ODISHA COMPUTER APPLICATION CENTRE (OCAC)
INVITES REQUEST FOR PROPOSAL
RFP Enquiry No.- OCAC-SEGP-INFRA-0056-2023/25117

Odisha Computer Application Centre (OCAC) invites Request for Proposal (RFP) for Selection of Agency for Implementation of AI Powered Virtual Classrooms with Digital Assessment in Government and Government Aided Schools across Odisha under ICT & Digital Initiatives Scheme for OSEPA, School & Mass Education Department, Govt. of Odisha. For details please visit websites www.ocac.in & www.odisha.gov.in.

The bid shall be submitted in electronic mode only in the portal **https://enivida.odisha.gov.in** latest by **30.01.2026, 4:00 PM.** OCAC reserves the right to accept/reject any/ all bids without assigning any reason thereof.

General Manager(Admin), OCAC, Plot No.-N-1/7-D, Acharya Vihar, P.O.-RRL, Bhubaneswar-751013, Ph.-2567280/ 2567064/ 2567295

ODISHA COMPUTER APPLICATION CENTRE (OCAC)
Odisha, Bhubaneswar–751013

Request for Proposal (RFP)

For Selection of Agency for Implementation of AI Powered Virtual Classrooms with Digital Assessment in Government and Government Aided Schools across Odisha under ICT & Digital Initiatives Scheme for OSEPA, School & Mass Education Department, Govt. of Odisha

RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025

Odisha Computer Application Centre
(Technical Directorate of E&IT Department, Government of Odisha),
N-1/7-D, Acharya Vihar, PO- RRL, Bhubaneswar – 751013
EPBX: 0674 -2567280 / 2567064 /2567295 / 2567283

DISCLAIMER

The information contained in this RFP document or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by Odisha Computer Application Centre (OCAC) or any of their employees is provided to Bidder(s) on the terms and conditions set out in this RFP Document and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by OCAC to the Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in making their technical and financial offers pursuant to this RFP (the "Bid"). This RFP includes statements, which reflect various assumptions and assessments arrived at by the bidder in relation to the Project. Such assumptions, assessments, and statements do not purport to contain all the information that each Bidder may require. The assumptions, assessments, statements, and information contained in this RFP, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations, studies and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtains independent advice from appropriate sources.

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

OCAC, makes no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Bid Stage. OCAC also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP.

OCAC 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 RFP. The issue of this RFP does not imply that is bound to select a Bidder or to appoint the Preferred Bidder, as the case may be, for the Project and reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

OCAC reserves all the rights to cancel, terminate, change or modify this selection process and/or requirements of bidding stated in the RFP, at any time without assigning any reason or providing any notice and without accepting any liability for the same.

1. Important Dates & Information

Information	Details
Bid Inviting Authority	Odisha Computer Application Centre (OCAC) (Technical Directorate of I.T. Dept., Govt. of Odisha)
Correspondence Address	The General Manager (Admin), Odisha Computer Application Centre (OCAC), (Technical Directorate of I.T. Dept., Govt. of Odisha), N-1/7-D, Acharya Vihar, P.O.- RRL, Bhubaneswar – 751013
Project Name	Request for Proposal (RFP) For selection of Agency for the Implementation of AI Powered Virtual Classrooms with Digital Assessment in Government and Government Aided Schools across Odisha under 'ICT and Digital Initiatives' Scheme for OSEPA, School & Mass Education Department.
RFP Reference No. and Date	RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025
Place of Execution	Odisha
Non-Refundable RFP Document Fee	₹22,400/- (Rupees Twenty-Two Thousand Four Hundred Only), in the form of Demand Draft drawn from any Scheduled Bank in favour of "Odisha Computer Application Centre", payable at Bhubaneswar or paid online through OCAC e-Tender Portal, i.e., https://enivida.odisha.gov.in
Earnest Money Deposit (EMD)	Earnest Money Deposit (EMD) of ₹8,00,00,000/- (Rupees Eight Crore) in the form of Demand Draft/Bank Guarantee from any Government, Nationalized, and Schedule Commercial Bank. The EMD of successful Bidder is liable to be forfeited if the Bidder revokes any terms of the tender within the validity period. EMDs given by unsuccessful Bidders will be refunded after placing of work order to the successful Bidder.
Availability of Bid Document in the website (www.ocac.in, www.odisha.gov.in& https://enivida.odisha.gov.in)	31-12-2025 To 30-01-2026 at 04:00 PM
Last Date and Time for Submission of Pre-Bid Query through **email and in excel format only (Annexure-13).**	09-01-2026 by 04:00 PM
Date & Time for Pre-Bid Conference through online VC	13-01-2026 at 12:00 Noon

Issue of Corrigendum (if any)	18-01-2026
Last Date and Time for Submission of Bid Document	**03-02-2026 by 04:00 PM**
Date and Time of opening of Pre-Qualification Bids and Technical Bids	03-02-2026 by 04:30 PM
Opening of Commercial Bid (CB)	To be informed

Note: Pre-Bid Query submitted in any other form will not be considered.

1.1. Fact Sheet

This Fact Sheet comprising important factual data of the tender is for quick reference of the Bidder.

Clause Reference	Topic
The Proposal	Odisha Computer Application Centre (OCAC) invites RFP for the selection of agency for Implementation of AI Powered Virtual Classrooms with Digital Assessment in Government and Government Aided Schools across Odisha under 'ICT and Digital Initiatives' Scheme for OSEPA, S&ME Department.
RFP Document Fee	₹22,400/- (Rupees Twenty-Two Thousand Four Hundred Only), (Inclusive of 12% GST) must be submitted along with the proposal. The RFP document fee must be in favor of Odisha Computer Application Centre from any Scheduled Bank payable at Bhubaneswar or paid online through https://enivida.odisha.gov.in.
Earnest Money Deposit (EMD)	Earnest Money Deposit (EMD) of ₹8,00,00,000/- (Rupees Eight Crore) in the form of Demand Draft/Bank Guarantee from any Government, Nationalized, and Schedule Commercial Bank. The EMD of successful Bidder is liable to be forfeited if the Bidder revokes any terms of the tender within the validity period. EMDs given by unsuccessful Bidders will be refunded after placing of work order to the successful Bidder.
Performance Bank Guarantee (PBG)	Performance Bank Guarantee (PBG) @ 10% of the cost of project from any Government, Nationalized, and Scheduled Commercial Bank in the prescribed format in favor of the Odisha Computer Application Centre shall be submitted by the successful bidder within 30 days of issue of work order.
Scope of Work	Selected bidder is expected to deliver the services listed in Scope of Work as mentioned in this RFP.
Language	Bid must be prepared by the bidder in English language only.
Currency	The bidder should quote in Indian Rupees only. The Total Price inclusive of taxes and duties will be considered for evaluation.
Validity Period	Proposals/bids must remain valid minimum for 180 days from the last date of bid submission.
Bid to be submitted on or before last date of submission at:	The proposal must be submitted to: **The General Manager (Admn.)** Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D Acharya Vihar Square, RRL Post Office, Bhubaneswar-751013 (INDIA)

