

EXPRESSION OF INTEREST

FOR

TECHNO COMMERCIAL PROPOSAL FOR SUPPLY OF DIGITAL INITIATIVES
UNDER PM SHRI

EOI Ref No. BECIL/DGM (VPG)/Eoi/ Supply
of Digital Initiatives under PM SHRI/2024-
25 Dated: 21/03/2025

Issued By

Ved Prakash Gupta, Deputy General Manager

 <p>बेसिल BECIL</p>	<p>Broadcast Engineering Consultants India Limited (A Government of India Enterprise) CIN No. : U32301UP1995GOI017744</p> <p><i>Corporate Office:</i> BECIL BHAWAN, C-56-A/17, Sector-62, Noida-201 307 Tel: 0120 4177850, Fax: 0120 4177879</p> <p><i>Head Office:</i> 14-B Ring Road, IP Estate, New Delhi- 110002 Tel: 011 23378823, Fax: 01123379885 Web: www.becil.com</p>	 <p>G20 भारत 2023</p>
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The information contained in this Request for Proposal document (the "EOI") or subsequently provided to Participating agency(s), whether verbally or in documentary or any other form by or on behalf of BECIL or any of its employees or advisors, is provided to Participating agency(s) on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided. This EOI is not an agreement and is neither an offer nor invitation by BECIL to the Participating agencies or any other person. The purpose of this EOI is to receive budgetary quote to get a perspective on the approximate cost involved in executing such project. This EOI includes statements, which reflect various assumptions and assessments arrived at by BECIL in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Participating agency may require. This EOI may not be appropriate for all persons, and it is not possible for BECIL, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this EOI. Each Participating agency should, therefore, conduct its own investigations, actual site/facilities/location inspections and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this EOI and obtain independent advice from appropriate sources. Information provided in this EOI to the Participating agency(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. BECIL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein. BECIL, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant or Participating agency 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 EOI or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the EOI and any assessment, assumption, statement or information contained therein or deemed to form part of this EOI or arising in any way for participation in this Proposal Stage. BECIL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Participating agency upon the statements contained in this EOI. BECIL 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 EOI. The issue of this EOI does not imply that BECIL is bound to select a Participating agency. The Participating agency shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BECIL or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Participating agency and BECIL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Participating agency in preparation or submission of the Proposal, regardless of the conduct or outcome of the bidding Process. No participating agency has any right to claim any compensation or reimbursement to any cost. Participation in EOI does not guarantee selection of participating agency.

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SECTION –I

INTRODUCTION AND BRIEF DESCRIPTION

1. ABOUT BECIL

Broadcast Engineering Consultants India Limited (BECIL), an ISO 9001:2015, 27001:2013, ISO/IEC 2000:2012 certified Mini Ratna Central Public Sector Enterprise (CPSE) was incorporated on 24th March, 1995 under the Companies Act, 2013 (erstwhile the Companies Act, 1956) by Government of India with 100% equity share capital of BECIL held by President of India through Secretary and Joint Secretary of Ministry of Information & Broadcasting.

The Company was initially set up for providing project consultancy services and turnkey solutions encompassing the entire gamut of radio and television broadcast engineering, establishment of transmission facilities, content production facilities, terrestrial, satellite and cable broadcasting in India and abroad. The company has now diversified into the fields of Strategic Projects such as Information Communication.

Technology, Electronic Surveillance (namely CCTV, Access Control, Intrusion, Fire Safety, Hydrants, etc.). Electronic Media contents including films, Sentinel Analytics, Counter Drones/UAV etc. The activities include, but are not limited to Supply, Installation, Testing & Commissioning, Consultancy Services, Technical Audit, Media Analysis, R&D, projects pertaining to Digital India, City Surveillance, and Safe City. Smart City, Make in India, Manufacturing, Audio Video & Data Analysis, Cyber Security, Engineering, Procurement & Construction, Project Management Services, Operation and Maintenance, Manpower Placement, AMC and providing total turnkey project for critical information infrastructure.

