Expression of Interest (EOI) For Empanelment of system integrator for setting up of IT Infrastructure for Command Control Center, VSK and other related projects on PAN India basis

EOI No. EdCIL/DES/EoI/2022-23/004

Date: 17.11.2022

EdCIL (India) Limited

(A Mini Ratna Category - 1 CPSE, Under the Ministry of Education, Government of India)

'EdCIL House', Plot No. 18A, Sector- 16A NOIDA – 201301 (UP), INDIA

Tel: 0120-4156001-02, 4154003, 0120-4310840, 0120-2970206-207

Registered Office: Vijaya Building, 5th Floor, 17 – Barakhamba Road, New Delhi – 110001 (India)

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Section 1

INVITATION FOR EXPRESSION OF INTEREST

EdCIL (INDIA) LTD
(A Mini Ratna Category - 1 CPSE, Under the Ministry of Education, Government of India)
PLOT NO. 18A, SECTOR 16A, NOIDA

No.: EOI No. EdCIL/DES/EoI/2022-23/004   Dated: 17-11-2022

1. EdCIL (India) Ltd. invites Expression of Interest (EoI) from the registered companies/firms in India for "Empanelment of system integrator for setting up of IT Infrastructure".

2. The purpose of this EoI Document is to provide interested parties with the relevant information regarding the EoI and invite feedback from them. The applicants are advised to study this EoI Document carefully before submitting their response.

3. The feedback & suggestions received as part of the response from the applicants may be used while formalizing the RFP.

4. Sealed envelope, containing EOI along with the copies of supporting documents shall be submitted to the address given below mentioning "Empanelment of system integrator for setting up of IT Infrastructure" on the top cover:

   To,
   Chief General Manager (DES)
   EdCIL (India) Limited, 18 A, Sector-16A,
   Noida-201301 Uttar Pradesh
   +91-120-4310918

5. In exceptional circumstances and at its own discretion, EdCIL may extend the deadline for submission of proposals by issuing an amendment which will be made available on the EdCIL website. EdCIL reserves the right to amend/add further details in the EoI.

6. After evaluation of EoI responses, EdCIL will empanel technically qualified system integrators.

7. The applicants are requested to submit any queries in writing by email. The queries shall be addressed to CGM (DES) at the email id: destenders@edcil.co.in by 26.11.2022 up to 15:00 Hrs. (Mention Email Subject: EoI For Empanelment of system integrator for setting up of IT Infrastructure on PAN India basis).

8. EdCIL (India) Limited reserves the right to cancel this call for EoI and/or invite afresh with or without amendments, without any liability or any obligation and without assigning any reason.

9. Applicants are advised to visit EdCIL's website regularly for any updates on this EOI.

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

11. Further Details are given below in the Table:

Name of work	"Expression of Interest (EOI) For Empanelment of system integrator for setting up of IT Infrastructure for Command Control Center, VSK and other related projects on PAN India basis ."
Product Category	IT Infrastructure and supporting Software System integrators.
Place of delivery	PAN India as per project requirement
EOI Publishing Date	17.11.2022
Document Download Start Date	17.11.2022
EoI Submission End Date	08.12.2022 up to 15:00 hrs.

E-mail for Query Submission	EoI queries should be emailed to destenders@edcil.co.in as per format specified
Pre-Bid Query Submission period	26.11.2022 up to 15:00 hrs. EoI queries received later than the date and time as mentioned above shall not be entertained.
Pre-Bid Meeting	30.11.2022, 11:30 a.m. Pre-Bid Meeting address: EdCIL House, 18A, Sector 16A, Noida-201301
Validity of Offer	The response shall remain valid for at least 6 months from the last date of submission.
Contact Person	Deputy Manager (DES) +91-120-4156001-02, 4154003

<div align="center">Table 1</div>

Chief General Manager (DES)

EdCIL (India) Limited

18 A, Sector-16A, Noida-201 301

Tel: +91 120-4310840

120-4156001-02, 0120-4154003,

0120-2970206-207.

Section 2
Background

2.1 About EdCIL

EdCIL (India) Limited is a Government of India Enterprises (Mini Ratna Category-1) CPSE under Ministry of Education offering management and consultancy services in all areas of education and Ministry of Education, both within India and overseas. The Company strongly believes that digitization will be a game changer in addressing quality, quantity and governance needs in both schools and higher education.

The company accordingly focuses on all emerging areas of IT/ICT applications in the education sector. The vision of the company is to transform the teaching - learning process by improving communication and Collaboration among the faculty, students and administrators of the school through digital initiatives. The aim is to improve integration of technology into the teaching-learning spectrum and encourage students to become creators of their own learning by incorporating 21st century skills such as creativity and critical thinking.

EdCIL has offered services to clients ranging from Central Govt., States Govt., Government of other countries, CPSEs, INIs and autonomous Govt. / Pvt. Institutions / organizations.

2.2 About NEP

The New Education Policy 2020 aims to facilitate an inclusive, participatory and holistic approach, which takes into consideration field experiences, empirical research, stakeholder feedback, as well as lessons learned from best practices. NEP 2020 emphasizes infrastructure support, innovative education centers to bring back dropouts into the mainstream besides tracking of students and their learning levels, facilitating multiple pathways to learning involving both formal and non-formal education modes and association of counselors/well- trained social workers with schools. It indicates a progressive shift towards a more scientific approach to education. The prescribed structure will help to cater the ability of the child – stages of cognitive development as well as social and physical awareness. If implemented in its true vision, the new structure can bring India at par with the leading countries of the world.

2.3 About NDEAR

NDEAR is a key enabler of National Education Policy (NEP 2020) and acts as super connector to cross leverage ecosystem capabilities and catalyze innovation in skilling and education.

It is an architectural blueprint for the educational ecosystem in the country that defines a set of principles, standards and specifications, guidelines and policies to strengthen the digital infrastructure for education.

- It promotes a 'digital first' approach, supporting teaching and learning activities, and facilitating educational planning as well as governance and administrative activities.
- It aims at creating a digital foundation driving towards autonomy and self-governance of all parties involved, particularly states and the Centre.
- NDEAR's institutional structure, date, governance framework and technology will benefit both the student and the teacher community alike.
- Solutions that adhere to NDEAR frameworks and standards would be considered NDEAR-compliant. NDEAR-compliant solutions would be able to connect with one another.
- The framework implies that systems and solutions that worked in one state can be shared across the country and adapted in other parts.
- Systems that are not NDEAR-compliant would work in silos not being able to be leveraged by others.
- NDEAR can ensure that best practices are replicated across the board.
- NDEAR is not a centrally-controlled framework and it is inherently federated to ensure the autonomy of all stakeholders including the states.
- It is to be noted that NDEAR is not a platform, technology software or solution, application or portal, but an architectural blueprint.

2.4 About Vidhya Samiksha Kendra (VSK)

The NDEAR compliant VSK is an institutional setup that will enable integrated and shared 'seeing' for amplifying data-based decision making and actioning by key stakeholders for academic and non-academic activities and thereby improving learning outcomes.

- To be able to "see" practical insights from the combined data of the numerous Samagra Siksha-related plans and activities.

- To enable administrators and instructors in the field to make data-driven decisions by providing them with data and insights from field-level academic and non-academic activities at the national and state levels.
- With the aid of the student registry, keep tabs on the number of students enrolled, their home learning progress, dropout data, information on child labor that is mainstreamed, children who are not in school, the delivery of textbooks and uniforms, scholarships, allowances, school-based assessment, the support that teachers and schools are required to provide, awards, recognition, etc.
- To boost students' academic achievement, provide teachers more control over their classrooms, and make efficient use of the resources that are already accessible.
- To identify and analyze improvement areas for decision making and program gaps that need immediate attention.
- To create localized and centralized dashboards that offer ongoing and updated data insights on school performance indicators.
- Empower field level staff so see insights from data for their relevant programs/schemes and coach them to take actions to improve educational outcomes
- Data pyritization, which digitalizes information from paper documents like attendance records and grade sheets, can be used to efficiently collect data and speed up the data entry process.
- In view of the above EdCIL (India) Limited is spanning its spectrum in tune with the New Education Policy' agenda by contributing in improving the learning levels of school students through various appropriate interventions in terms of Ed-Tech solutions.

Section 3

Instructions to Bidders

3.1 Instructions for Online EoI Submission:

- 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.

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

- The bidders are required to submit soft copies of their EoIs electronically on http://www.tenderwizard.com/EDCIL e-tendering website, using valid 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.

- The scope of work is available in the complete EoI documents which can be viewed /downloaded from Tender Wizard E-Tendering Portal of http://www.tenderwizard.com/EDCIL. Both Technical and Financial responses 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 the applicant. Applicants are advised to upload their EoIs well in advance to avoid last minute technical snags.

- All Corrigendum/Amendment/Corrections, if any, will be published on the website http://www.tenderwizard.com/EDCIL as well as on EdCIL's website.

- It is mandatory for all the applicants to have class-III Digital Signature Certificate (in the name of person who will sign the EoI document) from any of the licensed certifying agency (Bidders can see the list of licensed Certifying Agencies from the link www.cca.gov.in) to participate in e- Procurement of EDCIL.

- It is mandatory for the bidders to get their firm/company registered with e-procurement portal of EDCIL, i.e., www.tenderwizard.com/EDCIL to have user ID & password by submitting a non-refundable annual registration charge as follows:

1	Registration charges for 1 year	Rs. 2000/-

(Exclusive of taxes, levies, etc.) which can be paid online using the e- payment gateway to KEONICS through the portal address mentioned above. The registration so obtained by the prospective bidder shall be valid for one year from the date of its issue and shall be subsequently renewed.

- Participant shall safely keep their User ID and password, which will be issued by the service provider i.e., KEONICS Ltd. upon registration, and which is necessary for e-tendering.
- Applicants are advised to change the password immediately on receipt of activation mail.
- Applicants shall not disclose their User ID as well as password and other material information relating to the e-tendering to any one and safeguard its secrecy.
- Submit your EoI well in advance with relevant documents on Tender Wizard E-Tendering Portal http://www.tenderwizard.com/EDCIL, as there could be last minute problems due to internet timeout, breakdown, etc.
- EoIs should be submitted only through Tender Wizard E-Tendering Portal and obtain the acknowledgement copy as a proof of successful submission.