2. Invitation for Bids

Odisha Computer Application Centre (OCAC) invites bids from eligible bidders who have the necessary eligibility and qualifications for Implementation, Operations, and Maintenance of 'AI Powered Virtual Classrooms with Digital Assessment' as per the "Scope of Work" described in this RFP. The selected bidder shall be responsible for implementing the project in CAPEX Phase and providing the operations and maintenance support for five years as described in this RFP under OPEX Phase from the date of GO-LIVE of the project.

The Bid Document has been published in the official website of OCAC (www.ocac.in), OCAC e-Tender Portal https://enivida.odisha.gov.in and official website of Govt. of Odisha (www.odisha.gov.in). The tender advertisement has also been published in leading newspapers for wide circulation. Bidders are requested to go through the Bid Document carefully and participate in the bidding process with all necessary details as required. This RFP is issued by OCAC, which is the sole point of contact during the selection process. The Nodal Officer responsible for entire process is the General Manager (Admin).

3. Background Information

Odisha School Education Programme Authority (OSEPA), School & Mass Education Department, Government of Odisha wishes to implement education technologies in schools to integrate the best practices in schooling experience. The State is looking to deploy a state-of-the-art technology providing agency to deliver the content through Internet/Satellite Communication across identified schools in Odisha state under 'ICT and Digital Initiatives' to enable disadvantaged children (geographically and financially) to have access to high quality centrally managed learning opportunities. The objective is to make students receive holistic educational inputs in their own schools through the medium of technology.

Under the project, the state wishes to establish outcome oriented remote teaching infrastructure which includes broadcasting studios and virtual classrooms in the connected schools along with the AI enabled feature of Digital Assessment solution. The objective is to make the students learn the concepts faster and in efficient ways with the help of engaging digital contents taught by studio experts. The system should enable assessments and record these, whether in the school at Virtual Classrooms or beyond the school on a Mobile App. This will help the OSEPA to use the data required for issuing remedial teaching. Necessary Artificial Intelligence technologies should be utilized for generating the actionable data. OSEPA intends to use the facility also for teacher training, extra-curricular courses, skill development and for implementation of other schemes through Virtual Learning. In addition, OSEPA aims to setup dedicated resource team to provide regular holistic learning programs on the virtual classroom setup.

Odisha Computer Application Centre (OCAC) has been designated as the state level Nodal Agency for finalizing the procurement process. In the above context, on behalf of OSEPA S&ME Department, Government of Odisha, OCAC seeks proposals from eligible bidders for implementing the Virtual Classrooms with Digital Assessment solution including the required Hardware, Software, and Services in the Government and Government Aided Schools as follows:

	Virtual Classrooms with Digital Assessment
No. of Schools	5370
Major components	Main Studios (4 nos.) and zonal level Regional Studios (8 nos.) for remote interactive teaching using Fibre/Satellite Connectivity; Digital Content in Odia & English languages as teacher support resource; Virtual Classrooms with Edge AI, Interactive Flat Panel, Student Digital Assessment Devices, Adaptive Remedial Learning Student App, Performance Analytics Dashboards; All the required central infrastructure and applications.

The purpose of this RFP is to provide interested Bidder with information to enable them to prepare and submit a proposal for Implementation, Operations and Maintenance of AI Powered Virtual Classrooms with Digital Assessment.

3.1 Basic Information

In order to provide high quality educational support to students of even the remote locations of the State, OCAC, Odisha wishes to establish AI Powered Virtual Classrooms with Digital Assessment at 5370 Schools. The services from the selected Bidder will cover supply, installation, connectivity as per feasibility, commissioning, and operations & management activities. The selected Bidder has to provide end-to-end solution and instructional services.

Creating infrastructure for Remote Education in Schools:

a)   Connectivity through BharatNet/Satellite-Based

The majority of rural regions in Odisha lack internet connectivity. This absence or poor connectivity exacerbates existing disadvantages for rural schools. Approximately 50% of the schools are expected to be suitable for BharatNet/Fibernet connectivity. For the remaining schools, satellite connectivity needs to be established to provide reliable, high-uptime connections, ensuring access even in the most remote areas. However, Bidder has to decide on the mode of connectivity (Bharat Net/Satellite/Fiber) based on the feasibility, stability, and suitability of the connectivity. The selected bidder must ensure the solution uptime in compliance with a service level agreement (SLA) under standard conditions.

b)   Broadcasting Studios

For delivering remote education, department would like to setup a dedicated network of studio infrastructure. Under this tender, 04 studios will be setup as Main Studios. Further, 08 Regional Studios will be setup in four zones for conducting live sessions, content development, and recording. Bidder has to connect all the Main Studios and Regional Studios for parallel program management with required Satellite bandwidth.

c)   AI Powered Virtual Classrooms with Digital Assessment

Virtual Classrooms platform should enable remote live and interactive learning at rural schools operated over Fiber/Satellite. This Platform with digital assessment capability in 5370 Government/Government Aided Schools should help students to learn from state level experts in the virtual classroom as well as beyond school in a mobile app. School teachers also should be able to deliver LIVE classes from anywhere on their desktop/laptop/smartphone.

OCAC/Department should get access to comprehensive reports of student performance. The bidder should provide all the required application software and mobile apps for conducting and managing the program.

d) Digital Content for Remote Classroom Learning

Under the project, Department envisions creating digital content in Odia and English mediums for class 6 to 12. This digital content will be used in live delivery from the studios as well as for teaching in the classroom.

e) Adaptive Remedial Learning Teacher App & Student App for Beyond the School Learning

Bidder has to provide an app-based Adaptive Remedial Learning System which will be used as a repository for accessing LIVE and recorded sessions. School teachers should also be able to conduct online sessions from desktop or mobile app for their respective students. Proposed solution should provide a feature that students should be able to access LIVE and recorded sessions from the mobile app from anywhere (under 4G or better Connectivity) through the application. Using the same app, students should also be able to have live video interaction with teachers. Based on student performance data and insights, the bidder should arrange regular after-school remedial teaching sessions for Classes 9–12, conducted by central expert teachers.

f) Centralized Applications & Dashboards

The bidder has to provide end-to-end application software required at the studios and Virtual Classrooms for content management and distribution, student assessment devices, student individualized analytics, classroom analytics, multi-level analytics, program monitoring software, asset management, complaint management, student information system, and dashboards for monitoring and report management.

