPU	Intel Xeon Quad-Core 64-bit Processor or better		
3	RAM	Should be equipped with 16GB DDR4 RAM for each Controller with upgrade support up to 128GB for each Controller		
4	Drive Bays	Min. 24 or more		
5	Drive Interface	SAS 12 Gb/s or better		
6	Hard Disk Drives	Min. 24 x 10TB SAS Drives WITH 7200 RPM or better		
7	Spare Drives	Min. 2 x 10TB SAS Drives with 7200 RPM shall be supplied as standby spares		
8	Maximum Internal Raw Capacity	Should support internal raw capacity of Min. 450 TB or more		
9	Drives	Hot swappable		
10	Interfaces	Min. 1x USB2.0, 2 x USB 3.0, 1 x UPS Port, 1 x Control Port or more		
11	RJ45 LAN Ports	Min. 1x 1Gbe, 2 x 10 Gbe or more		

12	Expansion Ports	Min. 2x 12Gb/s SAS Wide Port		
13	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Infortrend/ QSAN/ DDP/ Promise		

24 PORT 10GIG ETHERNET SWITCH			**2**	
1	Type	24-Port 10Gig with 2 Dedicated 10Gig Ethernet Uplink Ports		
2	Ports	Min. 24 x 10G RJ-45 copper ports		
3	SFP+ Ports	Min. 2 x 10 Gig (shared)		
4	Form Factor	Rackmount		
5	Packet buffer memory	Min. 3MB or better		
6	Bandwidth	480Gbps or better		
7	MAC Address database size	Min. 32K or better		
8	VLAN	Min. 64 or better		
9	Multicast groups	128 or more		
10	Max number of source ports allowed (many to one port mirroring)	23 or more		
11	Fan(s)	Min. 2 active fans		
12	IEEE 802.3az	Required		
13	Max power consumption	80 Watts or better		
14	LED Indications	Power, Speed, Fan, Link/Activity or better		
15	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Cisco/ Netgear/ TP-Link		

SDI RECLOCKING DISTRIBUTON AMPLIFIER			8	
1	Type	1x4 HD-SDI/SDI distribution amplifier/repeater		
2	Input	Min. 1 x 3G/HD/SD-SDI input		
3	Output	Min. 4 x 3G/HD/SD-SDI re-clocked/equalized outputs		
4	Audio	Should support embedded SDI Audio		
5	Feature	Should support automatic cable equilisation and signal retiming		
	Rack Mounting Kit	Should be supplied with Rack Mounting Kit		
6	Power	DC power through threadable locking connector		
7	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	AJA/ Avmatrix/ Blackmagic Design/ Datavideo		

UP/DOWN/CROSS SCALING CONVERTER			2	
1	Type	3G-SDI/ HDMI Scaling Cross Converter		
2	Input	HDMI Type A x 1, SD/HD/3G-SDI x 1, Analog Audio (1/8" Jack) x 1 or better		
3	Output	SD/HD/3G-SDI x 1, HDMI Type A x 1, Audio SDI/HDMI Embedded or better		
4	SDI Input Formats	1080p 60/59.94/50/30/29.97/25/24/23.98 1080Psf 30/29.97/25/24/23.98 720p 60/59.94/50/30/29.97/25/24/23.98 625i 50 525i 59.94 or better		
5	SDI Video Rate	SD/HD/3G-SDI or better		
6	SDI Color Space & Precision	YUV 4:2:2 or better		

7	HDMI Input Formats	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50/30/29.97/25/24/23.98 576p 50, 576i 50 480i 60/59.94 or better		
8	HDMI Color Space & Precision	YUV 4:2:2 or better		
9	SDI/HDMI Output Format	1080p 60/59.94/50/30/29.97/25/24/23.98 1080i 60/59.94/50 720p 60/59.94/50 or better		
10	Power	DC Power Adapter		
11	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	AJA/ Avmatrix/ Blackmagic Design/ Datavideo		

DESKTOP COMPUTER SYSTEM FOR EQUIPMENT CONFIGURATION & MONITORING			1	
1	Type	Desktop Computer System		
2	Processor	Intel i5, 12 generation or better		
3	RAM	Min 8 GB DDR4 or better		
4	Media Drive	Min 500 GB M.2 2230, PCIe NVMe, SSD or better		
5	Ports	Min 2 x USB3.0 and 1 x USB2.0		
6	Peropherals	Wired Keyboard and Mouse Min 21" or bigger HDMI FHD display		
7	Softwares	OS - Windows 11 Pro English or better (Perpetual License) and Microsoft Office 365 license (Subscription License for 3 Years)		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	HP/ Dell/ Lenovo		