3.2 Preparation of EoIs

- Applicant should take into account any corrigendum/addendum published on the portal before submitting their EoIs.
- Please go through the EoI advertisement and document carefully to understand the documents required to be submitted as part of the procedure. Please note the number of documents-including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- Applicants, in advance, should get ready the EoI documents to be submitted as indicated in the EoI document/ schedule and generally, they can only be in PDF format. Bid documents may be scanned with 100dpi with black and white option.

The Expression of Interest is to be submitted in the manner prescribed below: -

1. Undertaking for Expression of Interest as per Annexure-1
2. Applicant Firm's Details as per Annexure -2
3. Financial summary of the Applicant Firm as per Annexure -3
4. Experience of the Applicant Firm as per Annexure -4

5. Technical Details as per Annexure -5
6. Budgetary Quote Annexure -6

Applicants must ensure that their EoI response is submitted as per the formats attached with this document. Special comments on the objectives and scope of the service projected in the enquiry may also be submitted along with the responses.

3.3 Submission of EoIs

- Applicant should log into the site well in advance for EoI submission and complete all formalities of registration (at least two days in advance of the closing date) so that he/she uploads their response in time i.e., on or before the submission time. Applicant will be sole responsible for any delay in uploading within the stipulated time.
- The applicant has to digitally sign and upload the required documents one by one as indicated in the EoI document.
- The server time will be considered as the standard time for referencing the deadlines for submission of the responses by the applicants. The applicants should follow this time during bid submission.
- Upon the successful and timely submission of EoI responses, the portal will give a successful submission message & a summary will be displayed with the response no. and the date & time of submission with all other relevant details.

3.4 Assistance to applicants

- Any queries relating to the EoI document, and the terms and conditions contained therein should be addressed to the Inviting Authority. For any other related queries applicants are requested to contact on below given contact details.
- For online registration, intended applicants may write us at harishkumar.kb@etenderwizard.com or contact at 080-40482100/9964074577/9650520101.
- For any further query related to Training Session, EoI Uploading/downloading or any other query related to tender please contact Tender wizard Helpdesk.

Telephone	Email
1. 080-40482100 2. 9650520101 3. 9964074577	1. harishkumar.kb@etenderwizard.com 2. ratan.thakur@etenderwizard.com 3. varun.b@etenderwizard.com (Note - cc to: destenders@edcil.co.in)

3.5 Minimum requirements at applicants' end

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

Section 4

Objective

The objective of the EoI is to empanel system integrators that can assist EdCIL to deploy Video wall and computing hardware for command control centers which will be used for visualization of the data for decision making, ground level implementation, monitoring, evaluation, data-based problem solving, logistic and technical support to the stakeholders on day-to-day basis and provide technical and support training to the client's personnel.

The empaneled system integrators will be required to provide necessary hardware's and supporting software for command control center/ video wall for the clients in various States/UTs.

Section 5
Scope of Work

EdCIL has been supporting educational departments in several State and Union Territory Governments in their education initiatives. The initiatives vary from design and implementation of education schemes and are likely to include schemes for implementation of NEP 2020 and other government schemes in States and Union Territories (UTs).

EdCIL envisions to be a Nodal Agency for establishing advanced technology-based command control center/ central system at state level solution for tracking student enrolment, progress in their learning levels, information on child labor and out of school children mainstreamed, textbook delivery, support required by teachers and schools. Online Monitoring and Tracking of academic and non-academic activities up to school level. Monitoring student attendance, academic progress, training outcomes and drop-outs, also monitoring teachers' attendance, performance and training.

EdCIL would like to strengthen its program design and implementation support capability so that it is able to serve many more programs/schemes/initiatives and multiple States and Union Territories.

In view of the above EdCIL intends to interact with system integrator with appropriate expertise and experience for designing, installation, commissioning and maintenance of hardware and supporting software of Command Control Center.

5.1 Indicative Infrastructure Requirement

EdCIL intends to empanel an organization for providing the hardware and required software which are mentioned detailed below required to fulfill the responsibilities mentioned above. For the same, the following, but not limited to will be required:

S.No.	IT Infrastructure
A	ACTIVE LED with cabling and accessories
1	Active-Led Type-1
2	Active-Led Type-2
3	Active-Led Type-3
B	Active-Led Video Wall Controller with cabling and accessories
1	For 4 inputs
2	For 8 inputs
3	For 12 inputs
C	LCD Panel (NXN) with cabling and accessories

1	LCD Panel Type-1
2	LCD Panel Type-2
D	**LCD Video Wall Controller with cabling and accessories**
2	For 4 inputs
3	For 8 inputs
4	For 12 inputs
E	**CCTV Solution with cabling and accessories**
1	Dome camera
2	16 Channel NVR
F	**Desktop Computer**
G	**Streaming Solution**
1	Full HD PTZ Camera for Faculty with Tracking facility (Optical Zoom 20X)
2	Full HD PTZ Camera for Faculty with Tracking facility (Optical Zoom 12X)
3	Recording and Streaming Device
4	Audio system
5	Mini Audio-Conferencing Solution
6	High-End Conferencing Solution
H	**Multi-functional Printer**
I	**Podium**
1	Smart Podium
2	Digital Podium High-end
3	Full HD Visualizer -Compact
4	Full HD Visualizer- Large
J	**UPS-10KVA with 6-hours back-up**
K	**Server Rack**
L	**Furniture**
M	**Call Management Solution**
N	**PRI Line**
O	**Switches**

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A. ACTIVE LED

1. Active-Led Type-1

S.no	Parameters	Specifications	Description	
1	Basic Information	Pixel Pitch	Minimum 1.88 mm	
		Pixel Density	270000 Pix / Sq-Mtr or above	
		Service Access	Front	
		Ingress Protection	IP20 or better	
	Physical Parameters	Diagonal Size	163" inches or above	
		Aspect Ratio	16:9	
		Clearance required at the back	Front access screen - 150mm Maximum	Back Access Screen- 600mm Maximum
3	Visual Parameters	Brightness	330 nits (cd/m2) or above	
		Viewing Angle	160x140 or better	
		Data Processing	Up to 16 Bit	
		Refresh	≥3000 or better	
		Contrast	5000:1 or above	
4	Electrical Parameters	Input Voltage	100-240V AC, 50/60Hz	
		Max. Power Consumption	700 W/m2	
		Average Power Consumption	250 W/m2	
		Special Features	Power Factor Correction	
5	Environmental Conditions	Temperature Range	Minimum Operating 0° to 40°C	
		Humidity	Minimum Operating 10 to 80%	
6	LED Wall Controller	Minimum Input	1x HDMI, 1x Audio, 1x DVI	
		Minimum Output	2x LED Outputs over Ethernet	
		Minimum Control	1x USB, Ethernet/ RS232	
		Input Voltage	AC-100-240V-50/60HZ	
		Overall power consumption	16W or less	
		Working Temperature	0 Degree C ~ 40 degree C or better	
		Working Humidity	10%~80%	

2. Active-Led Type-2

S.no	Parameters	Specifications	Description	
1	Basic Information	Pixel Pitch	Minimum 1.56 mm	
		Pixel Density	406000 Pix / Sq-Mtr or above	
		Service Access	Front	
		Ingress Protection	IP20 or better	
	Physical Parameters	Diagonal Size	135" inches or above	
		Aspect Ratio	16:9	
		Clearance required at the back	Front access screen - 150mm Maximum	Back Access Screen- 600mm Maximum
3	Visual Parameters	Brightness	330 nits (cd/m2) or above	
		Viewing Angle	160x140 or better	
		Data Processing	Up to 16 Bit	
		Refresh	≥3000 or better	
		Contrast	5000:1 or above	
4	Electrical Parameters	Input Voltage	100-240V AC, 50/60Hz	
		Max. Power Consumption	700 W/m2	
		Average Power Consumption	250 W/m2	
		Special Features	Power Factor Correction	
5	Environmental Conditions	Temperature Range	Minimum Operating 0° to 40°C	
		Humidity	Minimum Operating 10 to 80%	
6	LED Wall Controller	Minimum Input	1x HDMI, 1x Audio, 1x DVI	
		Minimum Output	2x LED Outputs over Ethernet	
		Minimum Control	1x USB, Ethernet/ RS232	
		Input Voltage	AC-100-240V-50/60HZ	
		Working Temperature	0 Degree C ~ 40 degree C or better	
		Working Humidity	10%~80%	

3. Active-Led Type-3

S.no	Parameters	Specifications	Description
1	Basic Information	Pixel Pitch	Minimum 1.25 mm
		Pixel Density	640000 Pix / Sq-Mtr or above
		Service Access	Front
		Ingress Protection	IP20 or better
	Physical Parameters	Diagonal Size	108 inches or above
		Aspect Ratio	16:9
		Clearance required at the back	Front access screen - 150mm Maximum / Back Access Screen- 600mm Maximum
3	Visual Parameters	Brightness	330 nits (cd/m2) or above
		Viewing Angle	160x140 or better
		Data Processing	Up to 16 Bit
		Refresh	≥3000 or Better
		Contrast	5000:1 or above
4	Electrical Parameters	Input Voltage	100-240V AC, 50/60Hz
		Max. Power Consumption	700 W/m2
		Average Power Consumption	250 W/m2
		Special Features	Power Factor Correction
5	Environmental Conditions	Temperature Range	Minimum Operating 0° to 40°C
		Humidity	Minimum Operating 10 to 80%
6	LED Wall Controller	Minimum Input	1x HDMI, 1x Audio, 1x DVI
		Minimum Output	2x LED Outputs over Ethernet
		Minimum Control	1x USB, Ethernet/ RS232
		Input Voltage	AC-100-240V-50/60HZ
		Working Temperature	0 Degree C ~ 40 degree C or better
		Working Humidity	10%~80%

B. Video wall Controller for Active-LED

1. Video wall Controller 4 inputs

Parameters	Description
Input Port	4 x HDMI or more
Output Port	4 x HDMI or more
Color depth	32 Bit or Better
Native Resolution	1920 x 1080 or higher
Networking	1 x Gigabit Ethernet
Scalability	The input and output can be increased as per user's demand.
Format Supported	SD(PAL/NTSC/SECAM), FULL HD(1080p)
Design	Industrial Casing, Rack Mountable
Cable & Connectors	All necessary Cables & Connectors to be provided
Software	Multi display system Management software, capable of displaying multiple inputs simultaneously on Display system. Capable of display system as single logical screen, capable of resizing & re-locating multiple input displays on the Multi display system