4. Pre-Qualification/Eligibility Criteria

Following table describes the pre-qualification criteria. A bidder participating in the bidding process shall possess the following minimum pre-qualification/eligibility. Any bidder failing to meet the stated criteria shall be summarily rejected and will not be considered for Technical Evaluation.

Sl. No.	PQ Criteria	Description of the Criteria	Documents to be Submitted
1	RFP Document Fee	a) Non-refundable Tender Cost of INR 22,400/- in e-procurement through online payment.	• Payment Receipt
2	EMD	a) Earnest Money Deposit (EMD) of ₹5,00,00,000/- (Rupees Five Crore) in the form of Demand Draft/Bank Guarantee from any Government/ Nationalized/ Scheduled Commercial Bank. The EMD of Successful Bidder is liable to be forfeited if the Bidder revokes any terms of the tender within the validity period. EMDs given by unsuccessful Bidders will be refunded after placing of work order to the successful Bidder.	• Scanned copy of DD/Bank Guarantee to be uploaded online • The DD/Bank Guarantee in original should be posted/ couriered/submitted in person to the concerned official before the close of time for bid submission.
3	Legal Entity	a) The prime bidder or in case of consortium, all the members of the consortium must be incorporated/registered in India, under the Indian Companies Act 1956/2013 or an LLP registered under the LLP Act 2008. b) Consortium is allowed with a maximum of two members (one bidder must be designated as the Lead Bidder or Prime bidder and the other as the Consortium Member).	• Valid copy of certificate of incorporation and registration certificates. • Copy of GST registration. • Copies of relevant Certificates of registration Income Tax / PAN Number from the respective Government Department. • Copy of Consortium Agreement (in case of Consortium)

4	Financial Capability (Turnover)	The Bidder/ In case of Consortium, Lead Bidder, must have an average annual financial turnover of ₹800 crores (with at least ₹400 Cr in IT/ITES-related activities) during the last three financial years (i.e., FY 2022-23, FY 2023-24, and FY 2024-25) duly audited by a competent authority and in case of consortium, consortium member must individually have a minimum average annual turnover of ₹ 50 crores during the last three financial years (i.e., FY 2022-23, FY 2023-24, and FY 2024-25); relevant supporting documents, such as a CA Certificate with UDIN, must be furnished.	a) Audited Balance Sheets b) CA Certificate
5	Financial Capability (Net Worth)	The net worth of the company must be positive for the last three financial years ending on 31st March 2025. In the case of a consortium, both members (the Lead Bidder and the Consortium Member) must comply with this criterion.	Certificate from CA
6	Technical Capability	The Lead Bidder/Consortium Member must have successfully implemented smart classroom/virtual classroom including e-content, in at least 4,300 classrooms in a single project, or in at least 3,200 Classrooms each in two projects, or at least 2,200 Classrooms each in three projects for Government Schools under the Central or State Government in India, within the last three years from the tender submission date.	Copy of the Work Order/MoU/ Agreement and Go-Live certificate/ Completion Certificate
7	Technical Capability	The Lead Bidder/Consortium Member must have successfully implemented a similar* project in at least 900 classrooms under a single project for Government schools under the Central Government or any State Government in India, within the last three years from the tender submission date.	Copy of the Work Order/MoU/ Agreement and Go-Live certificate/ Completion Certificate
8	Technical Capability (Studio)	The Lead Bidder/Consortium Member must have successfully setup minimum 3 transmission/broadcasting studios for live teaching for Govt. Schools under the Central Government or State Government in India within the last three years on/or before the bid publication date.	Copy of the Work Order/MoU/ Agreement and Go-Live certificate/ Completion Certificate issued by the competent authority.
9	Technical Capability (Assessment Devices)	The Lead Bidder/Consortium Member must have successfully implemented 40,000 digital assessment devices for Govt Schools under the Central or State Government in India within the last three years from on / or before bid publication date.	Copy of the Work Order/MoU/ Agreement and Go-Live certificate/ Completion Certificate issued by the competent authority
10	Technical Capability (Live Sessions)	The Lead Bidder/Consortium Member must have supplied/developed curriculum-based e-content modules and successfully delivered at least 500 LIVE teaching sessions through Subject Matter Experts (SMEs) from centralized studio(s) for students in Government Schools under the Central or any State Government in India within the last three years on / or before bid publication date.	Experience letter issued by competent authority
11	Bidder Quality Certification	The Lead Bidder/Consortium Member must have valid ISO 9001, ISO 20001, and ISO 27001 Certificates as on the date of submission of bid to this RFP.	Copies of valid certificates.
12	Blacklisting	All bidders must not be under a declaration of ineligibility for corrupt or fraudulent practices issued by any government department or public sector undertaking (PSU) in India.	Self- declaration as per Annexure-9
13	OEM Authorization	Lead bidder/Consortium member must attach Manufactures' Authorization Certificate from the OEM specific to this tender and Back-to-back service support and warranty undertaking letter from OEMs or from the Authorized Partner of OEM in India in case the OEM has no registered office in India under this RFP.	OEM MAF Annexure- 6

14	Local Presence	The Lead bidder/Consortium member should have an office in Odisha. However, if the presence is not there in the state, they should give an undertaking for establishment of a project office within 45 days of award of the contract.	Relevant Documents supporting office addresses/ Undertaking.
15	OEM Criteria	- OEMs of IFP, UPS, and Android Box should have supplied minimum 5000 Units in a single project for any Government/PSU department in the last three financial years (PO/WO and Completion letter to be submitted) - OEM of IFP must have at least Rs 500 Crore as average turnover from IFP / large format display in the last three financial years in India. - OEM of UPS must have at least Rs 300 Crore as average turnover in the last three financial years in India. - OEM of Android Box must have at least Rs 50 Crore as average turnover from the last three financial years in India. - OEM of Student Digital Assessment Devices should have supplied minimum 40,000 devices (directly or through System integrator/partner) for Government Schools.	Relevant support documents/CA certificates to be uploaded.

*Similar project means the solution must include one studio and each classroom at schools must have e-Content, Application Software, Digital Student Assessment Devices, Projector/IFPD/TV, Two-way interaction and Connectivity.