IP PBX (VoIP HOTLINE NETWORK)			1	
1	Type	A comprehensive IP based PBX solutions based on Server Gateway Architecture. Should support for integrated telephony solution for Video conferencing devices, Analog & IP Phones, PSTN gateways over IP architecture. The solution must offer users the ability to use their UC clients and IP Phones outside of the enterprise (Internet) to make audio and video call with or without VPN.		
2	Codec Support	G.711, G.729, G.729ab, g.722 or better		
3	System Feature	The system must support an inbuilt reporting tool for calls. Reports that are provided include Calls on a user basis, Calls Through gateways, Simplified Call Quality.		
4	System Feature	Should Support for configuration database (contains system and device configuration information, including dial plan)		
5	System Feature	Having inbuilt administration web based administration. No additional thick client for administration on the Admin PC, must also support HTTPS for management.		
6	System Feature	must support SSL for LDAP directory integration.		
7	System Feature	All Hardware & Software with license (perpetual) required for providing above Security measures must be incorporated.		
8	Security Feature	Access to the system must be secure for the purpose of access over IP network. The protection of signaling connection over IP by means of authentication, integrity and encryption must be		

		carried out using TLS.		
9	Security Feature	There must be provision of defining password aging, one time passwords. Provision shall be available to bar unauthorized user to connect to the system. The system must monitor and report the following types of security \ violation login Violations, authorization code violation station security code violation etc.		
10	Security Feature	IP Phones must not support direct, external initiated, connections via HTTP, telent, FTP, TFTP or any other protocol as means to prevent distributed Denial of Service attack exploitation, except those required for routine firmware upgardes.		
11	Security Feature	Role Based Account Management to define different levels of administrator access depending on specific function responsibility		
12	Systsem Capability	The system Must Have IP Capability for interfacing & Communicating with Voice, Video and Data infrastucture		
13	Systsem Capability	The architecture must support a minimum of _30 IP Extns , expandable upto 100 user.		
14	Systsem Capability	The system should be expandable by adding licenses, no additional hardware / card should be required for expansion.		
15	Systsem Capability	Extension mobility, Call forward, Message-waiting indicator (MWI), Do not Disturd, Hunt Groups, Distributed call proccessing, Hot Desking, Group Paging, Flexible numbering Schemes, Time of Day and Date Routing of Calls, Call Forwarding, Call Hold, Call Park, Ring Back When Free, Call Waiting or better		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Cisco/ Snom/ Avaya/ Poly		

IP PHONE (VoIP HOTLINE NETWORK)			1	
1	Type	IP Desk Phone with support for wideband hands-free talking (speakerphone), Digital Signal Processor (DSP) enhanced audio quality, 2-port Gigabit Ethernet switch (RJ45) Power over Ethernet (PoE) and USB headset ready.		
2	Display	High-resolution 2.7” graphical TFT display or better		
3	Features	10 SIP identities / accounts, XML browser, Call lists for dialed, received, missed calls, Local directory with 1000 entries, Multiple language support, DTMF in-band / out-of-band / SIP-INFO, Interoperable with all major IP PBX platforms or better		
4	Call Features	Speed dialing, URL dialing, Local dial plan, Automatic redial on busy, Caller identification, Call waiting, Call blocking , Auto answer, Hold, Blind and attended transfer, Call forwarding, 3-way conferencing on the phone, Multicast paging, DND mode, Keyboard lock, Unified Communications ready or better		

5	Audio Codecs	G.711 A-law, μ-law, G.722 (wideband), G.726, G.729AB, GSM 6.10 (FR), Built-in assignable ringtones, Comfort Noise Generator (CNG), Voice Activity Detection (VAD) or better		
6	User interfaces and setup	Configurable though web interface or better		
7	Protocols	SIP (RFC3261) DHCP, NTP HTTP / HTTPS / TFTP LDAP (Directory) Dual Stack IPv4 / IPv6 or better		
8	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Cisco/ Snom/ Avaya/ Poly		

8 PORT GIGABIT PoE ETHERNET SWITCH FOR POWERING IP PHONES			1	
1	Type	8 Port Gigabit PoE Etehrnet Switch		
2	Ports	Min.8 or more 10/100/1000 Mbps fast ethernet ports		
3	PoE	Flex or Fixed PoE for powering Camera and other offered devices. PoE power should be suitable for proposed equipment.		
4	Flow Control	Flow control is required for protection against data loss		
5	Distance	Min. Distance of 100 Meters or more		
6	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Netgear/ Cisco/ D-Link/ TP-Link		

TECHNICAL FURNITURE			2	
1	Type	Customized Operations Techncal Tables; 1 x For Monitor & Control Station 1 x For Production & Playout Station Professional PCR Tables with Mezzanine Shelf and Equipment Mounting Cut Outs, Cable Routing & Management Structure, made as per requirement. Firm with award of contract has to provide 3D drawings for approval of project incharge.		
	Approved Makes	Industry Standard (As per approval from Project Incharge)		

COMPUTER CHAIRS			5	
1	Computer Chair for Technician	Medium Back Chair made of good quality products of MSPL standard Models..Seat -Plywood made of 12 mm Hot Pressed. Upholstery PVC Structure moulded with prime quality high stretch fabric . PHA (Gas Lift) 105 mm (TDC 171 mm & BDC 66) understructure Base Revolving Pedestal chrome plated steel base with PP hub cap mechanism Torsion Bar adjustment can be operated in seating position.Mechanism provided upright position locking.Chair max height 1125 & min depth 715, 490W X 480D.Base seat 70 mm thick moulded with PU foam D-45kg/m3 H-18, 460W X 560H.Back seat of fabric mesh.Adjustable arm ,Armrest made of PU +LBkt.Seat Height can be adjusted with a pneumatic gas lift.Pedastal pitch centredia 715 mm with casters. Casers made of molded black nylon metal bolt inserted & fitted with 5 nos,twin wheel casters 50 mm dia.		
	Approved Makes	Industry Standard (As per approval from Project Incharge)		