BECIL, has its Head Office in New Delhi, Corporate Office in Noida and Regional Office in Bangalore and Kolkata. BECIL is exploring geographical expansion in many states due to diversification in business portfolios.

Over the years, BECIL has consciously groomed and developed a team of in-house, versatile and dedicated engineers and also cultivated and harnessed a vast reservoir of professionals drawn from various fields of Broadcasting Industry, which include public and private Broadcasters, Defense and Cable Industry. Through this network of resourceful technical professionals, BECIL, has established its pan India presence to serve the needs of the industry.

BECIL has a vast reservoir of experts and integrates the expertise of All India Radio (AIR) and Doordarshan (DD), the national broadcaster of India, catering to one of the largest Radio Networks reaching out to more than a billion people and the world's largest Terrestrial Television Network supplemented by Analogue and Digital satellite Broadcasting services reaching out to millions of TV homes in India and abroad.

2. INTENT AND IMPORTANT ASPECTS OF THE EXPRESSION OF INTEREST (EOI)

BECIL on behalf of its client invites techno-commercial proposal for budgetary estimate for Supply of Digital Initiatives across 124 PM SHRI Schools. The purpose of this Eoi is only to receive budgetary proposal to get an overview on estimated cost to execute such project. In case of award of work by Client to BECIL, a tender shall be floated on government portal where Bidder may quote their competitive price. No order shall be issued to any participating agency against this Eoi.

SECTION –II

3. IMPORTANT DATES (SCHEDULE AND CRITICAL DATES)

S.N.	ACTIVITY	SCHEDULED DATE & TIME
1.	EOI Number & Date	BECIL/DGM (VPG)/Eoi/ Supply of Digital Initiatives under PM SHRI/2024-25 Dated: 21/03/2025
2.	Date & Time of Issue of EOI	Date 21/03/2025 Time 06:30 hrs
3.	Last date and Time for Submission of proposals	Date 24/03/2025 Time 01:30 Hrs
4.	Place of Submission of EOI / Opening of EOI	BECIL Bhawan, C-56 / A -17, Sector - 62, Noida – 201307, Uttar Pradesh
5.	EOI Processing Fee (Non-refundable)	NIL
6.	Address for Communication of proposal	BECIL Bhawan, C-56 / A -17, Sector - 62, Noida – 201 307, Uttar Pradesh
7.	Contact details for this EOI	Ved Prakash Gupta, Deputy General Manager Telephone: 0120-4177850 Email : rupesh@becil.com/ved@becil.com

- NOTE: Broadcast Engineering Consultants India Limited reserves the right to amend the EOI tentative schedule and critical dates without giving any explanation whatsoever. Corrigendum may be published in this regard on www.becil.com . Participating agencies are advised to check the website for updates in this regard.