Note:

- In the absence of any of the above, the offer will be treated as non-responsive and summarily rejected.
- Relevant documents in support of the above criteria must be enclosed along with Technical Bid documents failing which the bid will be liable to be rejected.
- Financial and Technical experience of individual company shall only be considered. Subsidiary/Group/Holding company Financial and Technical experience not allowed.
- Project Management Consultancy (PMC) experience, shall not be considered as eligible experience. Bidder must have hands on experience in implementation as a System Integrator (SI) will be considered.
- Bidder must compulsorily submit MAFs from OEMs for the following: Digital Video Camera, Laptop, Professional Display, Transmission Server, UPS, AI Server, 75" Touch Screen IFPD, Android Device, Virtual Classroom Application Software, Multimedia Content, Adaptive Remedial Learning Student App, Student Digital Assessment Sets, Wi-Fi router.
- The bidder must ensure and verify that the content and question bank being proposed by it are compatible with all application software and analytics applications. Also, the content and the question bank must be easily mappable to the analytics engine. The bidder must submit an undertaking from the Multimedia Content Provider (OEM) and Analytics Application OEM for confirming this compatibility.
- Bidders who meet pre-qualification criteria might be called for LIVE demonstration to be technically qualified. Following components of the solution must be demonstrated:
    - o Two-way interactive class delivery and reception through Satellite/Bharat Net/Fiber (as per feasibility) in the classroom enabled with Edge AI.
    - o Two-way interactive class delivery and reception on mobile apps.
    - o Usage of student digital assessment devices and their successful working.
    - o Digital Content demonstration – in English and Odia medium with embedded questions.

- o Mobile Application demonstration:
  - ▪ Bidder should demonstrate working model of teacher app and student app
    - LIVE teacher and student login through mobile app
    - Teacher should conduct LIVE class and student should receive LIVE class
    - Student video interaction with expert
    - LIVE Multiple-Choice Question based assessment
    - MCQ based assessment in recorded sessions with interposed frames
    - Question & Answer during recorded sessions with interposed frames

Note: In case of unsuccessful demonstration, Bidder is subject to disqualification.

- If the tender calling authority determines that the product being proposed by any bidder shall not meet the requirement of RFP or there is a possibility that solution will not be executed properly, tender evaluation authority may also choose to visit the bidder before qualifying the bid in the technical evaluation stage.
- All Bidders shall submit an undertaking letter on their letterhead as a mandate during the bid submission confirming that they are proposing a solution which is ready for demonstration and should confirm their readiness to demonstrate their proposed solution within two working days of receiving the intimation from OCAC. Failure to do so shall be construed as bidder's offering is incomplete and non-responsive solution.
- All bidders must submit sample content with integrated multiple-choice questions in English and Odia (Five files – Mathematics, Physics, Biology, Chemistry, English – for Grade 9 or 10), including a demo content viewer application link, on or before the bid submission date. These samples will serve as the reference standard for the quality and format of the content to be used throughout the project duration.
- Department can inspect and examine the materials and workmanship of the goods/ equipment/machineries during any stage of Project Execution.

5. Instruction to Bidders

5.1. General
a) While every effort has been made to provide comprehensive and accurate background information and requirements and specifications, Bidders must form their own conclusions about the solution needed to meet the requirements. Bidders and recipients of this RFP may consult their own legal advisers with regard to this RFP.

b) All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by OCAC on the basis of this RFP.

c) No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of the OCAC. Any notification of preferred bidder status by OCAC shall not give rise to any enforceable rights by the Bidder. OCAC may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of the OCAC.

d) This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

5.2. Availability of RFP Document

a) The availability of bidding documents shall be commenced from the date as mentioned in Notice Inviting Bids (NIB). The complete bidding document can be downloaded from the official website of OCAC (www.ocac.in), e-Tender Portal of OCAC (https://enivida.odisha.gov.in) and Official website of Govt. of Odisha (www.odisha.gov.in). The prospective bidders are requested download the bidding document from the websites and follow the bidding steps as prescribed.

b) The Bid Notice is also published in leading newspapers (Odia & English) for wide Circulation.

5.3. Compliant Proposals/ Completeness of Response

a) Bidders are advised to study all instructions, forms, terms, requirements, and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.

b) Failure to comply with the requirements set out in this RFP may render the Proposal non-compliant and the Proposal may be rejected. Bidders must include all documentation specified in this RFP.

5.4. Follow the format and respond to each element in the order as set out in this RFP. Comply with all requirements as set out within this RFP.

5.5. Period of Validity of Bids

a) Bids submitted by the bidders shall remain valid for a period of 180 Days from the date of submission of RFP.

b) Prior to the expiry of the period of validity of Bids, the procuring entity, in exceptional circumstances, may request the bidders to extend the bid validity period for an additional specified period. A bidder may refuse the request and such refusal shall be treated as withdrawal of Bid and in such circumstances bid security shall not be forfeited.

c) Bidders who agree to an extension of the period of validity of their bids shall extend or get extended the period of validity of bid securities submitted by them or submit new bid securities to cover the extended period of validity of their bids. A bidder whose bid security is not extended, or that has not submitted a new bid security, is considered to have refused the request to extend the period of validity of its Bid.

5.6. Right to Accept Any Proposal and to Reject Any or All Proposal(s)

a) OCAC reserves the right to accept or reject any proposal at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for such action.

b) OCAC makes no commitments, explicitly or implied, that this process will result in a business transaction with anyone.

c) The submission of RFP does not constitute an offer by OCAC. The bidder's participation in this process may result in selecting the bidder to engage towards execution of the contract.

5.7. Format and Signing of Bids

a) All the Bids submitted by the bidders must be submitted with the checklist within 1 day from the date of bid submission.

b) Each page of the bidding document shall be kept with the office seal and signature by the authorized representative from the Bidder.

5.8. Cost & Language of Bidding

a) The bidder shall be responsible for all costs incurred in connection with participation in the bid process, including site visits but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/ discussions / presentations, preparation of bid, in providing any additional information required by OCAC to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process. OCAC will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

b) The Proposal should be filled by the Bidder in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the Proposal, the English translation shall govern.

5.9. Alternative/ Multiple Bids

Each bidder shall submit only one Proposal. The bidder who submits more than one proposal will not be qualified.

5.10. RFP Document Fees

The bidders are required to pay the RFP Document Fee of ₹22,400/-, online through e-Tender Portal (https://enivida.odisha.gov.in/)/ Demand Draft. Proposals received without or with inadequate RFP Document fees shall be rejected.