2. Video wall Controller 8 inputs

Parameters	Description
Input Port	8 x HDMI or more
Output Port	4 x HDMI or more
Color depth	32 Bit or better
Native Resolution	1920 x 1080 or higher
Networking	1 x Gigabit Ethernet
Scalability	The input and output can be increased as per user's demand.
Format Supported	SD(PAL/NTSC/SECAM), FULL HD(1080p)
Design	Industrial Casing, Rack Mountable

Cable & Connectors	All necessary Cables & Connectors to be provided
Software	Multi display system Management software, capable of displaying multiple inputs simultaneously on Display system. Capable of display system as single logical screen, capable of resizing & re-locating multiple input displays on the Multi display system

3. **Video wall Controller 12 inputs**

Parameters	Description
Input Port	12 x HDMI or more
Output Port	4 x HDMI or more
Color depth	32 Bit or better
Native Resolution	1920 x 1080 or higher
Networking	1 x Gigabit Ethernet
Scalability	The input and output can be increased as per user's demand.
Format Supported	SD(PAL/NTSC/SECAM), FULL HD(1080p)
Design	Industrial Casing, Rack Mountable
Cable & Connectors	All necessary Cables & Connectors to be provided
Software	Multi display system Management software, capable of displaying multiple inputs simultaneously on Display system. Capable of display system as single logical screen, capable of resizing & re-locating multiple input displays on the Multi display system

C. LCD panel (NXN)

1. LCD-Panel Type-1

S.No	Parameters	Description
1	Screen Size	55" or above
2	Panel Technology	IPS/VA
3	Back Light Type	Back Lit LED Direct
4	Aspect Ratio	16:09
5	Native Resolution	1,920 X 1,080 (FHD) or better
6	Brightness	350nit or Higher
7	Dynamic Contrast Ratio	Minimum 200,000:1
9	Uniformity	91% or more
10	Viewing Angle(H x V)	178 X 178
11	Color Depth	1.07Billion(10 bit) or better
12	Response Time	8ms (G to G) or lesser
13	Life time(Typ.)	Min 60,000Hrs(Typ.) or high
14	Operation Hours	24Hrs
15	Orientation	Portrait & Landscape
16	Minimum Inputs ports	HDMI -1 ,DP-1,DVI-D-1,USB-1,RJ45(LAN-1), IR in-1
17	Minimum Output ports	DP -1 ,RJ45(LAN-1)-1
18	Bezel to Bezel (Gap)	2 mm or less (Even Bezel from all side)
20	Operation Humidity	10 % to 80 %
21	Power Supply	100-240V~, 50/60Hz
22	Power Consumption	170 watts or less

2. LCD-Panel Type-1

S.No	Parameters	Description
1	Screen Size	55" or above
2	Panel Technology	IPS/VA
3	Back Light Type	Back Lit LED Direct
4	Aspect Ratio	16:09
5	Native Resolution	1,920 X 1,080 (FHD) or better
6	Brightness	350nit or Higher
7	Dynamic Contrast Ratio	Minimum 200,000:1
9	Uniformity	91% or more
10	Viewing Angle(H x V)	178 X 178
11	Color Depth	1.07Billion(10 bit) or better
12	Response Time	8ms (G to G) or lesser
13	Life time(Typ.)	Min 60,000Hrs(Typ.) or high
14	Operation Hours	24Hrs
15	Orientation	Portrait & Landscape
16	Minimum Inputs ports	HDMI -1 ,DP-1,DVI-D-1,USB-1,RJ45(LAN-1), IR in-1
17	Minimum Output ports	DP -1 ,RJ45(LAN-1)-1
18	Bezel to Bezel (Gap)	1 mm or less (Even Bezel from all side)
20	Operation Humidity	10 % to 80 %
21	Power Supply	100-240V~, 50/60Hz
22	Power Consumption	170 watts or less

D. LCD Video wall Controller

1. Video wall Controller 4 inputs

Parameters	Description
Input Port	4 x HDMI or more
Output Port	4 x HDMI or more
Color depth	32 Bit Or better
Native Resolution	1920 x 1080 or higher
Networking	1 x Gigabit Ethernet
Scalability	The input and output can be increased as per user's demand.
Format Supported	SD(PAL/NTSC/SECAM), FULL HD(1080p)
Design	Industrial Casing, Rack Mountable
Cable & Connectors	All necessary Cables & Connectors to be provided
Software	Multi display system Management software, capable of displaying multiple inputs simultaneously on Display system. Capable of display system as single logical screen, capable of resizing & re-locating multiple input displays on the Multi display system

2. Video wall Controller 8 inputs

Parameters	Description
Input Port	8 x HDMI or more
Output Port	8 x HDMI or more
Color depth	32 Bit Or better
Native Resolution	1920 x 1080 or higher
Networking	1 x Gigabit Ethernet
Scalability	The input and output can be increased as per user's demand.
Format Supported	SD(PAL/NTSC/SECAM), FULL HD (1080p)
Design	Industrial Casing, Rack Mountable

Cable & Connectors	All necessary Cables & Connectors to be provided
Software	Multi display system Management software, capable of displaying multiple inputs simultaneously on Display system. Capable of display system as single logical screen, capable of resizing & re-locating multiple input displays on the Multi display system

3. **Video wall Controller 12 inputs**

Parameters	Description
Input Port	12 x HDMI or more
Output Port	12 x HDMI or more
Color depth	32 Bit Or better
Native Resolution	1920 x 1080 or higher
Networking	1 x Gigabit Ethernet
Scalability	The input and output can be increased as per user's demand.
Format Supported	SD(PAL/NTSC/SECAM), FULL HD(1080p)
Design	Industrial Casing, Rack Mountable
Cable & Connectors	All necessary Cables & Connectors to be provided
Software	Multi display system Management software, capable of displaying multiple inputs simultaneously on Display system. Capable of display system as single logical screen, capable of resizing & re-locating multiple input displays on the Multi display system

E. CCTV

1. **Dome camera**

Parameters	Description
Image Sensor	1 /2.8" 2 Megapixel progressive CMOS
Lens Type	2.8 mm Fixed, F1.6
Resolution	1920 x 1080
Minimum Illumination	0.002 Lux / F1.6(color,30IRE), 0 Lux with IR on
IR Distance	Min 30 Mtr
Electronic Shutter Speed	1 / 3~1 / 100000s
Day/Night	Auto(ICR) / Color / B&W
Noise Reduction	3D DNR
Backlight Compensation	120dB WDR,BLC,HLC
Edge Base Storage	Supports max. 256 GB Micro SD card
Event	No SD card, SD card error, Capacity warning, Network disconnection, IP conflict, Illegal access
Audio	Built-in Mic
Video Compression	H.265 / H.264 or better
Video Streaming	Dual
Supported Protocols	HTTP; HTTPs; TCP; ARP; RTSP; RTP; RTCP; UDP; SMTP;DHCP; DNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; Bonjour;IEEE 802.1x; Multicast; ICMP; IGMP; TLS
Compatibility	ONVIF Profile S , G , T
Operating Temperature	0°C to +60°C
Relative Humidity	Less than 90%, non-condensing
Cyber SECURITY	User account and password protection HTTPS, IP Filter, Digest authentication, User access log, TLS1.2 only, AES-128 / 256, SSH, Telnet closed, sFTP by default, PCIDSS compliance

Analytics	Motion Detection, Video Tampering, Scene Changing, Tripwire Intrusion
Housing	IP66/IK10
Power Supply	DC12V PoE (802.3 af)(Class 0)
Certificates	Emissions- FCC, Immunity-CE, Safety-UL,RoHs- CE (EN 63000),BIS

2. **Specification for 16 Channel NVR**

Parameters	Description
Operating System	Embedded LINUX
PROCESSOR	Quad-core embedded processor
Resolution	3840 × 2160; 1920 × 1080; 1280 × 1024; 1280 × 720; 1024 × 768
Video Input Recording	Up to 16 channels
POE	16 Port
Record Bit/Frame Rate	RECORD BIT RATE
Interface	1 HDMI (up to 3840 × 2160); 1 VGA
Video Standard	PAL or NTSC
Video Codec	H.265/H.264/MJPEG/MPEG4
Multi-screen layout	1/4/8/9/16
Audio Input	1 Channel Input/1 Channel Output, RCA,Two Way Communication
Motion Detection	Support
Alarm Event	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer
Alarm/Relay Output	16/6 Channels
Internal Storage capacity	4 SATA ports; up to 32TB
Backup	USB storage device, Network download

Recording Mode	Schedule (Regular/Continuous, Motion Detection, Alarm); Manual; Stop	
Search Mode	Time/Date; Alarm; Motion Detection (MD); Exact Search (accurate to a second); Smart Search	
Playback	1/4/8/16 (maximum 4-ch @ 8 MP, 8-ch @ 4 MP, or 16-ch @ 1080p simultaneous playback	

F. Desktop Computer

S.No.	Parameters	Description
1	Display	21" or Higher WVA Panel
2	Native Resolution	Resolution of 1920x1080 or higher.
3	Contrast ratio	1000:1
4	Aspect Ratio	16: 09
6	CPU	Intel Core i5 Intel (10th gen or better)
7	RAM	8 GB RAM or better
8	Hard Disk	1 TB or better
9	In-Built Wi-Fi / Wireless LAN Card	Should have a inbulit Wi-Fi / Wireless LAN Card
10	Ports (Minimum)	DP/HDMI x 1, USB 2.0 ports x 2, USB 3 ports x 3, LAN Port x 1
11	Standard Keyboard	Wired Keyboard
12	Optical Mouse	Wired Mouse
13	Operating System	Windows 10 pro or better

G. Streaming Solution

1. Full HD PTZ Camera for Faculty with Tracking facility (Optical Zoom 20X)

S.No	Parameters	Description
1	Image Sensor	The camera should have a 1/2.8" CMOS camera sensor or better
2	Effective Pixels	The camera should be 2 megapixel or better
3	Signal To Noise ratio	The camera should have a s/n>= 50dB or better
4	Minimum Illumination	The camera should have a minimum Illumination of .5 Lux.
5	Field of View	The camera should have a 59.5 or more degrees Wide field of view and 3.2 or more degrees tele field of view.
6	Zoom	The camera should have an optical Zoom of 20X or more and digital zoom of 2X or more
7	Pan/Tilt Range	The camera should have a PAN range of -170° to + -170°or more and Tilt range of -30° to +30° or more.
8	Presets	The camera should have at least 65 presets
9	Video Output	The camera should have Video Output through USB 3.0 for Unified devices, Digital DVI-D Port and 3G-SDI port.
10	Control	The Camera should have RS-232 control port
11	Resolutions Support	The camera should support resolutions of 1080p/60,1080p/50,1080p/30,1080p/25, 720p/60,720p/50, 720p/30, 720p/25 or better.
Panoramic Camera		
13	Image Sensor	The camera should be a 1/2.8" CMOS sensor or better
14	Effective Pixels	The camera should be 2 megapixel or better
5	White Balance	It should have auto white balance
16	Exposure	It should support auto exposure.