SECTION –III

3. GENERAL TERMS & CONDITIONS OF EOI

- 3.1 Broadcast Engineering Consultants India Limited (BECIL) invites Expression of Interest (EOI), through offline mode for techno commercial proposal for Supply of Digital Initiatives under PM SHRI/2024-25 Dated: 21/03/2025 scope of work of Eoi.
- 3.2 The duly signed Hard Copy of the Techno Commercial Proposal is to be submitted in a packed and sealed envelope, in Tender Box, BECIL BHAWAN C-56/A17 Sector- 62 Noida (UP) 201307.
- 3.3 BECIL may ask for Demonstration, if required.
- 3.4 The EOI must be addressed to the given name and address:
- To,
Shri Ved Prakash Gupta
Deputy General Manager
Broadcast Engineering Consultants India Limited
C-56/A-17, Sector-62, Noida, Uttar Pradesh-201307
- 3.5 The EOI must be submitted in English Only. All the documents including the supporting documents/ enclosures etc. must be Calibri/Aerial/Times New Roman, font size-12 and fully legible. Supporting documents if in a language other than English must be accompanied by an English translated document. The English version shall prevail in matters of interpretation. Each and every page of the EOI should be numbered and mention the relevant page no. of the documents in the checklist. **EOI Documents which are not legible shall be rejected.**
- 3.6 In case the participating agency has any doubt about the meaning of anything contained in the EOI document, she/he shall seek clarification within 1 day 0.of issue of EOI. Except for any written clarification by Shri Ved Prakash Gupta, Deputy General Manager BECIL, no written or oral communication, presentation or explanation by any other employee of BECIL shall be taken to bind or fetter BECIL.
- 3.7 The Management of BECIL reserves the right to amend or withdraw any of the terms and conditions mentioned in the EOI Document or reject any or all the proposals without giving any notice or assigning any reason. The decision of the CMD, Broadcast Engineering Consultants India Limited in this regard shall be final and binding on all.
- 3.8 BECIL reserve the right to amend any term of the EOI at any point of time before the submission and participating agency should regularly check the website. Further, BECIL also reserves to increase/decrease/delete/add any BOQ item.

4. SUBMISSION OF EOI

- 4.1 EOI, complete in all respects, must be submitted offline.
- 4.2 BECIL may, at its own discretion, extend the date for submission of EOI. In such a case all rights and obligations of BECIL and the Participating agencies shall be applicable to the extended time frame.
- 4.3 As the EOI can be submitted only up to the defined date and time, there can't be any late proposals. BECIL will not be responsible for any delay in obtaining the terms and conditions of the tender. BECIL will not be responsible for postal delays. Proposals received after the due date will not be opened and rejected.
- 4.4 At any time prior to the last date for receipt of EOI, BECIL may for any reason, whether at its own initiative or in response to a clarification requested by a participating agency, modify the EOI Document by an amendment. The amendment will be notified on BECIL's website <http://www.becil.com> and should be taken into consideration by the participating agencies while preparing their EOI.
- 4.5 The participating agencies will bear all costs associated with the preparation and submission of their proposals. BECIL will, in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.
- 4.6 The EOI must contain:
- 4.6.1 Company/participating agency profile relevant to EOI.
 - 4.6.2 Techno commercial proposal
 - 4.6.3 Declaration regarding acceptance of Terms and conditions of EOI.
 - 4.6.4 Essential information such as Name & address of the agency, Business Name, E-mail id, Fax No. /Telephone No. , Authorized Signatory name, E-mail ID and contact no.
- 4.7 The EOI should be duly signed on each page by authorized person. Each page should be properly numbered. Documents authorizing the signatory must accompany the EOI.
- 4.8 The EOI complete in all respects must be submitted with requisite information and annexure(s). The EOI should be free from ambiguity, change or interlineations. Incomplete EOI will not be considered and is liable to be rejected without making any further reference to participating agency.

4.9 The participating agency shall be ignored, if complete information is not given there-in, or if the particulars and data (if any) asked for are not filled in properly.

4.10	Checklist of documents/information to be submitted	
	(a)	Profile of the company/participating agency/firm
	(b)	Participating agencies Details as per format
	(c)	All the requisite documents in the prescribed formats placed at Annexures to this EoI
	(d)	Techno Commercial proposal

5. OPENING OF EOI

5.1 The proposals submitted against this EOI shall be opened on Date 24/03/2025 at 01:30Hrs. BECIL reserves the right to change the date of opening of proposal.