5.11. Earnest Money Deposit (EMD)/BID Security

Bidders shall pay EMD of ₹5 Crores in the form of Demand Draft/Bank Guarantee issued by one of the Government, Nationalized, and Schedule Commercial Bank in India drawn in favor of CEO, OCAC, Technical Directorate of E & IT, Odisha, Bhubaneswar, Odisha. EMD should be valid for a period of 180 (One Eighty) days from tender due date. EMD will be refunded to unsuccessful applicant agencies within 30 (Thirty) days of the completion of selection process. The bid / proposal submitted without EMD mentioned above, will be summarily rejected. No exemption for EMD.

5.12. Pre-Bid Meeting & Clarifications

a) A pre-bid conference will be scheduled by OCAC to clarify doubts of potential bidders in respect of the procurement and the records of such conference shall be published on the respective websites as Pre-bid clarifications.

b) A pre-bid meeting will be held online/offline only. Only the prospective bidders who have deposited the RFP document fee shall be allowed to participate in the Pre-bid meeting.

c) The RFP document fee can also be transfer online through NEFT only to Union Bank of India, Account Number 149316300000195, IFSC Code-UBIN0814938, Acharya Vihar Branch, Bhubaneswar, Account Name Odisha Computer Application Centre. In case of NEFT online transfer of RFP Document fee, the firm must mention the Firm Name, Amount Transfer with Transaction ID, Tender Enquire Number, GST No to the mail.

d) In case on-line meeting, the web-link of Pre-bid meeting shall be shared through the mail to the prospective bidders those have submitted the pre-bid queries along with proof of payment of RFP document fee.

e) The Bidders will have to ensure that their queries for Pre-Bid meeting should reach the below email id on or before the prescribed date as mentioned in "Important Dates and information" section of this RFP.

f) Pre-Bid Queries to be sent to gm.ocac@odisha.gov.in, gm_ocac@ocac.in with a copy to chandan.pradhan@semt.gov.in and jayashree.mishra@odisha.gov.in

g) The Queries should necessarily be submitted in the format as prescribed in Annexure 13 of this RFP.

h) OCAC shall not be responsible for ensuring receipt of the bidders' queries. Any requests for clarifications post the indicated date and time may not be entertained by OCAC.

5.13. Responses to Pre-Bid Queries and Issue of Corrigendum

a) The Nodal Officer mentioned in the RFP document will endeavor to provide timely response to all queries. However, OCAC makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does OCAC undertake to answer all the queries that have been posed by the applicants. The responses to the queries from all applicants will be published on OCAC website.

b) At any time prior to the last date for receipt of RFP, OCAC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective applicant, modify the RFP Document by a corrigendum.

c) The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on www.ocac.in and www.odisha.gov.in.

d) Any such corrigendum shall be deemed to be incorporated into this RFP.

e) In order to provide prospective applicants reasonable time for taking the corrigendum into account, OCAC may, at its discretion, extend the last date for the receipt of Proposal.

5.13   Submission of Proposals
5.13.1. Instruction to Bidders for Online Bid Submission

e-Nivida is a complete process of e-Tendering, from publishing of Tenders online, inviting online bids, evaluation and award of contract using the system. The instructions given below are meant to assist the bidders in registering on e-Nivida Portal and submitting their bid online on the portal. More information useful for submitting online bids on the e-Nivida Portal may be obtained at: https://enivida.odisha.gov.in.

5.13.2. Guidelines for Registration

a) Bidders are required to enroll themselves on the e-Nivida Portal https://enivida.odisha.gov.in or click on the link "Bidder Enrolment" available on the home page by paying Registration Fees of ₹5,600/- inclusive of Applicable GST.

b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.

d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/ TCS / nCode/ eMudhra etc.), with their profile.

e) Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

f) Bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC / e-Token.

g) The scanned copies of all original documents should be uploaded in pdf format on e-Tender portal.

h) After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id odishaenivida@gmail.com for activation of the account.

5.13.3. Searching for Tender Documents

a) There is various search options built in the e-Tender Portal, to facilitate bidders to search active Tenders by several parameters.

b) Once the bidders have selected the Tenders they are interested in, then they can pay the Tender fee and processing fee (NOT REFUNDABLE) by net-banking /Debit / Credit card then you may download the required documents / Tender schedules, Bid documents etc. Once you pay both fee Tenders will be moved to the respective 'requested' Tab. This would enable the e- Tender Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the Tender document.

5.13.4. Preparation of Bids

a) Bidder should take into account any corrigendum published on the Tender document before submitting their bids.

b) Please go through the Tender advertisement and the Tender document carefully to understand the documents required to be submitted as part of the bid.

c) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the Tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100dpi with Color option which helps in reducing size of the scan.

d) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.

e) These documents may be directly submitted from the "My Documents" area while submitting a bid and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process. Already uploaded documents in this section will be displayed. Click "New" to upload new documents.

5.13.5. Submission of Bids

a) Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

b) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Tender document as a token of acceptance of the terms and conditions laid down by Department.

c) Bidder has to select the payment option as per the Tender document to pay the Tender fee / Tender Processing fee & EMD as applicable and enter details of the instrument.

d) In case of BG, bidder should prepare the BG as per the instructions specified in the Tender document. The BG in original should be posted/couriered/given in person to the concerned

official before the Online Opening of Financial Bid. In case of non-receipt of BG amount in original by the said time, the uploaded bid will be summarily rejected.

e) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOM format with the Tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOM file, open it and complete the yellow Colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOM file is found to be modified by the bidder, the bid will be rejected.

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

g) The uploaded bid documents become readable only after the Tender opening by the authorized bid openers.

h) Upon the successful and timely submission of bid click "Complete" (i.e. after Clicking "Submit" in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.

i) The Tender summary has to be printed and kept as an acknowledgement of the submission of the Tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

5.13.6. Clarifications on using e-Nivida Portal

a) Any queries relating to the Tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a Tender or the relevant contact person indicated in the Tender.

b) Any queries relating to the process of online bid submission or queries relating to e-Tender Portal in general may be directed to the Helpdesk Support. Please contact e-Nivida Helpdesk. **Phone No.:011-49606060, Mail id: odishaenivida@gmail.com.**

5.13.7 Submission of Manufacturer's Authorization Form

Bidder must submit the duly signed MAF at the time of bid submission in the Prequalification Proposal as per the prescribed format (Annexure-6). The MAF should be submitted in OEM's letter head mentioning required details.