17	Field of View	It should have a field of view of Horizontal: 86°; Vertical: 52° or better
18	Accessories	The system should come up with all the accessories, like control cables, power cables, tracking software, hardware, setup, etc.
Others		
19	RJ-45 Port	It should have RJ-45 port.
20	RJ-45 Port	It should support 128 Kbps-8192Kbps or better.
21	Protocols	It should support TCP, HTTP, RTSP, RTMP, ONVIF, UDP or more.
22	Video Compression	It should support H.265/.264/MJPEG or better compression.
23	Teacher tracking function	It should track the target even if the target is stationary for a long time. Also it should lock the tracking target without being disturbed by other moving targets or the contents of the projector. It should support self-adaptive teacher height function.

2. **Full HD PTZ Camera for Faculty with Tracking facility (Optical Zoom 12X)**

S. No	Parameters	Description
1	Image Sensor	The camera should have a 1/2.8" CMOS camera sensor or better
2	Effective Pixels	The camera should be 2 megapixel or better
3	Signal To Noise ratio	The camera should have a s/n>= 50dB or better
4	Minimum Illumination	The camera should have a minimum Illumination of .5 Lux.
5	Field of View	The camera should have a 59.5 or more degrees Wide field of view and 3.2 or more degrees tele field of view.
6	Zoom	The camera should have an optical Zoom of 12X or more.
7	Pan/Tilt Range	The camera should have a PAN range of -170° to + -170°or more and Tilt range of -30° to +30° or more.
8	Presets	The camera should have at least 65 presets

9	Video Output	The camera should have Video Output through USB 3.0 for Unified devices, Digital DVI-D Port and 3G-SDI port.
10	Control	The Camera should have RS-232 control port
11	Resolutions Support	The camera should support resolutions of 1080p/60,1080p/50,1080p/30,1080p/25, 720p/60,720p/50, 720p/30, 720p/25 or better.

Panoramic Camera		
13	Image Sensor	The camera should be a 1/2.8" CMOS sensor or better
14	Effective Pixels	The camera should be 2 megapixel or better
5	White Balance	It should have auto white balance
16	Exposure	It should support auto exposure.
17	Field of View	It should have a field of view of Horizontal: 86°; Vertical: 52° or better
18	Accessories	The system should come up with all the accessories, like control cables, power cables, tracking software, hardware, setup, etc.

Others		
19	RJ-45 Port	It should have RJ-45 port.
20	RJ-45 Port	It should support 128 Kbps-8192Kbps or better.
21	Protocols	It should support TCP, HTTP, RTSP, RTMP, ONVIF, UDP or more.
22	Video Compression	It should support H.265/.264/MJPEG or better compression.
23	Teacher tracking function	It should track the target even if the target is stationary for a long time. Also, it should lock the tracking target without being disturbed by other moving targets or the contents of the projector. It should support self-adaptive teacher height function.

3. Recording and Streaming Device

S. No.	Parameters	Description
1	Interactive Panel (Size)	Minimum 10" inches or more
2	HDMI Inputs	2 x HDMI In or more
3	HDMI Output	1 x HDMI Out for Local Display
4	Audio Inputs	1 x Line In and 1 x MIC In (unbalanced)
5	Audio Output	1 x Line Out
6	USB 3.0	1x USB 3.0 ports
7	Storage	1TB (Internal) or more
8	Video Compression	H.264 or better
9	Bitrate	300kbps to 16 Mbps or better
10	Resolution	1080p, 720p, 480p, 270p, User Selectable up to 1920 x 1080p
11	Video Switching	During Live Streaming and recording via the touch screen or Web UI
12	Video Layout	PIP, POP, Single video
13	Encoded Streams	2 simultaneous 1080p streams at 30 fps (with up to Full HD Sources)
14	Audio Encoding	AAC (Sampling @ 48 khz) up to 320kbps
15	Network	1 x 1000 Ethernet port (RJ45)
16	Video Format	MP4, 1080p
17	Controls	Web UI Panel, 10.1' touch screen, RS232 and RS485 or more
18	Power Consumption	Max up to 30W/ 2.5Amp
19	Additional Component	Power On/ Off Switch, Reset Button
Operational Requirement		
20	10.1" Touchscreen	Should have user friendly touchscreen and web interface makes switching easy between your connected sources or layouts
21	Audio Support	should have 3.5mm line-level input/ unbalanced MIC input and Built-in attenuation and gain control for perfect sound fidelity
22	Stream to View Everywhere	Should have capability of live stream to YouTube/ Facebook or web browsers locally over RTMP or RTMPS
23	Integration	Device should have capability to Integrates with 3rd Party central control systems
24	Internal Storage	Should have minimum 1 TB Internal Storage
25	Local Video Output	Should able to view content to a larger display through the local HDMI video output. Configure to share all input sources or switched program output
26	Full HD Recording	Should supports 1080p Full HD recording
27	Table Mount	Table mount stand should be supplied to mount the streaming device

| 28 | Table Mount | Table mount stand should be supplied to mount the streaming device |

4. Audio system

S.No.	Parameters	Description
1	Amplifier	Inbuilt of 120-Watt audio amplifier or better
2	Speakers	Four Speakers of 20 Watt Each or more
4	Sub-woofer	One External sub-woofer of 20 Watt or better
5	Microphone Receiver	Dual Chanel Microphone receiver
6	Wireless microphone	One Hand Held and One Headband Wireless Microphone
7	Connectivity	1x HDMI (ARC), 1x USB, 1x Audio In, 1x Wireless Bluetooth or better
8	Remote control	Should have remote control

5. Mini Audio-Conferencing Solution

S.No.	Parameters	Description
1	Connectivity	wireless USB, Wired USB, Aux IN/Out, Bluetooth
2	Special features	Device should have capability to cascade with min 2 mic and all should be operated as a single unit
3	Battery Life	8 Hours or better
4	Inbuilt Speakers	Should have minimum 10-watt speaker
5	Inbuilt Mic	Should have inbuilt 6 microphone connected in array
6	Range of Mic	Audio pickup range of 6 meter or better.
7	Certifications	CE & ROHS

6. High-End Conferencing Solution

Parameters	Description
Speakerphone	
Speaker Output	Speaker system should include 2 speakers of 10 watt each housed in single unit
Controls	Should have touch button to control the device
Function Control	Power ON/OFF (Battery status), Volume+, Volume-, Speaker mute, Microphone mute, Scene switch, Language switch etc.
Status Indication	Should have LED Light Indication
Connectivity	Should have USB wired and wireless USB dongle connectivity
Inbuilt Battery	Should have inbuilt battery with minimum 2 hours battery backup
Power Supply	DC 12 Volts, 2 Amp.
Expansion Microphone	
Wireless Microphone	Solution should supplied with minimum 4 Wireless expansion microphones
Microphone type	Digital Silicon Omnidirectional Microphone
Sensitivity	-26dBm
Frequency Response	100Hz - 16kHz
Signal to Notice Ratio	60dB or better
Sampling Rate	48 kHz or better
Voice Pick up Range	3 Meters or more
Wireless Transmission	Should connect with 2.4 Ghz wireless transmission
Controls	Should have touch button to control the device
Function Control	Power ON/OFF, Microphone mute
Status Indication	Should have LED Light Indication for charging, Mute and working status
Inbuilt Battery	Should have inbuilt battery with minimum 6 hours battery backup
Charging	Charging mode USB type C & Charging tray

Charging Tray	
Charging Tray	System should supplied with minimum 2 no's of charging tray.
Charging Capacity	Charging tray should have charging capacity of up to 2 Microphone
Charging Interface	USB type C
Power Supply	DC 5 Volts, 2 Amp.
Operational Requirements	
Echo Cancellation	Solution should support echo cancellation up to 256ms or more
Noise Cancellation	Solution should support noise cancellation
Certifications	CE & RoHS

H. Multi-functional Printer

Configuration	Machine + DP + TK
Features	Copier / Printer /Color Scanner / Two Paper Tray of 550 Sheet Each / 100 Sheet Manual Bypass / Network Ready / Speed 40 PPM / DPI 1200 X 1200 / Zoom 25% to 400% /RAM 2GB / Memory 32GB

I. Podium
1. Smart Podium

S.No.	Parameters	Description
1	Type/Mounting	Free Standing
2	Construction	The enclosure should be made of Polycarbonate/Metal Body and Steel Frame with Soft wheels. The Top sliding (Opening/Closing) cover should be made of Polycarbonate Body. The construction of the podium should be such that, while the podium is locked and not in use, there should not be any port exposed on the outer body for breakage/mishandling.