6. GENERAL TERMS & CONDITIONS OF EOI

6.1 The Techno commercial proposal is to be placed inside a single sealed envelope named as

“Response for EOI No. BECIL/DGM (VPG)/EoI/ Supply of Digital Initiatives under PM SHRI/2024-25 Dated: 21/03/2025 Submitted by: [Firm/Company name]

6.2 BECIL reserves the right to solicit additional information from participating agency/OEM/Implementation Agency to evaluate which proposal best meets the need of the Project. Additional information may include, but is not limited to, past performance records, lists of available items of works which will be done simultaneously with the project, on-site visit and evaluations by BECIL personnel, or any other pertinent information. It will be vendor’s responsibility to check for updated information on website <https://www.becil.com>. BECIL reserves the right to cross verify the information directly with client

6.3 BECIL reserves the right to waive off any deviations, accept the whole or part thereof or reject any or all proposals and to select the participating agency/OEM/Implementation Agency(s) which, in the sole opinion of BECIL, best meets the project’s interest. BECIL also reserves the right to negotiate with potential participating agency/OEM/Implementation Agency(s) so that its best interest to fulfill the need of project is served.

6.4 BECIL reserves the right to reject any and all proposals, to negotiate all terms of any agreement resulting from this EOI, and to request additional information from participating agency.

6.5 All information contained in this EOI, or provided in subsequent discussions or

disclosures, is proprietary and confidential. No information may be shared with any other organization, including potential sub-contractors, without prior written consent of BECIL.

6.6 Any dispute or difference or claim arising out of or in relation to this EOI shall be settled or decided by CMD/Director, BECIL or by any other person to be nominated by CMD/Director.

SECTION –IV

SCOPE OF WORKS

7. Objective and Scope of work with Specification detail

7.1 PM SHRI Digital Libraries

As per programmatic norms, digital libraries will be established in all 124 schools, comprising tablets pre-loaded with educational content for students in upper primary and higher grades. The PM SHRI guidelines emphasize the adoption of **Personalized Adaptive Learning (PAL)** to address diverse learning needs, stating:

"Personalised and Adaptive Learning (PAL) programme could be adopted to cater to the different needs of students."

In alignment with these guidelines, digital libraries will be leveraged to implement PAL, ensuring tailored instruction that enhances student engagement and academic performance.

7.2 ICT Labs & Smart Classrooms

As per programmatic norms, ICT Labs and Smart Classrooms will be established to equip students with digital skills, hands-on experience with emerging technologies, and access to high-quality digital learning resources. These facilities will cater to students in Classes VI to XII, with provisions for:

ICT Labs: Schools will be equipped with devices to support subject-specific learning in Computer Science, ensuring students gain hands-on experience with the latest tools and technologies. The ICT labs will host essential software applications aligned with the HP Board curriculum for Classes 9 to 12, providing practical exposure to programming, data science, networking, and digital content creation.

As per the HP Board curriculum, the following software programs are essential for effective teaching and learning in Computer Science.

Category	Software	Purpose
Operating System	Windows 10/11	General system use, MS Office, and administration
	Linux (Ubuntu, Fedora, Kali Linux)	Learning Linux basics, shell scripting, and networking concepts
Office & Documentation	Microsoft Office (Word, Excel, & PowerPoint)	Document processing, presentations, spreadsheets
	LibreOffice/OpenOffice	Open-source alternative for MS Office

Programming & Web Development	Notepad++	Basic code editing
	Visual Studio Code	HTML, CSS, JavaScript, and other programming languages
	Eclipse IDE	Java programming (if included in syllabus extensions)
	PyCharm	Python programming (if applicable)
	Adobe Dreamweaver	Web development (HTML, CSS, PHP)
	XAMPP/WAMP	Local web server for PHP & MySQL
Networking & Internet Tools	Google Chrome, Mozilla Firefox, Microsoft Edge	Web browsing, testing web applications
	Cisco Packet Tracer	Networking concepts and simulations
	Wireshark	Network monitoring and analysis
	PuTTY	SSH and remote access for Linux systems
Database & SQL Tools	MySQL	Database management and SQL queries
	phpMyAdmin	Web-based administration MySQL
	Oracle SQL Developer	Alternative SQL tool for learning database management
Digital Image Editing & DTP	Adobe Photoshop	Image editing and graphics design
	CorelDRAW	Logo and graphic design
	Adobe PageMaker	Desktop publishing and document layout
	GIMP	Open-source alternative to Photoshop
Multimedia Editing	Windows Movie Maker / Adobe Premiere Pro	Video editing and multimedia projects
	Audacity	Sound editing and audio mixing
Other Specialized Software	PL/SQL Developer	Learning PL/SQL database concepts
	Java Runtime Environment (JRE) & JDK	Java-based programming (if applicable)
	Tally	If any accounting-related modules are included
	OBS Studio	Screen recording and presentation