AIR-CONDITIONING IN STUDIO & PCR			3	
1	Type	1.5 Ton or better Inverter Split AC with 5 Star or better energy Star Rating. Should Include Required Installation with Additional Copper Pipes, Power Cables, Power Sockets Etc.		
2	Full Load Capacity (100%)	5300 W or better		
4	Compressor Type	High EER Rotary		
5	Capacity TR	1.5 Ton or better		
8	Star Rating	5 Star or better		
9	Coil Type	Copper		
10	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	Daiken/ Mitsubishi/ Samsung/ LG		

ON LINE UPS SYSTEM WITH BATTERIES			1	
1	Type	Online UPS - 10 KVA Capacity 1+1 Hot Standby Redundant 3 Phase In, 1 Phase Output Includes Installation		
2	Batteries	SMF Battery Bank for 25 Mins Power Backup		
3	Accessory	Should include Common Battery Rack		
4	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	APC/ Luminous/ Tata Libert/ Eaton		

COMPUTER CHAIRS			1 Lot	
1	Computer Chair for Technician	Electrical Work as per Electrical Workflow Requirement for Complete Technical Area including but not limited to Power Switch & Sockets, General Lighting, Distrbution Box, Raceways, Conduits, Batons, Switch Tops, Eelctrical Cable laying for entire technical area. Bidder should include connectivity from Main Power Panel to Distribution Box.		
	Approved Makes	Havels, Polycab, Finolex, Syska, Philips		

FIRE EXTINGUISHER			2	
1	Type	Dry Chemical Powder (DCP) Type 5 Kg Fire Extinguisher		
2	Specifics	Standard Dry Chemical fire extinguishers with sodium bicarbonate-based extinguishing agent to combat Class B and Class C fires		
	Approved Makes	**Industry Standard with Safety Certification**		

CCTV CAMERA			3	
1	Type	The technical area should be equipped with Min. 2MP Full HD Smart Wi-Fi CCTV surveillance. 3 Nos. of CCTV cameras should be placed inside the NOC at with proper placement to cover the entire spectrum of the room. The cameras should be Wi-Fi enabled and should support Micro SD Card based recording. The cameras should be equipped with Min. 32 GB of memory card and should have protected access on mobile and computer devices.		
2	Supplied Accessories	All necessary cables and accessories should be supplied for completeness of the system		
	Approved Makes	**CP-Plus/ Hikvision/ Bosch/ Philips**		

SYSTEMS INTEGRATION MATERIAL			1 Lot	

1	Cabling	It is required to set-up the facility for Full HD/HD operations, therefore all the cabling should seemlessly support required operations.		
2	Installation Material	All installation materials including power cables, interconnection cables, equipment/data racks, connectors, ferruels, ties and other accessories (including nuts, bolts, screws etc.) required for installation of the complete system shall be quoted		
3	System Completeness	Completeness of the system as per bill of material of the tender, will be responsibility of the bidder. If any material is found short within the scope of the tender and during installation because of which equipment is not functional, completion certificate may not be issued		
4	Misc. Sub-System	Additional converters, adapters, mounts or fixtures etc have to be supplied by the bidder to complete the workflow, even if the same are not part of the bill of material.		
	Approved Makes	**Canare, Beldon, Ravtron, Manhattan, Cisco, Netgear, TP-Link**		

List of Approved Make for Civil & Electrical works

The following are approved brand makes/manufacture's makes listed below. In case it is established that material as listed below is not available in the market, approved equivalent material and finished of any other specialized brand names/ manufacturer's makes may be used as per approval of EdCIL.

Sl No	Particulars	Make List
1	MDF/Plywood	NUWUD/Century/Asain/Archid/GREEN PLY
2	Laminated sheet	Archidlam National /Formica /Greenlam /MERINO
3	Particle board (only for modular w/s &storage Unit)	Archidply /Greenlam/Century ISI make
4	Marine grade plywood	Century, Kitply, Greenply, Anchor, Orchid, Prince
5	Adhesive	Fevicol / Araldite/Anchor
6	MarinegradeBlockBoard	Century ,Kitply, Greenply, Anchor, Orchid
7	Locks	Godrej/Haffle/Hettich/Ebcoor
8	Storage Hardware	Godrej/Haffle/Hettich/Ebcoor
9	Screws/Nails & other accessories	GKW/Nettle ford or t
10	False Flooring	Kebao, Armstrong, AMF
11	Carpet	Unitex, Armstrong,
12	Plain/Toughened glass	Saint-Gobain,Indo Asahi,Modi
13	Hardware	Dorma/Euro/Ozone/Enox/Ebco/Hamco
14	GI Sections	India Gypsum / SaintGobin /Jindal or
15	Acoustical False Ceilings :Mineral fiber board	Armstrong, Hunter Douglas /Peritex
16	Paint	Asian/Nerolac/Dulex/ Berger
17	Light Fittings	Philips/Wipro/Osram/Havells/Crompton
18	FRLS insulated Elec.Wire /cable armored, unarmoured, Sheathed, unsheathed, flexible cable, Multicore, single core cable, flat cable	Finolex/Ploycab/Havells/RRkabel/KEI
19	PVC conduit (HEAVY DUTY ONLY)	CAP/Finolex/Polycab
20	MCB&MCCB	Legrand/Schneider/ABB/Siemens/L&T
21	Light Fixture & Lamps	Philips/Wipro / Osram/ Havells/ CromptionG./Halonix
22	Modular Switches	ABB/Legrand/MK/ANCHOR/ELLEYS/ROMA