3	Display	Built-in highly sensitive Interactive Panel with adjustable Motorized tilt & a mechanism to make the Panel stable so that it does not shake while writing with following minimum features -
(a)	Technology	Interactive Panel should have both EMR (Electro magnetic resonance) & P-CAP touch technologies to have finger and 2 mm thick touch stylus
(b)	Screen Type	LED
(c)	Size	53.0 cm (21 inches) or higher
(d)	Resolution	1920 x 1080 or higher
(e)	Aspect ratio	16:09
(f)	Computer interface	One USB, One VGA/DVI/HDMI Port
(g)	Interactive Resolution	4000 Lpi (lines per inch)
(h)	Response Time	5ms
(i)	Viewing Angles	170(H) ; 160(V)
(j)	Touch	Finger and Stylus
(k)	Reading accuracy	±0.5 mm (center)
(l)	Tracking speed	Approximately 200 points per second
(m)	Pen Pressure sensitivity	1024 Levels
4	System Details	
(a)	Processor	Intel Core i5 (10th Gen or better processor)
(b)	Small Form Factor	Computer should be of 2 liters Volume or less
(c)	In-Built Wi-Fi /Wireless LAN Card	Should have a inbuilt Wi-Fi / Wireless LAN Card
(d)	RAM	8 GB
(e)	Hard Disk	128 GB SSD with 1 TB HDD or better
(f)	Ports (Min.)	HDMI x 1, DP (Display Port) x 2, USB ports x 5, LAN Port x 1
(g)	Keyboard & Mouse	Wireless
(h)	Operating System	Windows 10

(i)	Antivirus	Norton Anti-Virus/MacAfee or equivalent with 1 year license
5	Multimedia Controller	
(a)	Ports on front Panel of Controller (Minimum)	VGA, HDMI, USB3.0x2,Audio IN or more
(b)	Buttons on front Panel of Controller (Minimum)	Push buttons to control Volume Up& Down, Volume Mute and to switch sources of HDMI Visual Presenter, VGA Visual Presenter, HDMI Laptop, PC HDMI, VGA Laptop, VGA PC and Controller Power On/Off, Display Power On and Power Off or more
(c)	Ports on Rear Panel of Controller (Minimum)	USB 3.0 X 2, VGA Input x 2, VGA Output x 2, RCA Audio IN X 1, RCA Audio Output x 2, HDMI Inputx2, HDMI Outputx2, Programming Port (Phoenix connector) or more
(d)	Built in HDMI Repeater	Yes (HDMI Output port should support 15mtr HDMI cable)
(e)	Controller Resolution Output	4K (3840 x 2160) Native
(f)	Power	5 V DC (Suitable Adaptor should be supplied with controller)
6	Built in devices	
(a)	Gooseneck Microphone	Gooseneck Microphone with XLR output. It should be Phantom powered so that there is no requirement of batteries thereby eliminating consumable cost. The gooseneck length should be at least 21.5cm with ON/OFF switch and with LED light indicating ON/OFF status. The gooseneck microphone shall be permanently polarized condenser, highly directional featuring hyper cardioid /lobar directivity
(b)	Amplifier	250 Watts minimum
(c)	Speakers	Two speakers of Minimum 100 W each shall be a part of standard supply.
(d)	Wireless Microphone Units	One handheld Microphone and One Lapel Microphone with single receiver should be supplied with a range of 10 meters.
7	Sliding Trays	Provision for keeping Keyboard & Mouse

8	Power Supply	180 -240V, 50Hz, AC Supply

2. Digital Podium High-end

S.No.	Parameters	Description
1	Type/Mounting	Free Standing
2	Construction	The Podium shall be wheel mounted capable of moving in all directions with a facility of lock them while the electronic podium is in use. The enclosure shall be made of Polymer Powder Coated Steel Body with wooden top panels, designed to work in suitable environmental conditions. The wooden top shall have lock and key and should have a sliding cover for opening/closing easily. The Podium should have housing and connectivity for Visual Presenter while the visualiser is in use and not in use. At the time of using the Visualiser, drawer can be opened and Visualiser can be used. The construction of the podium should be such that, while the podium is locked and not is use, there should not be any port exposed/ visible on the outer body for breakage/mishandling.
3	Display	Built-in highly sensitive Interactive Panel with adjustable Motorized tilt & a mechanism to make the Panel stable so that it does not shake while writing with following minimum features -
(a)	Screen Type	LED
(b)	Size	53.0 cm (21 inches) or higher
(c)	Resolution	1920 x 1080 or higher
(d)	Aspect ratio	16:9/16:10
(e)	Computer interface	One USB, One VGA/DVI/HDMI Port
(f)	Interactive Resolution	4000 Lpi (lines per inch)
(g)	Response Time	5ms
(h)	Viewing Angles	170(H) ; 160(V)
(i)	Touch	Finger Touch

(j)	**Reading accuracy**	**±0.5 mm (center)**
(k)	Tracking speed	Approximately 200 points per second
(l)	Pen Pressure sensitivity	2048 Levels
(m)	Speakers	Display panel should have Inbuilt Speaker
4	**System Details**	
(a)	Processor	Intel Core i5 (10th Gen or better processor)
(b)	Small Form Factor	Computer should be of 2 litres Volume or less
(c)	In-Built Wi-Fi /Wireless LAN Card	Should have a inbuilt Wi-Fi / Wireless LAN Card
(d)	RAM	8 GB
(e)	Storage	128 GB SSD with 1 TB HDD or better
(f)	Ports (Min.)	HDMI x 1, DP (Display Port) x 2, USB ports x 5, LAN Port x 1
(g)	Keyboard & Mouse	Wireless
(h)	Operating System	Windows 10
(i)	Antivirus	Norton Anti-Virus/MacAfee or equivalent with 1 year license
5	**Controller**	
(a)	Ports on front Panel of Controller (Minimum)	VGA, HDMI, USB3.0x2, Audio IN or more
(b)	Buttons on front Panel of Controller (Minimum)	Push buttons to control Volume Up& Down, Volume Mute and to switch sources of HDMI Visual Presenter, VGA Visual Presenter, HDMI Laptop, PC HDMI, VGA Laptop, VGA PC and Controller Power On/Off, Display Power On and Power Off or more
(c)	Ports on Rear Panel of Controller (Minimum)	USB 3.0 X 2,VGA Input x 2, VGA Output x 2, RCA Audio IN X 1,RCA Audio Output x 2,HDMI Inputx2,HDMI Outputx2 , Programming Port (Phoenix connector) or more
(d)	Built in HDMI Repeater	Yes (HDMI Output port should support 15mtr HDMI cable)

(e)	Controller Resolution Output	4K (3840 x 2160) Native
(f)	Power	5 V DC (Suitable Adaptor should be supplied with controller)
6	Built in devices	
(a)	Gooseneck Microphone	Gooseneck Microphone with XLR output. It should be Phantom powered so that there is no requirement of batteries thereby eliminating consumable cost. The gooseneck length should be at least 21.5cm with ON/OFF switch and with LED light indicating ON/OFF status. The gooseneck microphone shall be permanently polarized condenser, highly directional featuring hyper cardioid /lobar directivity.
(b)	Built in Amplifier Power	250 Watts minimum
(c)	Speakers	Two speakers of Minimum 100 W each shall be a part of standard supply.
(d)	Wireless Microphone Units	Wireless Hand Held & Lapel microphone with receiver.
7	Sliding Trays	Provision for keeping laptop and Keyboard & Mouse
8	Power Supply	180 -240V, 50Hz, AC Supply
9	Security	Integrated authentication System having RFID, Password protection & Physical Key for secure access to system.
10	Fans	Suitable cooling fans to be provided in the lower body.

3. Full HD Visualizer -Compact

Parameters	Description
Camera Sensor	1/4"CMOS Sensor F=2.8
Effective Pixels	Min. 8 Mega Pixel or better
Frame Rate	Min. 30fps or better
Inbuilt Microphone	Should available inbuilt Microphone
OCR function	Should support OCR technology
Video Output	It should provide the following resolutions HDMI: Full HD (1080p), HD (720p), VGA (480p); USB: Full HD (1080p), SXGA (1280 x 1024), XGA (1024 x 768), SVGA (800 x 600), VGA (640 x 480), QVGA (320 x 240); VGA: HD (1360 x 768), WXGA (1280 x 800), SXGA (1280 x 1024), XGA (1024 x 768)
Shooting Area	Minimum A3 (420MM x 297MM) or better to share information more flexibility.
Zooming Capability	Minimum 100x Zooming Capability or better to capture clear and loss-less magnified image.
Split Screen	Device should allows the live image of an object being captured to be displayed alongside an image stored on the external memory.
Focus Adjustment	It should have option of Auto/ Manual Focus Adjustment
LED Light	Two Type LED system Top LED & Side LED strip
White Balance	Auto
LED Light Brightness Adjustment	Should support LED Light Brightness Adjustment & Dimming capability
Image Rotation	90°, 180°, 270°
Multimedia Function	Freeze, Focus Adjustment, LED on/off, Brightness Adjustment, Contrast, Negative, Black and While, Split Screen, Slideshow, Video Capture, Flicker Reduction, Image Rotation(0/180degrees), Source (PC/SD Card), Image Mirror, Picture in Picture.
Interactive features	Should have Touch screen support to perform interactive features

SD Card	Should support SD/SDHC card with min. 32 GB Capability or more
File Format	JPEG (1920 x 1080), VGA (720p)
Connectivity ports	1x VGA In, 1x VGA out, 1x HDMI out, 1x USB, 1x SD Card
Safety	Should have Kensington lock (K-Lock)
Portability	Device should portable structure allows users to fold and easy to store.
Advance Features	PC Less Annotation, Image roaming drag Region zoom in, Split Screen function, Camera Rotation, Device Portability, Microscope Capability
Remote Control	Device should available with fully functional remote control
Annotation	Device should have on-board Annotation feature without using any other computing device.
On Screen Toolbar	Should have on-Screen toolbar to perform Auto focus, Magnifier, Zoom in/out, Rotate, Mirror, Freeze, Division, Snap, Record, File Browse, PIP, Annotate, Settings
Key on Visualizer	It should have minimum Zoom in/out, Res/Exit, Menu, VGA/HDMI, Light, Auto/OK, UP/Down buttons or more for ease of access
Certification & Datasheet	BIS, CE, RoHS, FCC and Datasheet should be available on OEM website

4. Full HD Visualizer- Large

Parameters	Description
Camera Sensor	1/2.7"CMOS Sensor
Effective Pixels	Min. 8 Mega Pixel or better
Lens	F=1.6~3.0, f=4.7~47mm
Frame Rate	Min. 30fps or better
Inbuilt Microphone	Should available inbuilt Microphone
OCR function	Should support OCR technology