ICT labs are essential to ensure students receive hands-on experience with the latest tools and technologies. These labs will be established based on the latest system specifications and software requirements as per the curriculum.

7.3 Digital Classrooms

As per the programmatic norms, smart classrooms and interactive panels could be implemented for all grades, ensuring access to high-quality educational content that aligns with curriculum requirements. To enhance classroom engagement and foster interactive learning across all subjects, smart classrooms will be equipped with interactive panels and digital content. These resources will empower teachers with modern tools to create dynamic and engaging lessons, improving student comprehension and participation.

B) Components & Specifications

To ensure successful implementation, the following components are required to be procured by the implementing agency under each category:

8. PM SHRI Digital Libraries

The following components include essential hardware, software, training, and monitoring mechanisms to support their successful implementation:

Component	Description	Recommendations
Hardware	Tablets + Accessories	<ul style="list-style-type: none"> Tablets are recommended as a preferred hardware to implement PAL program Accessories like Headphones, chargers, tablet stands with covers, etc. to also be included during procurement 10% extra accessories to be provided keeping in mind wear and tear
Software	Truly adaptive and personalised	<ul style="list-style-type: none"> Software to be evaluated by Edtech Tulna, an evaluation tool developed by IIT - Bombay and Delhi, to be leveraged to identify most effective PAL Software Implement Device Management Systems in all devices for tracking and troubleshooting.
Teacher Capacity Building	Training on both the foundational and functional components of PAL	<ul style="list-style-type: none"> Physical hands-on trainings to be given to teachers to include PAL as part of the timetable, teaching - learning practice, and for remediation.
Web-Based Monitoring Dashboard	A centralised dashboard, to monitor the functionality of devices, usage, learning progress of students, is needed	<ul style="list-style-type: none"> Develop a web-based dashboard with defined KPIs to assess device functionality, device usage patterns (both online and offline), and student learning outcomes. Establish API-based integration with the VSK to enable continuous monitoring and streamlined data access.

Suggestive Tablet Specifications for PAL Implementation

Product	Category	Specifications	Quantity per School
Tablet	CPU	2.0 GHz or higher with Octa Core	24
	RAM	4 GB	
	Storage	64 GB internal; dedicated SD Card slot	
	Operating System	Android 11.0 or above	
	Screen	8" IPS/AMOLED/HD or higher,	
	Battery	Minimum 5000 mAh	
	Audio Jack	3.5mm headphone jack with mic	
	Network	WiFi enabled	
	Browser	Mozilla Firefox/Chrome (latest version)	
	MDM Tool	Mobile Device Management (MDM) for security and monitoring	
Accessories	Headphones	Compatible with 3.5mm audio jack	26
	Tablet Covers	Cover-cum-stand for tablets	24

9. ICT Lab

The following components include essential hardware, software, training, and monitoring mechanisms to support their successful implementation:

(Non-Recurring)

Component	Description	Recommendations for HP
Hardware	Laptops, IFPDs, UPS, Printers, Cameras, DTH Connection	Procurement to include: 1. 65" Interactive Panel - 1 per school 2. OPS (Open Pluggable Specification Unit for IFPD) - 1 per school 3. Monochrome Laser Printer - 1 per school 4. Desktop Computer - 8 per school 5. UPS (600VA) - 8 per school 6. UPS (1KVA) - 1 per school 7. Laptop-1 per school 8. Computer Table - 8 per school 9. Chair-8 per school 10. Headset-16 per school
Software	Subject-specific applications for Computer Science education	<ul style="list-style-type: none"> Preloaded content and software for all grades from 1st to 12th. Implement Device Management Systems in all devices for tracking and troubleshooting.
Teacher Capacity Building	Training on both foundational and functional use of ICT labs	Hands-on training for teachers on use of ICT Labs and to effectively integrate digital devices into classroom teaching.