Chair for Technician

Revolving Chair

Medium Back Chair made of good quality products of MSPL standard Models..Seat -Plywood made of 12 mm Hot Pressed. Upholstery PVC Structure moulded with prime quality high stretch fabric . PHA (Gas Lift) 105 mm (TDC 171 mm & BDC 66) understructure Base Revolving Pedestal chrome plated steel base with PP hub cap mechanism Torsion Bar adjustment can be operated in seating position.Mechanism provided upright position locking.Chair max height 1125 & min depth 715, 490W X 480D.Base seat 70 mm thick moulded with PU foam D-45kg/m3 H-18, 460W X 560H.Back seat of fabric mesh.Adjustable arm ,Armrest made of PU +LBkt.Seat Height can be adjusted with a pneumatic gas lift.Pedastal pitch centredia 715 mm with casters. Casers made of molded black nylon metal bolt inserted & fitted with 5 nos,twin wheel casters 50 mm dia.



Chair for Guest and Anchor

Chair made of good quality products of MSPL Standard Models. Seat plywood made of 12 mm Hot Pressed Back PP Structure.Upholestry PVC structure moulded with prime quality high stretch fabric. Seat and back are firmly connected to the base frame mechanism.Chair height 1080.440W X 420Dbase seat 65 mm thick moulded with PU foam D-45kg/m3 H-20 & 440w X 470H back seat 70 mm thick PP structure moulded fabric mesh. Back seat shell PP structure. 415/515 Armrest fitted to the seat with armrest connecting brackets. Armrest made of prime quality PP structure.Arm rest height from seat 180mm. Height from seat to ground 500 mm. Understructure base steel frame. The product shall be BIFMA member having AIOTA(All India Occupational Therapists Association) for Office Furniture range for ergonomic design.



CHAPTER-VII

ANNEXURE-II

<< Bidder's Organization Letter Head >>

DECLARATION SHEET

We,_____hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

The rates quoted in the financial bids are subsidized due to academic discount given to EdCIL INDIA LTD.

We, further specifically certify that our organization has not been Black Listed/ De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.	NAME & ADDRESS OF THE Vendor/ Manufacturer/ Agent
1 Phone	
2 Fax	
3 E-mail	
4 Contact Person Name	
5 Mobile Number	
6 TIN Number	
7 PAN Number	
(In case of on-line payment of Tender Fees) 8 UTR No. (For Tender Fee)	
(In case of on-line payment of EMD) 9 UTR No. (For EMD)	

10 MSME Details i. Registration No.	
ii. Gender	
iii. SC/ST	
11 Kindly provide bank details of the bidder in the following format: a) Name of the Bank	
b) Account Number	
c) Kindly attach scanned copy of one Cheque book page to enable us to return the EMD to unsuccessful bidder	

(Signature of the Bidder)

Name: _____

Seal of the Company

Annexure III

LETTER OF UNDERTAKING
(ON THE LETTER HEAD OF THE BIDDER)

To

Chief General Manager (EIS & EPS)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A,
NOIDA – 201301 (U.P.), India

Sir,

SUBJECT-"*Setting Up of Studio and Network Operating Centre in IGNOU Campus, New Delhi and Rate Contract for Setting Up of Studio in Regional centers of IGNOU on Pan India basis*"

This bears reference to EdCIL*NIT No* **EdCIL/EIS & EPS/IGNOU/Studio/2024-25 Dated:29.06.2024** We, hereby, accept all the terms and conditions for submitting bid as mentioned in this Bid Document.

We hereby certify that no terms and conditions have been stipulated by us in the Financial Bid.

We warrant that the services do not violate or infringe upon any patent, copyright, trade secret or other property right of any other person or other entity. We agree that we shall not prevent EdCIL from any claim or demand, action or proceeding, directly or indirectly resulting from or arising out of any breach or alleged breach of any of the terms & conditions of bid document and contract.

The above document is executed on ___/___/2024 at (place) _____ and we accept that if anything out of the information provided by us is found wrong, our bid/ work order shall be liable for rejection.

Thanking you,

Yours faithfully,

Name of the Bidder_____

Authorized Signatory_____

Seal of the Organization_____

Date:

Place:

ANNEXURE IV

UNDERTAKING

This is to confirm that we M/s _____ (give full address) have not been declared neither **failed to perform on any Agreement, nor have been expelled from any project or Agreement nor any Agreement terminated** for breach by the us (Agency) in any of the government department and public sector undertaking /enterprise or by any other Client in India, in last five year before release of advertisement.