Video Output	It should provide the following resolutions HDMI: Full HD (1080p), HD (720p), SXGA (1280 x 1024), XGA (1024 x 768); USB: Full HD (1080p), SXGA (1280 x 1024), XGA (1024 x 768), SVGA (800 x 600), VGA (640 x 480), QVGA(320 x 240); VGA: HD (1360 x 768), WXGA (1280 x 800), SXGA (1280 x 1024), XGA (1024 x 768)
Video Recording	Full HD (1080p), HD (720p), SXGA (1280 x 1024), XGA (1024 x 768)
Shooting Area	Minimum A3 (420MM x 297MM) or better to share information more flexibility.
Optical Zoom	Should Have minimum 12x optical zoom or better to capture clear and loss-less magnified image.
Digital Zoom	Minimum 120x Digital zoom or better
Split Screen	Device should allow the live image of an object being captured to be displayed alongside an image stored on the external memory.
Denoise	Devise should have Image Denoise Function to provide clear and crisp image quality.
Text Enhancer	Devise should have Text Enhancer Function to provide clear image quality of Text book/paper.
Image Capture	Devise should have capability to capture minimum 200 images with in device without connecting storage media.
Focus Adjustment	It should have option of Auto/ Manual Focus Adjustment
LED Light	Should available on camera head to provide proper lighting.
White Balance	Auto
Image Rotation	90°, 180°, 270°
Multimedia Function	Freeze, Focus Adjustment, LED on/off, Brightness Adjustment, Negative, Black and While, Split Screen, Slideshow, Video Capture, Image Rotation(0/180degrees), Source(PC/SD Card), Image Mirror, Picture in Picture, Title, Highlight, Mask, Mosaic.
Interactive features	Should have Touch screen support to perform interactive features
SD Card	Should support SD/SDHC card with min. 32 GB Capability or more

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File Format	JPEG (1920 x 1080), VGA (720p)
Connectivity ports	1x VGA In, 1x VGA out, 1x HDMI in, 1x HDMI out, 1x Audio In, 1x Audio out, 3x USB, 1x SD Card
Safety	Should have Kensington lock (K-Lock)
Advance Features	PC Less Annotation, Image roaming drag Region zoom in, Split Screen function, Camera Rotation
Rotary Knob	Device should have rotary knob for Zoom In/ Zoom out function for easy control
Remote Control	Device should available with fully functional remote control
Annotation	Device should have on-board Annotation feature without using any other computing device.
On Screen Toolbar	Should have on-Screen toolbar to perform Auto focus, Magnifier, Zoom in/out, Rotate, Mirror, Freeze, Division, Snap, Record, File Browse, PIP, Annotate, Settings
Key on Visualizer	It should have minimum Source selection (Visualizer/ PC/ Camera USB mode) Power, Light, Delete, Focus +/-, Brightness +/-, Zoom In/ out, Split, Freeze, Rotate, Menu, Back, Snap, Record, Play, Auto focus, & Navigation keys with select key.
Certification & Datasheet	BIS, CE, RoHS, FCC and Datasheet should be available on OEM website

J. UPS-10KVA with 6-hours back-up

S.NO.	Parameters	Description
1	System	Online UPS System
2	Capacity	10 KVA
3	Output Power Capacity	10000 VA
4	Output	220V, 50Hz
5	Waveform	Pure Sine wave
6	DC to AC Efficiency	Greater than 90%
7	Inverter technology	IGBT based, High Frequency
8	Grid charger	SMPS type constant current- constant voltage- Trickle
9	Backup requirement	Minimum 6 hours.
10	Display	LCD

K. Server Rack

1. Server Rack 42U
2. Server Rack 24U

L. Furniture

S.NO.	Parameters	Description
1	Chair	Supplying & Installation of medium back chair with ergonomic design, comfortable & aesthetically appealing. The seat and back shall be made of 15mm thick hot pressed commercial plywood padded with high resilience moulded polyurethane foam 50mm thick having density 45kg/m³ or better in seat and 45mm thick having density 35Kg/m³ or better in back. The same shall be upholstered with fabric tapestry 1mm thick and 300 GSM. The back and base of chair shall be supplied with polypropylene/ABS moulded cover and the backrest shall be made by keeping the natural curvature of the spine with back support. The seat and back shall be arrested together with 50-60µ thick powder coated HR steel spine and the armrest shall be used black integral polyurethane arm with metal insert completely joint with seat and back for better support and durability. The arm rest should be flat . For seating durability, the chair shall have swivel tilt 360-degree revolving mechanism with upright position locking and tilt tension adjustment. The pneumatic seat height adjustment for healthy seating, user can adjust seat height up to 100mm with standard class-3 gas-lift to suit them using the lever under the seat. The gas-lift mechanism should be tested as per standards. The pedestal should have five legged injection moulded in black 30% glass filled nylon having pitch circle Dia. 700mm and fitted with 5 nos. twin wheel castors. The castors of the chairs should be injection moulded in black 30% glass filled nylon, tested to perform 98,000 cycles with 250lbs load. The seat size shall be 485±10 mm(W) X 450±10 mm(D) and back size shall be 480±10 mm(W) X 400±10 mm(H) from seat. Overall height shall be 810±10 mm. Sample shall be prepared and approved by EdCIL before going for mass production.
2	Workstation table	Providing and supplying workstation table in completely knock down conditions with an overall size 1320mm X 660mm X 1200mm that is to be assembled at site. The work top shall have the size 1200mm X 600mm made up of 25mm thick pre-laminated particle board of grade II of IS level with approved laminate and finish as per approved shade. The profile of the top shall be in rectangle shape and the edges shall be sealed with 2mm thick thin strip of impermeable PVC that is cut to fit the size of board panel and duly pasted with the assistance of edge banding machine at 200 degree Celsius. A pullout keyboard trey shall be provided of 18mm thick pre-laminated particle board having size 525mm X 350mm. The trey shall be operated on keyboard channel. The workstation shall have panel-based partition of 60 mm thick with overall height 1200mm. The partition shall be linear in profile and provided in the front side of user as well as on the both sides of the user. The top trim, top bar, mid bar, vertical bar, raceway,

		skirting shall be made up of aluminum extrusions (pre-treated) and duly powder coated with 40μ-60μ thick. The trims shall have the size 60mm X 19mm with 1.5mm thick covered with Die cast end caps on joints 2 ways, 3 ways & 4 ways (L-cover for corner, T-cover for middle section wherever required). The aluminum raceway shall be situated below the worktop with an overall size 116mm(H) X 60mm(D) with 1.4 mm cover thickness and 2mm back thickness as per requirement of inlaying the electrical management and carrying the wire horizontally. The exposed vertical and horizontal faces of the frames shall be snap fitted with trims. Laminated top tile and bottom tile shall be situated at both sides of the user and below the work top respectively. The Partition shall have concealed wire management capabilities and should be engaged for responsive and safe operations of power, telecommunications and data (LAN) and has separate components for electrical, data and telephone cables having adequate capability of both the vertical and horizontal wire movements. Slots/cut-outs should be given on raceways to fix all electrical and data points. Single sided Flaper box should be enclosed at table top that houses data, telephone cable and power connection discretely. 10 Module Network Switch- Having Hydraulic Cable Cubby Popup Box with HDMI Connector, VGA Connector, Audio Connector, LAN Port, Power Ports & USB Port etc. Zinc coated small top support brackets shall be fixed on the partition for table top support. To protect the wall from kicks, abrasion and serve as a decorative moulding, skirting shall be situated at bottom. Adjustable leveler shoe shall be provided at bottom of the partition to avoid scratches on the floor. Fixed type pedestal shall be provided with an overall size 400mm X 450mm X 725mm. The pedestal shall be made up of pre-laminated particle board of grade II of IS level. Pedestal side, back, top, facia shall be 18mm thick and drawer base shall be 9mm thick. The pedestal shall have 3 nos. of drawer i.e. 2 box drawer and 1 filing drawer. The drawer shall be operated with SS handle and easily close & open with the assistance of roller channel and ball bearing channel to enable smooth operation. The drawer shall have central locking mechanism in which all the drawer shall be synchronized lock with one single key. To protect the wall from kicks, abrasion and serve as a decorative moulding, skirting shall be provided at bottom. A nylon castor based CPU unit shall be provided with an overall size 468mm X 284mm with 18mm thick Pre-laminated particle board. The Design should be prepared in the 3D with colour scheme and the manufacturing shall not start until the design is approved.

M. Call Management Solution

	Customer Care Center Functions
	Call Center Features
1	Solution should help in reducing business costs and improve customer response by providing a single-server, contact-center-in-a-box deployment with the following:
a	> ACD
b	> CTI
c	> Unified Agent Desktop Services
2	Proposed Solution should be capable of providing options to interact using multiple channels without adding a separate hardware i.e.-
a	> Inbound voice
b	> Preview, Progressive and Predictive Outbound Dialling
c	> Agent email
d	> Web Chat
3	Solution must provide-
a	>Historical and real-time reporting data on the agent and supervisor desktop
4	Solution proposed should be able to integrate with existing backend system using web services for customer information pop-up.
5	From the agent desktop, agents can answer, release, hold, retrieve, conference, consult, and direct transfer the calls.
6	Supervisor should have control on Changing the agent association with a resource group and must be applied immediately.
7	Agents have access to Live Data for themselves and the queues to which they are associated. For example, from the agent desktop, agents can see how many calls they have handled today and how many calls are currently in queue.
8	System should provide an option to configure common repetitive agent tasks.
9	Proposed solution should be capable of integrating with third party applications.
10	System should be capable of automatically start recording on calls that meet conditions defined in the application script and voice contact workflow.
11	Automatic Number Identification (ANI) support
12	Dialed Number Identification Service (DNIS) support
13	Should suport call routing based on skill
14	Route on Skill competency – Route calls based on routing logic then matches the caller and contact requirements with agent skills to find the optimum match using one of the following agent selection criteria:
15	Conditional routing (time of day, day of week, and custom variables)
16	Custom routing based on data from database access (for example, data-directed priority routing)
17	System should be capable to provide dynamic priority queueing of call
18	System should support the playing of customizable queuing announcements based on the skill group that the call is being queued to, including announcements related to position in queue and expected delay.
19	The solution should be highly available for core functions i.e call routing, ivr functions, voice gateways with PRI lines and telephony and there should be minimum disturbance in case of a server outage or any ther outage at the infrastructure.
20	Solution must provide scalability upto 100 voice agents without adding any hardware.