Web-Based Monitoring Dashboard	A centralized dashboard to track ICT lab usage and device performance	Develop a web-based dashboard with defined KPIs to assess device functionality, device usage patterns (both online and offline), and student learning outcomes. Establish API-based integration with the VSK to enable continuous monitoring and streamlined data access.
Annual Maintenance Contract	Maintenance & Management	A three-year Annual Maintenance Contract (AMC) to ensure continued functionality and support.

Additionally, the following components to be included as per the recurring budgets available for under ICT Labs and proposal may be submitted separately year-wise.

(Recurring)

Component	Description	Recommendation
ICT Instructors	Support staff for ICT Lab implementation and troubleshooting	1 ICT Instructor per 10 schools to be appointed to ensure digital learning for students and provide support to teachers on the implementation of the program. 1 State Level Manager also to be appointed to manage the ICT Instructors.
Multimedia Content Updation	Maintenance of digital learning content	Regular updates and maintenance of digital learning content
Central Helpdesk Support	Dedicated helpdesk for addressing ICT-related issues	Establish a centralized helpdesk and online complaint portal with defined response time for issue resolution.
Sub-meter and Electricity Charges	Electricity consumption for ICT Labs	Allocate funds for electricity costs, including sub-meter installation where necessary.

Suggestive Specifications for the Hardware components above:

Product	Specifications	Quantity
65 inch Panel	65" Interactive Touch Screen, Resolution 3840(H) ×2160 (V) IPS Screen (DLED Backlit), Display Color 1.07Billion Colors (10bit), Brightness 400cd/m ² *, View Angle R/L 178 (Min.), U/D 178 (Min.), Aspect Ratio 16:9, Speaker output 20W × 2, HDMI Input 3 X IN, Type C 1, Multi-Media USB USB2.0*2 and USB3.0*3 (total 5 USB ports), RS232 1, RJ-45 2 (RJ45 IN X 1 RJ45 Out X 1) Touch input 2, Bluetooth BT 5.4, WIFI WIFI 6E, Line Out 1, Touch screen, Touch Resolution 32768x32768, Cover Glass Anti-glare, Mohs 7 Hardness 9, Touch Accuracy 1mm, Annotation Over Any Source Yes,	1