If the above information found false at any stage after the placement of Work Order / Agreement, EdCIL (India) Limited (Ed.CIL), 18-A, Sector 16-A, Noida will have full right to cancel the Contact and forfeit the Performance Guarantee. All the direct and indirect cost related to the cancellation of the order will be borne by us besides any legal action by Ed.CIL which shall be deemed fit at that point of time.

Authorized Signatory

Note: *The undertaking regarding the non-blacklisting of firm is to be submitted on a non-judicial stamp paper of Rs. 100/- (Rupees Hundred only).*

ANNEXURE V

Annual Average Turn Over: -

Sl. No.	Financial Year	Annual Turn over
1.	2020-21	
2.	2021-22	
3.	2022-23	
	Average of past Three F.Y.	

Note: Certificate from Statutory Auditor/ Chartered Accountant certifying balance sheet only for all 03 years to be attached.

ANNEXURE-VI

Details of Projects Completed During Last 3 years

Name of the Firm:

S. No.	Name of the Projects	Order No. & Date	Description & Quantity of ordered items	Value of Order	Date of Start	Scheduled Date of Completion	Actual Date of Completion	Reason for Delay, if any
1.								
2.								
3.								
4.								
5.								
6.								
7.								

Signature with Seal

ANNEXURE-VII

List of Permanent Technical Persons:

S.No	Name of person	Designation	Years of experience	Contact Number

Signature of Bidder

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

ANNEXURE-VIII

POWER OF ATTORNEY

Know all men by these presents, we…… (name of firm and address of the registered office) do hereby constitute, nominate appoint and authorize Mr./Ms……..son/daughter/wife of and presently residing at……..., who is presently employed with /retained by us and holding position of…….as our true and lawful attorney
(hereinafter referred to as the "Authorized Representative") to do in our name and on our behalf, all such acts, deeds and things are as necessary or required in connection with or incidental to submission of our proposal for and selection as the <project title> for the <name of the client>……project, proposed to be developed by the
…….. (the "client") including but not limited to signing and submission of all applications, proposals and other documents and writings, participating in pre bid and other conferences and providing information /responses to the client, representing us in all matters before the Client, signing and execution of all contracts and undertakings consequent to acceptance of our proposal and generally dealing with the client in all matter in connection with or relating to or arising out of our Proposal for the said project /or upon award thereof to us till the entering into of the Agreement with the client.

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawful done or caused to be done by our said Authorized Representative pursuant to and in exercise of the powers conferred by this power and Attorney and that all acts, and things done by our said Authorized Representative in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

[IN WITNESS WHEREOF WE……THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON
THIS …….. DAY OF …….. 2024.

For …… (Name and registered address of client)

(Signature, name, designation, and address)

Witness:

1. (Signature, name and address)

2. (Signature, name and address)

Notarized

Accepted

……

(Signature, name, designation, and address of the attorney)

Notes:

1. The mode of the execution of the power of Attorney shall be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required the same should be under seal affixed in accordance with the required procedure.
2. Wherever required, the applicant should submitted for verification the extract of the charter documents and other documents such as a resolution/Power of Attorney in favor of the person executing this Power of Attorney for delegation of power hereunder on behalf of the applicant.
3. For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power and Attorney is being issued. However, the Power of Attorney provided by the applicants from countries that have signed The Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy it is carries a conforming Apostle certificate.

ANNEXURE-IX

LETTER OF BID SUBMISSION

To,

Chief General Manager,
EIS & EPS
EdCIL (India) Limited,
Ed.CIL House, 18A, Sector- 16A,
NOIDA- 201 301 (U.P)

SUBJECT-*"Setting Up of Studio and Network Operating Centre in IGNOU Campus, New Delhi and Rate Contract for Setting Up of Studio in Regional centers of IGNOU on Pan India basis"*

-Submission of Bid -

Sir,

Having examined the details given in Notice Inviting Bid & Bid Document for the above work, I/we hereby submit the relevant information.

1. I/We hereby certify that all the statements made and information supplied in the enclosed form _____ and accompanying statements are true and correct.

2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.

3. I/We submit the following **certificates** in support of our suitability, technical knowledge and capability for having successfully completed the following works:

S. No.	Name of Work	Certificate From

4. Earnest Money Deposit amounting to Rs. ---------- in the form of DD/Pay Order No. ---------- dated ---------- issued by ---------- Bank is submitted.

Enclosures:

Date of Submission :

ANNEXURE – X

Name of the Bank: _____

To

EdCIL (India) Limited, Noida

PERFORMANCE BANK GUARANTE FORMAT

In consideration of the Chairman and Managing Director, EdCIL acting through _____ (Designation & address of Contract Signing Authority), (hereinafter called **"EdCIL (India) Limited"** having agreed under the terms and conditions of agreement/ Contract Acceptance letter No. _____ dt _____ Made between _____ (Designation & address of contract signing Authority) and _____ (here in after called "the said Agency" for the work _____ (here in after called "the said agreement") having agreed for submission of a irrevocable Bank Guarantee Bond for ₹ _____ (₹ _____ only) as a performance security Guarantee from the Agency for compliance of his obligations in accordance with the terms & conditions in the said agreement.