21	Ability to capture Customer Data or Information with Pop up of existing or already registered customers with their identification number/bill no.
22	Ability to listen to recording whilst on hold, with as many music as possible (Note that, music on hold can be changed at any time, with ease and flexibility)
23	Ability for Full Featured Automatic Call distribution (with skill based call distribution)
24	Ability for Extensive Call Distribution Algorithm that will allow Calls to be evenly distributed among Agents, and to allow Agents to be on more than one Queue at the same time
25	Ability to manage the Call distribution according to pre-defined skill sets
26	Call Centre Management software with Comprehensive and extensive reporting with as many metrics as possible.
27	Ability to records every calls (In & out) of the Call Centre. (Agents call recording.
28	Ability to supervisory call monitoring (Silent listening, Call Barging)
29	Ability to display in Real-time the activities of the Call Centre on a bigger screen or on different devices.
30	Agent analysis – which shows State Summary per agent , currently reports cannot be ran on specific agent ..Web interface for Agents, Supervisors and Admin to manage and monitor calls in Real-Time
31	Ability to monitor and listen or barge in to Agents calls by Supervisors or anyone with required privilege at any time.
32	Ability to run detailed call reports at anytime. The reporting database can be backup periodically. Agents can see in realtime the customers number. Agent can also assign a reason code (Pre-Configured) to the call.
33	Ability to Integrate with a CRM Software.
34	The application must be securely accessible by staff not physically located in office but should be available via a web interface.
35	The system should be IPv6 compatible
36	Proposed Solution should support for SSO logins.
37	The solution allows to easily track the status of license and software usage trends. It pools the license entitlements in a single account instead of having separate licenses for multiple systems and allows you to move licenses freely across virtual accounts.
	Experience Management
38	Solution should have an option of a platform for Customer Experience Management (CEM), integrated with powerful tools that should allow to see your business from your customers' perspective
39	Administrators can configure post-call surveys to collect feedback directly from customers for inbound acd calls
40	Administrators can configure analytical gadgets, which can be viewed on agent/supervisor desktop.
	ACCESSIBILITY / USER INTERFACE
a	> Intuitive, unified interface for handling voice, email and webchat
b	> availability status and wrap up reasons, which can be reported.
41	The application must be able to support skill sets
42	The application must have read/write access to external databases
43	The system should be a CRM optimizer to achieve CTI. The system should have a CRM Integration port/capability to allow for CTI.
44	The system must be able to identify incoming callers effectively with either systematic assistance (e.g. CTI screen pop) or through flexible search and to equip agent

	representatives with customer and context-based information prior to speaking with the customer
45	The application must support features for contact escalation and transfer of both voice and data
46	Application must have Integrated IVR
a	> auto-attendant and call menu prompting
b	> caller input digital collections
c	> dynamic, multi-format "numbers-to-speech"playback
47	Application must have telephony controls (soft phone), click-to-dial speed dial with option for hard pick on IP Phone.
a	> delay announcements to callers in queue
b	> simultaneous caller listening to the same announcement
c	> allow Supervisors perform real-time changes/adds/deletes to announcements
48	Should have option of providing desktop chat by embedding IM & presence services on the agent & supervisor dekstop.
	Call Control System Architecture & Redundancy
1	A comprehensive IP based solutions based on a Server Gateway Architecture.
2	Support for integrated telephony solution for Video conferencing devices, Analog & IP Phones, PSTN gateways over IP architecture.
	Centralized architecture
3	The call control system should be fully redundant solution with NO single point of failures & should provide 1:1 redundancy. Both the server should do call processing all the time and act as backup in case of the failure of one server.
4	The call control should support clustering over WAN
	Support for call-processing and call-control.
5	All the appliances in the call control system should have dual redundant and hot swappable power supply and fans for high availability.
6	All appliances in the call control system should have hot swappable storage media to ensure high availability.
7	Should support signaling standards/Protocols – SIP, MGCP, H.323, Q.Sig.
8	CODEC support - G.711, G.729, G.729ab, g.722, ILBC
9	Support for configuration database (contains system and device configuration information, including dial plan)
10	Having inbuilt administration web based administration. No additional thick client for administration on the Admin PC. Should also support HTTPS for management.
11	Inbuilt reporting tool for calls. Reports that are provided include Calls on a user basis, Calls through gateways, Simplified Call Quality.
12	Able to add bulk add, delete, and update operations for Phones, Gateways & users
13	Conference Bridge—provides software conference bridge resources that can be used by IP EPABX.
14	IP Phone Address Book Synchronizer—allows users to **synchronize** Microsoft Outlook or Outlook Express address books with Personal Address Book.
	System Capabilities Summary
15	The System should have IP capability for interfacing & Communicating with Voice, Video and Data infrastructure
16	The architecture should support a minimum of 1000 IP phones and VC systems per Server
18	The System should support Alternate Call Routing

19	The System should have GUI support web based management console
21	The System should support Audio message-waiting indicator (AMWI)
22	The System should have Automated bandwidth selection
23	The System should support Call Admission Control to configure number of calls that can be active between locations —intercluster and intracluster
24	Call preservation - redundancy and automated failover - on call-processing failure
25	Should support LDAP integration for directory synchronization & user authentication
	End user telephony Features required:
26	Extension mobility
27	Call forward all
28	Message-waiting indicator (MWI)
29	Privacy
30	Device mobility
31	Do not disturb
32	Hunt groups
33	Dial-plan partitioning
34	Distributed call processing
35	Deployment of devices and applications across an IP network
36	"Clusters" of Call-Servers for scalability, redundancy, and load balancing
37	Intercluster scalability to 100+ sites or clusters through H.323 gatekeeper
38	Forced authorization codes and client matter codes (account codes)
39	H.323 interface to selected devices
40	Hotline and private line automated ringdown (PLAR)
41	Interface to H.323 gatekeeper for scalability, CAC, and redundancy
42	Language support for client user interfaces (languages specified separately)
43	Multi-Level Precedence and Preemption (MLPP)
44	Multilocation—dial-plan partition
45	Multiple ISDN protocol support
46	Multiple remote Call Server platform administration and debug utilities
47	Prepackaged alerts, monitor views, and historical reports with Real Time Monitor Tool (RTMT).
48	Real-time and historical application performance monitoring through operating system tools and Simple Network Management Protocol (SNMP)
49	Remote terminal service for off-net system monitoring and alerting
50	Real-time event monitoring and presentation to common syslog
51	Trace setting and collection utility
52	Cluster wide trace setting tool.
53	Trace Collection tool.
54	Multisite (cross-WAN) capability with intersite CAC
55	Q.SIG (International Organization for Standardization [ISO])
56	Video calls to be placed with the same user model as audio calls.
57	Call-Server should support new video end points.
58	Call-Server should have the infrastructure to handle codec and video capabilities of the endpoints, bandwidth negotiation to determine if video/audio call can take place, single point of administration, management of media devices such as gateways and MCUs.
2	**PSTN Gateways**

59	Shall be able to support multiple types of PSTN interfaces concurrently, such as E1 PRI, E1 R2, FXS, FXO and E&M.
60	Same gateway must be able to serve for both E1/T1 PSTN as well as SIP trunks.
61	Shall be highly modular platforms with several types of module slots to add connectivity and services
62	Digital Signal Processor (DSP) shall support both voice and video calls.
63	Provides standards-certified VoiceXML browser services. Each gateway shall support at least VXML sessions using HTTP and HTTPS.
64	Ability to cache voice prompts on its local memory to provide better voice quality to caller and minimize bandwidth required across WAN links.
65	Shall support voice prompts in both G.711 and G.729 codecs.
66	Support MRCP v2 as standard interface to ASR/TTS engines.

5.2 Regions

The interested parties should have their presence or should be willing to work Pan-India or in any one of the regions specified below:

1. **Northern states** (Jammu & Kashmir, Himachal Pradesh, Punjab, Uttarakhand, Haryana, Delhi, Rajasthan and Uttar Pradesh and UT Chandigarh)
2. **Southern states** (Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana and Lakshadweep)
3. **North-eastern states** (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim)
4. **Central states** (Chhattisgarh and Madhya Pradesh)
5. **Eastern states** (Bihar, Jharkhand, Odisha, West Bengal and Andaman and Nicobar Islands)
6. **Western states** (Goa, Gujarat, and Maharashtra along with the Union territory of Dadra and Nagar Haveli and Daman & Diu)

Section 6

Eligibility and Evaluation Criteria

6.1 Empanelment Procedure

1. The response submitted by prospective within stipulated time will be evaluated by EdCIL Committee.
2. Applicants will be requested to present and demonstrate their potential services. The date and time of the presentation will be informed to the bidders separately. During the presentation and demonstration, EdCIL's relevant committee will assess the acceptability of alternative solutions in light of the requirements.
3. Shortlisting by the committee of EdCIL will be based on the following parameters:
    a. Details of the Solution.
    b. Support and Services Model.
    c. Business Model of the Bidder.
    d. Bidder's credibility.
    e. Bidder's Strength.
    f. Risk & challenges.
4. EdCIL will officially communicate to the shortlisted organization about their response for selection.
5. Selected Partner shall submit a performance security deposit of Rs 5 Lakhs in the form of Demand Draft/NEFT Bank Transfer to EdCIL.
6. Selected Partners will be empaneled for a period of one (01) year from the date of empanelment. The empanelment can be renewed for a period of one more year based on the requirement and satisfactory performance.
7. Empanelment can be cancelled in case any fraud is reported regarding the firm, in which the empanelment security shall also be forfeited.
8. Empanelment may also be terminated pre-maturely on mutual agreement with the empaneled firm.
9. If the empaneled partner is blacklisted by any PSU/State or central government department/ministries etc., during the currency of the empanelment period, the empanelment shall be terminated by EdCIL. The partner is expected to immediately inform EdCIL regarding its blacklisting as per above for necessary action.

6.2 EoI Evaluation

Evaluation will be based on the firm meeting the Pre- qualification criteria. It is mandatory for the firm to fulfill all the pre-qualification criteria to be technically qualified. EdCIL reserves the right to assess the firm's capability and capacity to perform the contract, should circumstances warrant such an assessment in the overall interest of the EdCIL or project.