	Response Time <8ms, Palm Detection Yes, Pen and Touch Differentiation Yes, Pens Included 2 Stylus, Compatibility Windows 11/ Linux/Android/Chrome, Android, PANEL CPU Quadcore, OS Version ANDROID 14 or higher, Flash 32 or higher, RAM 4 GB or higher, Touch 40 points, Write 20 points, Power AC:100~240V 60/50HZ, Typical Power Watt ≤240W, Power Saving or Sleep Mode <0.5W, 3 years onsite warranty	
OPS	Intel Core i5 Processor or higher, 8 GB RAM or higher, 256 GB SSD or higher, Windows 11 home, Preloaded with Antivirus, 3 years onsite warranty	1
Printer	Type: Monochrome Laser Printer, Functions: Print, Scan, Copy, Supporting OS: Windows, MacOS, Linux, Connectivity: USB, Monthly Duty Cycle: 10000 pages (A4) 10000 pages (Letter) or higher, Print Speed: 20 PPM (Mono) or higher, Manual Two Sided Printing, Auto-off Technology, Intuitive Control Panel, 3 years onsite warranty	1
Desktop	Intel i5/AMD RYZEN 5 or higher, 8GBDDR4 or higher, 512GBSSD or higher, 19.5 Inches Monitor or higher. Windows 11 Home, 3 years onsite warranty, 1vga+1hdmi+1DP port must, TCO 9.0 of same oem make, ISO 20000,27000,50000,SA8000 must from oem.	8
UPS 600VA	Capacity: 600VA/360W or higher, Input Voltage Range: 140 V ~ 300 VAC, Frequency: 50 Hz ± 10%, Output Voltage: 230 VAC Nominal, Transfer Time: Typical 4~8ms, Waveform (Battery Mode): Modified Sine Wave, Type: Sealed Maintenance Free, Charging Time: 6 Hours recover to 90% capacity, Battery Rating: SMF 12V/7AH x 1 Battery, Operating Temperature: 0°C-40°C,, Relative Humidity: 0 to 95% Non-Condensing, Noise Level: < 40dB, 3 years onsite warranty	8
UPS 1KVA	Capacity: 1000VA/600W or higher, Input Voltage Range: 140 V ~ 300 VAC, Frequency: 50 Hz ± 10%, Output Voltage: 230 VAC Nominal, Transfer Time: Typical 4~8ms, Waveform (Battery Mode): Modified Sine Wave, battery Type: Sealed Maintenance Free, Charging Time: 6~8 Hours recover to 90% capacity, Battery Rating: SMF 12V/7AH x 2 Battery, Operating Temperature: 0°C-40°C; Relative Humidity: 0 to 95% Non-Condensing, Noise Level: <40dB, 3 years onsite warranty	1
Laptop	i5 processor or higher, 8 GB RAM or higher, 512 GB SSD or higher, Window 11 Home, Display: 35.6 cm (14") or higher IPS Display with Full HD 1920 x 1080, HD Graphics Card LED-backlit TFT LCD, 16:9 aspect ratio, 45% NTSC color gamut, Wide viewing angle up to 170 degrees, 3 years onsite warranty	1
Computer Table	600 mm x 450 mm x 760 mm height, work top and side panels are made up of Pre-laminated particle board of 17min thick with 0.8 mm PVC edge binding all around the work top, the table should be	8

	provided with keyboard tray fitted with telescopic channel.	
Chair	Chair made of 25 mm pipe of 16 SWG gauge with seater size -450 mm x 450 mm. Total height of chair will be 830 mm and height of seat will be 450 mm. Seat and back made of 12 mm ply with cushion and upholstered with prime quality fabric.	8
Headset	Type: Over the hear, Plug & play, Noise cancelling microphone: yes, Connection type: Single/Double 3.5 mm jack, Impedance: 32 ohms, Frequency Response: headphone 20Hz-20KHz, Microphone 100Hz-16KHz, Sensitivity Headphone: 100DB+/-3DB, Certification: BIS, warranty 3 years on site	16

10. Digital Classrooms

The following components include essential hardware, software, training, and monitoring mechanisms to support their successful implementation:

Component	Description	Recommendations for HP
Hardware	Smart Panels / Interactive Flat Panel Displays (IFPDs)	<ul style="list-style-type: none"> - 2 Smart Classrooms per schools to be equipped with 65" Interactive Panels with inbuilt Android 11.0 - 2 Stylus pens per IFPD -1 UPS per IFPD Panel 1 OPS per IFPD -Ensure compatibility with high-quality digital content. -Ensure site preparation for effectively deploying Smart Classrooms.
Content Software &	Interactive learning tools and digital content	<ul style="list-style-type: none"> - Preloaded Content to be sourced from NCERT-approved platforms and aligned with HP Board syllabus for all grades from 1st to 12th. -Include subject-specific interactive simulations and e-learning resources. -Implement Device Management Systems in all devices for tracking and troubleshooting
Teacher Capacity Building	Training on integrating digital content in lesson delivery	Hands-on training for teachers on effectively integrating digital devices and digital content into daily classroom teaching along with lesson planning, session planning and digital learning.
Web-Based Monitoring Dashboard	A centralized system to track digital classroom engagement	<ul style="list-style-type: none"> - Develop a dashboard to monitor Smart Panel usage, lesson plan integration, and student engagement. -Ensure API integration with VSK for real-time tracking.