1. We _____ (Indicate the name of the Bank) hereinafter referred to as the Bank, undertake to pay to the EdCIL (India) Limited an amount not exceeding ₹ _____ (₹ _____ only) on demand by the EdCIL (India) Limited.

2. We _____ (Indicate the name of the bank, further agree that (and promise) to pay the amounts due and payable under this guarantee without any demur merely on a demand from the EdCIL (India) Limited through the CGM, EdCIL (India) Limited or _____ (Designation & Address of contract signing authority), stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the EdCIL (India) Limited by reason of any breach by the said Agency of any of the terms of conditions contained in the said agreement or by reason of the Agency failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding ₹ _____ (₹ _____ Only).

3. (A) We _____ (indicate the name of Bank) further undertake to pay to the EdCIL (India) Limited any money so demanded notwithstanding any dispute or dispute raised by the Agency in any suite or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.

53.1.1.1.1 The payment so made by us under this Performance Guarantee shall be a valid discharge of our liability for payment there under and the Agency shall have no claim against us for making such payment.

4. We _____ (Indicate the name of bank) to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the EdCIL (India) Limited under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by _____

   (Designation & Address of contract signing authority) on behalf of the EdCIL (India) Limited certify that the terms and conditions of the said agreement have been fully and properly carried out by the said Agency and accordingly discharges this guarantee.

5 (a) Not withstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the EdCIL (India) Limited or until (date of validity/ extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the EdCIL (India) Limited within validity/ extended period of validity of guarantee from the date aforesaid.

   (b) Provided always that we _____ (indicate the name of the Bank) unconditionally undertakes to renew this guarantee or to extend the period of guarantee form year to year before the expiry of the period or the extended period of the guarantee, as the case shall be on being called upon to do so by the EdCIL (India) Limited If the guarantee is not renewed or the period extended on demand, we _____ (indicate the name of the Bank) shall pay the EdCIL (India) Limited the full amount of guarantee on demand and without demur.

6. We _____ (indicate the name of Bank) further agree with the EdCIL (India) Limited that the EdCIL (India) Limited shall have the fullest liberty without our consent and without effecting in any manner out of obligations hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to the powers exercisable by the EdCIL against the said Agency and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Agency for any bearance act or omission on the part of the EdCIL (India) Limited or any indulgence by the EdCIL (India) Limited to the said Agency for by any such matter or thing whatsoever under the law relating to sureties for the said reservation would relive us from the liability.

7. This guarantee will not be discharged by any change in the constitution of the Bank or the Agency.
8. We, _____ (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the EdCIL (India) Limited in writing.

9. This guarantee shall be valid up to (Date of Completion plus Handholding Period). Unless extended on demand by EdCIL (India) Limited Notwithstanding anything to the contrary contained hereinbefore, our liability under this guarantee is restricted to Rs…….. (Rs……..only) unless a demand under this guarantee is made on us in writing on or before…….. we shall be discharged from our liabilities under this guarantee thereafter.

Dated: the Day of For

(indicate the name of bank)

Signature of Banks Authorized official

Witness (Name)_____

Designation with Code No. ---------

1 Full Address----------

2.

ANNEXURE-XI

PROFORMA PRE CONTRACT INTEGRITY PACT

GENERAL

This pre-contract Agreement (hereinafter called the Integrity Pact) is made on ___ day of the month of …. 2024, between, on one hand, acting through Shri/Smt. _____, Designation, EdCIL (India) Limited (hereinafter called the "BUYER"/ "EdCIL" interchangeably, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part

AND

M/s _____ represented by Shri _____, Chief Executive Officer (hereinafter called the "BIDDER/Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the EdCIL proposes to procure services towards "***"Setting Up of Studio and Network Operating Centre in IGNOU Campus, New Delhi and Rate Contract for Setting Up of Studio in Regional centers of IGNOU on Pan India basis"*** for its clients and BIDDER/Seller is willing to offer the said services and related items as referred to in the Bid document no. ……/ 2024 Dated ……..2024.

WHEREAS the BIDDER is a private company /public company / Government undertaking / partnership / registered expert agency, constituted in accordance with the relevant law in the matter and the EdCIL is a Public Sector Undertaking under Ministry of Human Resource Development performing its functions.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

Enabling the EdCIL to obtain the desired services as referred to in the Bid document no. …… dated ……..2024 at a competitive rate in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement and Enabling BIDDERs to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the EdCIL will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

1. Commitments of the EdCIL

a) The EdCIL undertakes that no official of the EdCIL, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

b) The BUYER will, during the pre-contract stage, treat all BIDDERs alike, and will provide to all BIDDERs the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERs.

c) All the officials of the EdCIL will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the EdCIL with full and verifiable facts and the same is prima facie found to be correct by the EdCIL, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings shall be initiated by the EdCIL and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the EdCIL the proceedings under the contract would not be stalled.