6.3 Pre-Qualification Criteria

Sr. No.	Specific Requirement	Documents required
1.	The firm should be a company registered in India under Companies Act 1956, Act 2013 or a partnership registered under the India Partnership Act 1932 or Partnership firm registered under Limited Liability Partnership Act 2008 with their registered office in India in operation for the last three years.	● Certificate of Incorporation ● Memorandum and Article of association ● Registered Partnership deed
2.	Average Annual Turnover of the firm for the last three financial years, from ITeS should be 50 crores i.e., 2019-20, 2020-21, 2021-22 with net profit and positive net worth. **For MSME registered with NSIC** Average Annual Turnover of the firm for the last three financial years, from ITeS should be 45 crores i.e., 2019-20, 2020-21, 2021-22 with net profit and positive net worth.	● Audited profit and loss statement and balance sheet ● Auditor certificate clearly specifying the turnover from ITeS services with net profit and positive net worth. ● MSME Bidders should be produce valid registration certificate issued by NSIC/MSME.
3.	The Bidder should have experience of deployment of Active LED| Videowall| LCD Videowall in Govt./PSU/Corporate Sector in the past three financial years, for a similar scope of work.	Attach Proof for the projects executed and certificate from client along with Annexure - 4
4.	The firm must have a valid PAN and a registration number for GST	● Copy of PAN card ● Copies of relevant GST registration certificates

5.	The firm should be an ISO 9001:2015 or ISO/IEC 20000-1:2018 or ISO 27001:2018/2013 or CMMI Level 3 certified company.	Copy of Valid certificate(s) in the name of the firm attested by the authorized signatory of the company
7.	The firm must have at least 500 full time professionals on its rolls as on 31st March 2022 in India.	Certificate duly attested by appropriate authority on firm's letterhead signed by authorized signatory of the firm
8.	The firm/company should be a profit-making concern for each of the last three consecutive financial years i.e., 2019-20, 2020-21, 2021-22	Audited and CA Certified financial statements.
9.	Should have presence in at least 5 States/UTs across India as per details defined in clause 5.2	Proof of presence/address proof on firm's letterhead duly signed by the authorized signatory of the firm
10.	A Power of Attorney / Board Resolution in the name of the person signing the EOI.	Original Power of Attorney / Board Resolution Copy on a non-judicial stamp paper
11.	Mandatory Undertaking: firm should: ● Not be insolvent ● Not have been convicted of any criminal offense ● Not have been blacklisted by a central/Government institution /PSU/Government Bodies /Autonomous Bodies/Private Sector ● Comply with requirements of Registration under contract labor (Regulation & Abolish) Act, wherever applicable	The firm shall furnish an undertaking duly attested by notary on a non-judicial stamp paper of value INR100/- (Rupees One Hundred Only)
12.	The firm should submit detailed deployment plan and approach for execution	Technical proposal comprising all necessary details
13.	The bidder should submit the product brochure of all the hardware and software asked in EOI	Product Brochure along with technical specification sheet.

Table 2

Note:

1. EOIs will also be reviewed for compliance with the necessary Instructions, terms and conditions, scope of work, formats etc. as outlined in this document.

2. EdCIL reserves the right to physically verify the office or any document provided by the bidder in the way EdCIL desires
3. All the aforementioned documents must be signed and stamped before uploading on the e-tender portal.
4. EoI response must be properly serial numbered and indexed.

The applicants are expected to examine all instructions, forms, terms and other details in the EOI document carefully. Failure to furnish complete information as mentioned in the EOI document or submission of a proposal not substantially responsive to the EOI document in every respect will be at the Applicant's risk and may result in rejection of the proposal.

EdCIL reserves the right to withdraw, amend, modify the EOI and or vary any part thereof at any stage. EdCIL further reserves the right to cancel the EoI at any stage. The EOI is not an offer and is issued with no commitment.

6.4 Tender Evaluation among the empaneled partners

1. On case-to-case basis, the RFP will be called among the empaneled partners with the redefined scope of work, technical qualification (as per the quantum of work) and payment terms as per the end client requirement.
2. The bids received against the RFP from the empaneled partners will be technically evaluated and financial bids of technically qualified bidders will be considered for further evaluation.
3. The work order will be awarded to the lowest (L1) bidder.
4. The successful bidder will be required to submit performance bank guarantee equivalent to 10% of the project cost for entire duration of contract.
5. Other terms and conditions of the tender shall be defined on case-to-case basis as per the requirement of end client and EdCIL.

Section 7

Formats

To,
Chief General Manager (DES)
EdCIL (India) Limited, 18 A, Sector-16A, Noida-201 301

Sub: Submission of Expression of Interest (EOI) For Empanelment of system integrator for setting up of IT Infrastructure for Command Control Center, VSK and other related projects on PAN India basis.

In response to the aforementioned Invitation for Expressions of Interest (EOI) published on ____ for the above purpose, we would like to submit the required information and express our interest. As instructed, we have attached the following documents in response:
1. Applicant Firm's Details as per Annexure -2.
2. Financial summary of the Applicant Firm as per Annexure -3.
3. Experience of the Applicant Firm as per Annexure -4.
4. Technical Detail as per Annexure -5
5. Budgetary Quote as per Annexure-6
6. Pre-Bid Query as per Annexure-7

Sincerely Yours,

Signature of the applicant
[Full name & Designation of applicant]
Firm Name
Stamp_____
Date:
Place:
Encl.: As above.
Note:

1. This is to be furnished on the letterhead of the organization.
2. It is expressly clarified that before submitting the EOI, Applicant must have carefully examined the contents of all the attached documents and any failure to comply with any of the requirements of EOI document will be at the Applicant's risk.
3. It is mandatory to submit all the annexures in full in the EoI response. The response of those applicants who have not submitted all the annexures in full may not be considered.

Annexure – 2
Details of Applicant's Firm

S.No.	Particular	Details Along with the Supporting documents
1.	Firms' legal entity & Name	
2.	Type of organization (Proprietorship/Partnership/Private Ltd./Public Ltd./Startup/MSME, etc.)	
3.	Country of Incorporation/Registration	
4.	Incorporation Document / Date of Incorporation/Registration	
5.	PAN Number	
6.	GST Registration Number	
7.	Registered And Corporate Office Address	
8.	Mobile Number	
9.	Email ID	
10.	Company Website	
11.	Empanelment with Govt. Organizations (Mention names along with copies of Certificates)	
12.	Employee Strength	
13.	ISO certification / Other certification (if any)	
14.	Whether the firm has been blacklisted/debarred by any Central Govt. / State Govt./PSU/ Govt. Bodies / Autonomous? If yes, details thereof.	

Table 3

Note: Self attested copies shall be provided in support of the documentary evidence mentioned above.

Signature of the applicant
[Full name & Designation of applicant]
Firm Name
Stamp_____
Date:
Place:

Annexure - 3

Financial Summary

Name of the Applicant Firm:

Turn-over, profit & loss and Net Worth accounts for last three years:

	Particulars	1st FY (2019-20) Rs. (In Lacs)	2nd FY (2020-21) Rs. (In Lacs)	3rd FY (2021-22) Rs. (In Lacs)	Average Annual Turnover Rs. (In Lacs)
		A	B	C	(A+B+C)/3
1.	Annual Turnover				
2.	Profit & Loss Account				
3.	Net Worth				

Table 4

● Above mentioned statement should be certified by a certified Chartered Accountant.

Signature of the applicant
[Full name & Designation of applicant]
Firm Name
Stamp_____
Date:
Place:

Annexure – 4

EXPERIENCE IN RELATED FIELDS

S. No.	Items	Name of work order and Client/ Organization in last 3 years till 31.03.2022	Date of Work Order	Completion Date / Go – Live Date, If any	Any other Remarks
1	Experience in similar assignments in Private Sector.				
2	Experience in similar assignments in State / Central Government / Public Sector / Autonomous bodies.				
3	Experience in similar assignments in Central and State Universities / NII / Education Institutes.				

Table 5

Signature of the applicant
[Full name & Designation of applicant]
Firm Name
Stamp.........................
Date:
Place:

Annexure – 5

Technical Details

Applicant has to submit the following:

i.   Product / Solution / Service Details:
   a. Product Brochure.
   b. Product and Technical Detail.
   c. Product Specification Sheet.
   d. Problem area to be focused by the solution.
ii.   Approach & methodology.
   a. Implementation Plan.
   b. Training Methodology.
   c. Quality framework.
      - SLA.
      - Support and Service Model.
      - Methodology & proposed quality plan.
      - Performance management.
   d. Risk & challenges.

Annexure - 6
Budgetary Quote

EoI Number: EdCIL/DES/EoI/2022-23/004

Subject: Empanelment of IT Infrastructure and supporting Software System integrators

S.No.	IT Infrastructure	Unit Price	GST(%)	GST Amount	Total Price with GST
A	ACTIVE LED with cabling and accessories				
1	Active-Led Type-1				
2	Active-Led Type-2				
3	Active-Led Type-3				
B	Active-Led Video Wall Controller with cabling and accessories				
1	For 4 inputs				
2	For 8 inputs				
3	For 12 inputs				
C	LCD Panel (NXN) with cabling and accessories				
1	LCD Panel Type-1				
2	LCD Panel Type-2				
D	LCD Video Wall Controller with cabling and accessories				
2	For 4 inputs				
3	For 8 inputs				
4	For 12 inputs				
E	CCTV Solution with cabling and accessories				
1	Dome camera				
2	16 Channel NVR				
F	Desktop Computer				
G	Streaming Solution				
1	Full HD PTZ Camera for Faculty with Tracking facility (Optical Zoom 20X)				
2	Full HD PTZ Camera for Faculty with Tracking facility (Optical Zoom 12X)				
3	Recording and Streaming Device				

4	Audio system					
5	Mini Audio-Conferencing Solution					
6	High-End Conferencing Solution					
H	**Multi-functional Printer**					
I	**Podium**					
1	Smart Podium					
2	Digital Podium High-end					
3	Full HD Visualizer -Compact					
4	Full HD Visualizer- Large					
J	**UPS-10KVA with 6-hours back-up**					
K	**Server Rack**					
L	**Furniture**					
M	**Call Management Solution**					

Table 6

Note:

- The budgetary quote will be inclusive of 3-year onsite Warranty and support cost.
- The bidder should include all duties as applicable in their budgetary quote. The budgetary quoted above should be inclusive of cost pertaining to travel/stay and any other allowance/incidentals payable to the staff deployed by the bidder for the assignment.
- All Installation, commissioning and cabling cost must be included in the respective product budgetary.

Signature of the applicant
Full name & Designation of applicant
Firm Name
Stamp_____
Date:
Place:

Annexure – 7
Pre-Bid Query Format

Pre-bid queries should be submitted in .XLS and Word format.

EoI Description	Expression of Interest (EOI) For Empanelment of system integrator for setting up of IT Infrastructure for Command Control Center, VSK and other related projects on PAN India basis.			
EoI No.	EdCIL/DES/EoI/2022-23/004			
Organization Name				
Address				
Contact Person				
Contact No.				
Official E-Mail Id				
S.No.	Section No.	Page No.	Clause as per EoI	Clarification Sought