Annual Maintenance Contract	Maintenance & Management	A three-year Annual Maintenance Contract (AMC) to ensure continued functionality and support.
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Suggestive Specifications for the Devices

Product	Specifications	Quantity per School
IFP	65" Interactive Touch Screen with Compatibility Windows 11/Linux/Android/Chrome, Android, PANEL CPU Quadcore, OS Version ANDROID 14 or higher, Flash 32 or higher, RAM 4 GB or higher. 2 Stylus Pen along with Wall Mount Kit, Sliding Shutter and web camera along with Site Preparation and necessary electrification.	2
OPS	Intel Core i5 Processor or higher, 8 GB RAM or higher, 256 GB SSD or higher, Windows 11 home, Preloaded with Antivirus, 3 years onsite warranty	2
UPS	Capacity: 1000VA/600W or higher, Input Voltage Range: 140 V~300 VAC, Frequency: 50 Hz \pm 10%, Output Voltage: 230 VAC Nominal, Transfer Time: Typical 4~8ms, Waveform (Battery Mode): Modified Sine Wave, battery Type: Sealed Maintenance Free, Charging Time: 6~8 Hours recover to 90% capacity, Battery Rating: SMF 12V/7AH x 2 Battery, Operating Temperature: 0°C-40°C; Relative Humidity: 0 to 95% Non-Condensing, Noise Level: < 40dB, 3 years onsite warranty	2

Particulars of the Participating Agency

1.	Name of company/participating agency	
2.	Office Address /Telephone No / Fax No / email id / website	
3.	Year of establishment	
4.	Status of the Company/participating agency	
5.	Name of Directors	i) ii) iii)
6.	Names of principle person concerned with this work with title and Telephone No / Fax/ Email Id, Etc.	
7.	Whether registered with the registrar of companies /registrar of firms. If so, mention number and date.	i) ii) iii)
8.	In case of change of Name of the Firm, former Name / Names and year/ years of establishment:	
9.	GST registration certificate	
10.	Whether an assessed of income tax. If so, mention permanent account number.	
11.	State Annual turnover of the company/participating agency Furnish copies of audited balance sheet and profit & loss	
12.	Particulars and place of similar type of works done if any in a single order (Furnish details in a separate sheet and enclose copy of the past order)	

Signature of Authorized Signatory

Place: _____

Date: _____

Address: _____

Mobile: _____

Email ID: _____

Proposal Covering Letter

To
Deputy General Manager
Broadcast Engineering Consultants India Limited
BECIL Bhawan, C-56, A/17, Sector-62, Noida-201307

Reference: EOI No.<<>> dated << 202X>>

Dear Sir/Madam,

We, the undersigned, offer to provide Systems Implementation solutions to BECIL on <Name of the Systems Implementation engagement> with your Expression of Interest dated <insert date>and our Proposal. We are hereby submitting our Proposal, which includes our techno commercial proposal.

We hereby declare that all the information and statements made in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

We understand that the purpose of this Eoi is only to receive techno commercial proposal to receive budgetary proposal to get an overview on estimated cost to execute such project. In case of award of work by Client to BECIL, a tender shall be floated on government portal where participating agencies may quote their competitive price. No order shall be issued to any participating agency against this Eoi.

We agree to abide by all the terms and conditions of the EOI document.

We understand you are not bound to accept any Proposal you receive.

Signature of Authorized Signatory

Place: _____
Date: _____
Address: _____
Mobile: _____
Email ID: _____

Credentials Summary

S. No.	Project Name	Client Name	Client Type	Similar Project Value (in INR)	Documentary evidence provided (Yes or No)	Project Status (Completed or Ongoing or Withheld)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Signature of Authorized Signatory

Place: _____

Date: _____

Address: _____

Mobile: _____

Email ID: _____