3. **Commitments of Bidders**

The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:

a) The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the EdCIL, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

b) The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the EdCIL or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with the Government.

c) Bidders shall disclose the name and address of agents and representatives and Indian BIDDERs shall disclose their foreign

principals or associates.

d) BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.

e) The BIDDER further confirms and declares to the EdCIL that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the EdCIL or any of its functionaries, whether officially or unofficially to the award to the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation, as the case shall be for satisfactory performance of the proposed terms of Bidder.

f) The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the EdCIL or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

g) The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

h) The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

i) The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the EdCIL as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.

j) The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

k) The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

l) If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the EdCIL, or alternatively, if any relative of an officer of the EdCIL has financial interest / stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of Bid.

m) The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the EdCIL.

4. **PREVIOUS TRANGRESSION**

a) The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this integrity pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the bid process.

b) The BIDDER agrees that if it makes incorrect statement on this subject. BIDDER can be disqualified from the Bid process or the contract, if already awarded, can be terminated for such reason.

5. **EARNEST MONEY DEPOSIT**

5.1 While submitting Technical bid, the BIDDER shall deposit an amount of Rs. ……. as Earnest Money with the EdCIL through Account Payee Bank Draft or a Pay Order in favour of EdCIL (India) Limited.

5.2 The instrument for Security Deposit made shall be valid up to the specified period and the bidder shall be liable to keep the said instrument valid for such extended period as the case shall be for satisfactory performance of the terms of Bidder above referred till the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the EdCIL, including warranty period, whichever is later.

5.3 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining of Performance Bond in the corresponding Contract governing such agreement that the provisions of Sanctions for Violation shall be applicable for encashment of Performance Bank Guarantee deposited towards forfeiture of said amount in case of a decision by the EdCIL to forfeit the same without assigning any reason for imposing such sanction.

5.4 No interest shall be payable by the EdCIL to the BIDDER on Earnest Money Deposit for the period of its currency.

6. **SANCTIONS FOR VIOLATIONS**

a) Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the EdCIL to take all or any one of the following actions, wherever required:

i. To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

ii. The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit / Performance Bond (Bank Guarantee) (after the contract is signed) shall stand forfeited either fully or partially, as decided by the

EdCIL and the BUYER (EdCIL) shall not be required to assign any reason therefore.

iii. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.

iv. To recover all sums already paid by the EdCIL, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR as the case shall be. If any outstanding payment is due to the BIDDER from the EdCIL in connection with any other contract for any other stores or on any account whatsoever and by whatsoever name called, such outstanding payment could also be utilized to recover the aforesaid sum and interest thereto.

v. To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the EdCIL, along with interest.

vi. To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the EdCIL resulting from such cancellation/rescission and the EdCIL shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

vii. To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which shall be further extended at the discretion of the EdCIL.

viii. To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.

ix. In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the EdCIL with the BIDDER, the same shall not be opened.

x. Forfeiture by way of encashment of Performance Bond in case of a decision by the EdCIL to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

b) The EdCIL will be entitled to take all or any of the actions mentioned at Para 6.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of any offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or

any other statute enacted for prevention of corruption.

c) The decision of the EdCIL to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, an Independent Monitor(s) shall be appointed by EdCIL, in case of breach of the provisions of the pact.

7. INDEPENDENT MONITORS

a) An Independent monitor (s) shall be appointed by EdCIL, incase of breach of the provisions of the pact.

b) The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

c) The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.

d) Both the parties accept that the Monitors have the right to access all the documents relating to the project / procurement, including minutes of meetings.

e) As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the EdCIL.

f) The BIDDER(s) accept that the Monitor has the right to access without restriction to all Project documentation of the EdCIL including that provided b the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Sub-bidders. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Sub-bidder(s) with confidentiality.

g) The EdCIL will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

h) The Monitor will submit a written report to the designated Authority of BUYER/Secretary in the Department/within 8 to 10 weeks from the date of reference or intimation to him by the EdCIL / BIDDER and, shall the occasion arise, submit proposals for correcting problematic situations.

8. FACILITATION OF INVESTIGATION

In case of any allegation of violation of any provisions of this Pact or payment of commission, the EdCIL or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER

shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. **LAW AND PLACE OF JURISDICTION**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the EdCIL.

10. **OTHER LEGAL ACTIONS**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that shall follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

11. **VALIDITY**

a) The validity of this Integrity Pact shall be governed by the terms of the ***NIT No*** **EdCIL/EIS & EPS/IGNOU/Studio/2024-25 Dated: 29.06.2024.**towards complete execution of the contract to the satisfaction of both the EdCIL and the BIDDER/Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract awarding the Bidder with successful bidder.

b) Shall one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12. The parties hereby sign this Integrity Pact at _____ on _____.

EdCIL (India) Limited Name of the Officer : Designation:	BIDDER CHIEF EXECUTIVE OFFICER
Witness: 1. _____ 2. _____	Witness 1. _____ 2. _____

(The Pre Contract Integrity Pact shall be modified based in line with the conditions of the Bid Documents).