5.14 Deadline for Submission of Bids

a) Bidder must ensure to submit their response on or before the deadline date as mentioned in "Important Dates & Information" section of this RFP.

b) Normally, the date of submission and opening of Bids will not be extended. In exceptional circumstances or when the bidding document are required to be substantially modified as a result of discussions in pre-bid meeting/conference or otherwise and the time with the prospective bidders for preparation of Bids appears insufficient, the date may be extended by the procuring entity. In such case the publicity of extended time and date shall be given in the manner, as was given at the time of issuing the original Bidding Document.

c) It shall be ensured that after issue of corrigendum, reasonable time is available to the bidders for preparation and submission of their Bids. If the last date of submission or opening of Bids is a non- working day, the Bids shall be received or opened on the next working day.

d) **Venue for Submission of Documents (Offline submission of any specified documents)**

Address to	General Manager (Admin), Odisha Computer Application Centre N-1/7-D, Acharya Vihar Square, PO: RRL Bhubaneswar –751002, Odisha
Telephone	0674-2567280/ 2567064/ 2567295
Fax	0674-2567842
Email id	gm.ocac@odisha.gov.in, gm_ocac@ocac.in

5.15 Withdrawal, Substitution, and Modification of Bids

a) If permitted by OCAC, a Bidder may withdraw its Bid or re-submit its Bid as per the instructions/ procedure prescribed by OCAC.

b) No proposal may be modified / withdrawn in the interval between the last date of submission of proposals/tender and the expiration of the validity period specified in the tender documents by the tendering authority.

5.16 Opening of Bids

a) The Bids shall be opened by the Proposal Evaluation Committee in the presence of the bidders or their authorized representatives who choose to be present.

b) The committee may co-opt experienced persons in the committee to conduct the process of Bid opening.

c) The committee shall prepare a list of the bidders or their representatives attending the opening of Bids and obtain their signatures on the same. The list shall also contain the representative's name and telephone number and corresponding bidders' names and addresses. The authority letters, if any, brought by the representatives shall be attached to the list. The list shall be signed by all the members of Bid opening committee with date and time of opening of the Bids.

d) The committee shall conduct a preliminary scrutiny of the opened technical Bids to assess the prima-facie responsiveness and ensure that the: -
   i. Bid is accompanied by bidding document fee, bid security or bid securing declaration, and processing fee (if applicable).
   ii. Bid is valid for the period, specified in the bidding document.
   iii. Bid is unconditional and the bidder has agreed to give the required performance security and other conditions, as specified in the bidding document are fulfilled.
   iv. Any other information which the committee may consider appropriate.

e) No Bid shall be rejected at the time of Bid opening except the Bids not accompanied with the proof of payment or instrument of the required price of bidding document, processing fee and bid security.

f) The Financial Bid cover shall be kept unopened and shall be opened later on the date and time intimated to the bidders who qualify in the evaluation of technical Bids.

5.17 RFP Evaluation

5.17.1 Evaluation &Tabulation of Pre-Qualification Bid

a) Determination of Responsiveness: The designated committee of OCAC shall determine the responsiveness of a Bid on the basis of bidding document and the provisions of pre-qualification/ eligibility criteria of the bidding document.

b) A responsive Bid is one that meets the requirements of the bidding document without any material deviation, reservation, or omission where: -
   1. "Deviation" is a departure from the requirements specified in the bidding document.

    2. "Reservation" is the setting of limiting conditions or with holding from complete acceptance of the requirements specified in the bidding document; and

    3. "Omission" is the failure to submit part or all the information or documentation required in the bidding document.

c) A material deviation, reservation, or omission is one that, if accepted, shall: -

    1. affect in any substantial way the scope, quality, or performance of the subject matter of procurement specified in the bidding documents; or

    2. limits in any substantial way, inconsistent with the bidding documents, the procuring entity's rights or the bidder's obligations under the proposed contract, OR

    3. if rectified, shall unfairly affect the competitive position of other bidders presenting responsive Bids.

d) The designated committee of OCAC shall examine the technical aspects of the Bid in particular, to confirm that all requirements of bidding document have been met without any material deviation, reservation or omission.

e) Fulfillment of eligibility criteria: All the criteria mentioned in **Clause No-4 (Pre-Qualification/Eligibility Criteria)** are mandatory. The bidder must comply with all the components mentioned in the eligibility criteria.

f) All supporting documents as mentioned in **Annexure-14.**

5.17.2 Evaluation and Tabulation of Technical Bids

Only those bidders who qualify in Pre-Qualification as per above will be considered for Technical Bid Evaluation. During the process of evaluation of the Technical Proposals, the Tender Committee may seek additional information and clarifications from any or all the bidders. This clarification will be sought through email communications/request a personal visit of the authorized representatives of the bidder. The bidder is expected to provide the clarifications or additional information within the stipulated time as indicated in the communication. If the bidder fails to provide the clarification or additional information, the information provided in the technical proposal only will be used for evaluation. Only the bidders, who score a Technical Score of more than 70 (Seventy) marks, will qualify for the evaluation in the commercial bid.

Note: OCAC reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical Evaluation criteria and the requisite support must be provided by the Bidder. In case any bidder or OEM does not provide a valid information, such bid will be treated as irresponsive bid and OCAC authority /School Education Department reserves the right to decision to reject it.

The technical competency will be evaluated on the below mentioned criteria:

SI. No.	Technical Eligibility	Marks	Max Marks
Technical Evaluation Criteria		
To facilitate the evaluation of technical proposals, the technical criteria along with the assigned weights are presented in the subsequent section.		
1	The Lead Bidder/Consortium Member must have successfully implemented smart classroom/virtual classroom project in a single project in at least 4,300 classrooms with Education Content in Govt. Schools under the Central Government or State Government in India, within the last three years from this tender submission date.		20
	- 15,001 Classrooms or more	20	
	- 10,001 Classrooms to 15,000 Classrooms	15	
	- 7,501 Classrooms to 10,000 Classrooms	10	
	- 4,300 Classrooms to 7,500 Classrooms	5	
2	The Lead Bidder/Consortium Member must have supplied/developed curriculum-based e-content modules and successfully delivered at least 500 LIVE teaching sessions through their Subject Matter Experts (SMEs) from centralized studio(s) for students in Government Schools under the Central Government or any State Government in India within the last three years from on / or before bid publication date.		15
	- 3,001 Sessions or more	15	
	- 1,501 to 3,000 Sessions	10	
	- 500 – 1,500 sessions	5	
3	The Lead bidder/Consortium member must have successfully implemented at least 40,000 assessment devices for Govt Schools under the Central Government or State Government in India within the last three years from on / or before bid publication date.		15
	− More than 1,20,001	15	
	− 80,001 to 1,20,000	10	
	− 40,000 to 80,000	5	
4	The Lead Bidder or Consortium Member must have successfully implemented similar project with VSAT connectivity in at least 900 classrooms in single project for Govt. Schools under the Central Government or State Government in India, within the last three years from on / or before bid publication date.		10
	− 1,801 or more Classrooms	10	
	− 900 Classrooms to 1,800 Classrooms	5	
5	The Lead Bidder/Consortium Member must have successfully established minimum 3 transmission/broadcasting studios for live teaching for Govt. Schools under the Central Government or State Government in India within the last three years on/or before the bid publication date.		10
	− 7 or More Studios	10	
	− 3 to 6 Studios	5	

6	Presentation on the proposed solution capturing the major features:
	    a) Understanding of the project
	    b) Detailed work-plan and methodology
	    c) Proposed mechanism of Project Monitoring
	    d) Past Performance
	Operation & Maintenance Support plan with demonstration of previously executed projects i.e., Monitoring/Ticketing tool, incident tracking system, incident closure mechanism — for evaluation of the Bidder's capability on Operations & Management.
			30

	TOTAL		**100**

5.17.3   Evaluation and Tabulation of Financial Bids

a) The financial bids/cover of the bidders who qualify in pre-qualification/eligibility criteria and score minimum 70 marks shall be opened at the notified time, date, and place by the members of the designated Procurement Committee in the presence of the bidders or their representatives who choose to be present.

b) The financial bid cover letter should be submitted in appropriate format as per **Annexure-7** followed by financial bid details as per **Annexure-12.**

c) The process of opening of financial bids/covers shall be similar to that of technical bids.

d) The names of the bidders, the rates given by them and conditions put, if any, shall be read out and recorded.

e) Prices quoted in the Bid must be firm and final and shall not be subject to any modifications, on any account whatsoever except applicable tax rates. The Bid Prices shall be indicated in Indian Rupees (INR) only.

f) The bid price will include all taxes and levies and mentioned separately.

g) Any conditional bid would be rejected.

h) Among all qualified bids, the highest scoring bid in terms of Quality and Cost will be termed the winning bid.

5.17.4   Correction of Arithmetic Errors in Financial Bids

The Proposal evaluation committee shall correct arithmetical errors in substantially responsive Bids, on the following basis, namely: -

a) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Proposal Evaluation Committee there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected.

b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to clause (a) and (b)above.

5.17.5   Evaluation based on Quality and Cost Based System

a) The selection of the service provider will be based on the Quality and Cost Based System (QCBS). The evaluation will consist of the following phases:
   - Evaluation of Pre-Qualification Criteria and Evaluation of Technical bids (of eligible Bidders in pre-qualification)
   - Evaluation of Financial bids (Technically Qualified Bidders)
   - Combined evaluation of Technical & Financial bid

b) The bid will be evaluated on QCBS methodology in the ratio of 70:30 i.e. 70% weightage will be given to the technical evaluation and 30% weightage will be given to the financial bid.

c) At the Technical Bid opening, the Bidders' names, requisite Bid security and such other details as the Employer may consider appropriate, shall be announced and recorded at the opening.

d) Technical Score calculation: The Bidder with highest qualifying technical score (T1) will be awarded 100% score. Technical Scores for other than T1 Bidders will be evaluated using the following formula:

$$\text{Normalized Technical Score of a Bidder (Tn)} = \frac{\text{Technical Score of the Bidder}}{\text{Technical Score of T1}} \times 100$$

Note: The score value is adjusted up to two decimal places.

Example: The Bidder with the Highest Technical Score will be awarded 100 and other Bidders will be awarded on percentile basis. If the Bidder with highest technical score is 90, then the T1 Bidder will get (T max) 100. A Bidder awarded 80 as technical score will get (80/90) x 100 = 88.88.

e) Only the bids which score minimum 70 marks as per Annexure 5 will be eligible for Financial Bid opening.

f) Eligible Technical Bids will be intimated for opening of their Financial Bid.

g) The Part II Financial Bid of the eligible Bidders who are shortlisted by the Tender Authority shall be opened in the presence of such parties, as may desire to be present in the due date and time. The Financial Bid of all the Bidders who have not been shortlisted by the Tender Authority will be rejected.

h) Financial Score calculation: The Bidder with lowest qualifying financial bid (L1) will be awarded 100% score. Financial Scores for technically qualified Bidders other than L1 Bidders will be evaluated using the following formula:

$$\text{Normalized Financial Score of a Bidder (Fn)} = \frac{\text{Commercial Bid of L1}}{\text{Commercial Bid of the Bidder}} \times 100$$

Note: The score value is adjusted up to two decimal places.

Example: If F1 is INR 110 and F2 is INR 120, then F1 will receive (F max) 100 and F2 will receive [110/120] x 100 = 91.67

i) Calculation of Composite Bid Score: Technical and financial scores secured by each Bidder will be added using weightage of 70% and 30% respectively to compute a Composite Bid Score.

j) The Bidder securing the highest Composite Bid Score will be adjudicated as the most responsive Bidder for award of the Project.

The Composite Bid score will be calculated as follows:
Bn = (0.70 x Tn) + (0.30 x Fn)
Tn = Technical score of the Bidder (out of maximum of 100 marks)
Fn = Financial score of the Bidder (out of maximum of 100 marks)
Bn = Composite Bid score of the Bidder

k) In the event the composite bid scores are 'tied', the Bidder securing the highest technical score will be adjudicated as the Best Value Bidder for the award of the Project.

Note: The authorities reserve the right to split the work among multiple bidders to complete the job in a time-bound manner.