ANNEXURE XII

MANUFACTURER AUTHORIZATION FORM

No. _____ dated _____

To

_____
_____
_____

Dear Sir:

Bid No. _____

We _____ who are established and reputed manufacturer of _____ (*name and description of goods offered)* having factories at _____ (*address of factory) with factory registration no. ----------* do hereby authorize M/s_____ (*Name and address of Agent)* to submit a bid, and sign the contract with you for the goods manufactured by us against the above bid.

We hereby extend our full warranty as per Clause 3 of the Conditions of Contracts, for the goods and services offered for supply by the above firm against this Invitation for Bid. We further certify that we shall support vendor with all related spares and maintenance during the entire contract period including the period of warranty/AMC.

Yours faithfully,

(Name):_____

(Name of manufacturers):_____

Note: This letter of authority should be on the letterhead of the manufacturer or OEM and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

Annexure XIII

CONTRACT FORM

THIS AGREEMENT made the ……. day of …... 2024 between ……. (Name of Procurement Consultant (hereinafter "the Procurement Consultant") of the one part and ……. (Name & address of Supplier) ……. (Hereinafter called "the Supplier") of the other part:

WHEREAS the Purchase is desirous that certain Goods and ancillary services viz. …….. (Brief Description of Goods and Services) and has accepted a bid by the Supplier for the supply of those goods and services in the sum of ……. (Contract Prize in words and Figures) (Hereinafter called "the Contract Rate")

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and constructed as part of this Agreement, viz.,

   [a] The Rate Schedule submitted by the Bidder;

   [b] The Schedule of Requirements;

   [c] The Terms & Conditions

   [d] The EdCIL's Notification of Award/ Purchase Order

3. In consideration of the payments to be made by the EdCIL to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the EdCIL to provide the goods and services and to remedy defects herein in conformity in all respects with the provisions of the Contract.

4. The EdCIL hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contact rates or such other sum as shall become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Brief particulars of the goods and services, which shall be supplied/ provided by the Supplier, are as under:

S. No.	Brief Description of Goods & Services	Quantity to be supplied	Unit Rate	Total Rate	Delivery Terms

TOTAL VALUE:

DELIVERY SCHEDULE:

IN WITNESS where of the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

said …….. (For the EdCIL)

in the presence of ……..

Signed, Sealed and Delivered by the

said …….. (For the Supplier)

in the presence of ……..

ANNEXURE – XIV

FORM - A

DELIVERYCERTIFICATE

1. The items mentioned as per details given below, have been physically verified by way of opening the cartons/packing and verifying the goods/items as per specifications It is certified and acknowledged that the same have been received at Site in good condition.

Sl. No.	Sl. No. (As per Work Order)	Description of items	Origin	Model & Make	Quantity

Please make appropriate column, as per requirement.

2. The items as per details given below was/were received in damaged conditions and therefore are not acceptable. These damaged goods/ items have been returned to the supplier and supplier is required to supply the new item in lieu of damaged one.

Details of the Goods/ items received in objectionable condition

Sl. No.	Sl. No. (As per Work Order)	Description of items	Origin	Model & Make	Quantity

Date: _____

(Signature of the issuing official)
(Authorized Official,)

Name _____
Designation _____

Rubber Seal of the Institution

Received the Acknowledgement Certificate

Date: _____

Signature of Supplier or his Authorized Representative
Name: _____

ANNEXURE – XV

FORM - B

INSTALLATION& COMMISSIONING CERTIFICATE

1. The items mentioned as per details given below, have been physically verified by way of opening the cartons/packing and verifying the goods/ items as per specifications It is certified and acknowledged that the same have been received at Site in good condition.

Sl. No.	Sl. No. (As per Work Order)	Description of items	Origin	Model & Make	Quantity

Please make appropriate column, as per requirement.

2. The items as per details given below was/were received in damaged conditions and therefore are not acceptable. These damaged goods/ items have been returned to the supplier and supplier is required to supply the new item in lieu of damaged one.

Details of the Goods/ items received in objectionable condition

Sl. No.	Sl. No. (As per Work Order)	Description of items	Origin	Model & Make	Quantity

Date: _____

(Signature of the issuing official)
(Authorized Official,)

Name _____
Designation _____

Rubber Seal of the Institution

Received the Acknowledgement Certificate

Date: _____

Signature of Supplier or his Authorized Representative
Name: _____

ANNEXURE – XVI

FORM - C

HANDING OVER OF SITE

1. The items mentioned as per details given below, have been physically verified by way of opening the cartons/packing and verifying thegoods/ items as per specifications It is certified and acknowledged that the same have been received at Site in good condition.

Sl. No.	Sl. No. (As per Work Order)	Description of items	Origin	Model & Make	Quantity

Please make appropriate column, as per requirement.

2. The items as per details given below was/were received in damaged conditions and therefore are not acceptable. These damaged goods/ items have been returned to the supplier and supplier is required to supply the new item in lieu of damaged one.

Details of the Goods/ items received in objectionable condition

Sl. No.	Sl. No. (As per Work Order)	Description of items	Origin	Model & Make	Quantity

Date: _____

(Signature of the issuing official)
(Authorized Official,)

Name _____
Designation _____

Rubber Seal of the Institution

Received the Acknowledgement Certificate

Date: _____ Signature of Supplier or his Authorized Representative
Name: _____