5.18 Exclusion of Bids /Disqualification

5.18.1 The procuring entity shall exclude/disqualify a Bid, if: -

a) The information submitted, concerning the qualifications of the bidder, was false or constituted a misrepresentation; or

b) The demonstration of their proposed solution was not satisfactory and/or if the tender calling authority's visit to the factory or development center of the bidder determines Bidder shall not be able to execute the project satisfactorily as per the requirements of the RFP.

c) The demonstration of their proposed solution was not satisfactory/ or not meeting the technical requirements and/or the required objectives and/or during the tender calling authority's visit to the bidders manufacturing facility/software development facility determines the Bidder lacks the required infrastructure or competence or capability to execute the project satisfactorily as per the requirements of the RFP.

d) The information submitted, concerning the qualifications of the bidder, was materially inaccurate or incomplete or misrepresented; and

e) The bidder is not qualified as per pre-qualification/eligibility criteria mentioned in the bidding document.

f) The Bid materially departs from the requirements specified in the bidding document or it contains false information.

g) The bidder, submitting the Bid, his agent or any one acting on his behalf, gave or agreed to give, to any officer or employee of the procuring entity or other governmental authority a gratification in any form, or any other thing of value, so as to unduly influence the procurement process;

h) A bidder, in the opinion of the procuring entity, has a conflict of interest materially affecting fair competition.

i) Any Bidder who, after publishing this RFP, either before or after participating in this procurement process, issues or circulates subsequent Expressions of Interest (EOIs) or Requests for Proposal (RFPs) for the same scope of work with the intent to execute the Project through other companies or entities shall be deemed non-compliant and will be disqualified from consideration under this RFP.

5.18.2 Bid shall be excluded/ disqualified as soon as the cause for its exclusion / disqualification is discovered.

5.18.3 Every decision of a procuring entity to exclude a Bid shall be for reasons to be recorded in writing and shall be: -
a) Communicated to the concerned bidder in writing.
b) Published on the State Public Procurement Portal, if applicable.

5.19 Lack of Competition

5.19.1 A situation may arise where if after evaluation of Bids, the proposal evaluation committee may end-up with one responsive Bid only. In such situation, the Proposal Evaluation Committee would check as to whether while floating the Bid all necessary requirements to encourage competition like standard bid conditions, industry friendly specifications, wide publicity, sufficient time for formulation of Bids, etc. were fulfilled. If not, the tender would be re-floated after rectifying deficiencies.

5.19.2 The Proposal Evaluation Committee shall prepare a justification note for approval by the next higher authority of the procuring entity, with the concurrence of the account's member.

5.19.3 In case of dissent by any member of Proposal Evaluation Committee, the next higher authority in delegation of financial powers shall decide as to whether to sanction the single Bid or re-invite Bids after recording reasons.

5.20 Acceptance of the successful bid and award of Project

5.20.1 Award Criteria: OCAC will award the Project to the successful bidder whose proposal has been determined to be substantially responsive and has been determined as the most responsive bids as per the process outlined above.

5.20.2 Purchaser's Procurement Rights: Without incurring any liability, whatsoever to the affected bidder or bidders, the Purchaser reserves the right to: -

a) Amend, modify, or cancel this tender and to reject any or all proposals without assigning any reason.

b) Change any of the scheduled dates stated in this tender.

c) Reject proposals that fail to meet the tender requirements.

d) Increase or decrease the quantity of the items at the time of placement of order.

e) Increase or decrease no. of resources supplied under this project.

f) The department reserves the right to place additional orders during the contract period, for similar requirements at the discovered price as per the RFP Condition. OCAC/OSEPA reserve the right Select the Agency to place additional order as per performance in this project.

5.20.3 Notification of Award: Prior to the expiry of the validity period, OCAC will notify the successful bidder in writing or by fax or email, that its proposal has been accepted. In case the tendering process / public procurement process has not been completed within the stipulated period, OCAC may like to request the bidders to extend the validity period of the bid. The notification of award will constitute the formation of the contract. Upon the successful bidder's furnishing of Performance Bank Guarantee, OCAC will notify each unsuccessful bidder and return their EMD within 15 days.

5.20.4 Issuance of Purchase Order: The OCAC shall reserve the right to negotiate with the bidder(s) whose proposal has been ranked best value bid on the basis of Technical and Commercial Evaluation to the proposed Project, as per the guidance provided by CVC. On this basis the Purchase order would be issued.

5.20.5 Acceptance of Bidder: The bidder has to give its acceptance within 7 days of Issuance of Purchase Order. In case OCAC has not received the acceptance or the selected bidder will refuse to accept the Purchase Order, OCAC may intimate the next competitive bidder to award the Purchase Order**.**

5.20.6 Performance Guarantee: The OCAC will require the Agency to provide a Performance Bank Guarantee/ Insurance Bond for equivalent value, within 30 working days from the Notification of award, for a value equivalent to 3% of the total cost as per financial breakup for applicable schedule of ownership i.e. total order value as per defined schedule excluding taxes.

The Agency shall be responsible for extending the validity date and claim period of the Performance Guarantee/ Insurance Bond as and when it is due on account of non-completion of the project and support period. In case the Agency fails to submit performance guarantee/ Insurance Bond within the time stipulated, the OCAC at its discretion may cancel the order placed on the Agency after giving prior written notice to rectify the same. OCAC shall invoke the performance guarantee/ Insurance Bond in case the selected Bidder fails to discharge their contractual obligations during the period or OCAC incurs any damages due to Bidder's negligence in carrying out the project implementation as per the agreed terms & conditions.

5.20.7 Signing of Contract

a) After the OCAC notifies the successful bidder that its proposal has been accepted, OCAC shall enter into a contract within thirty (30) days of the award of the contract or within such extended period, as may be specified by the Authorized Representative of OCAC, incorporating all clauses and the proposal of the bidder with the successful bidder. OCAC reserves the right to consider provision the Mobilization Advance to agency up to defined extent percentage as per applicable GFR Guidelines to meet the project deliverables in defined time lines.

b) Mobilization Advance may be provided by OCAC at the time of Contract Award in accordance with the General Financial Rules (GFR). If any Mobilization Advance is paid to the Agency, it shall be recovered from subsequent invoices raised by the Bidder by withholding 30% of the value of each submitted invoice until the Mobilization Advance amount is fully adjusted.

c) In the case of a Consortium, all Consortium Partners shall be jointly and severally responsible for the successful execution of the project and for ensuring compliance with all deliverables, timelines, and obligations under the project. The required invoice must be submitted by the Consortium, in accordance with the respective roles and responsibilities of its partners. Both Consortium Partners shall be fully liable for all obligations arising under the project.

5.20.8 Failure to Agree with the Terms and Conditions of the RFP

Failure of the successful bidder to agree with the Terms & Conditions of the RFP and the Proposal submitted by the successful bidder, despite the deviations submitted by the Bidder are adequately considered and mutually agreed, shall constitute sufficient grounds for the annulment of the award, in which event OCAC may award the Project to the next best value bidder or call for new proposals from the interested bidders. In such a case, the OCAC shall invoke the PBG or the EMD as the case may be, of the most responsive bidder.

5.21 Confidentiality

a) Notwithstanding anything contained in this bidding document but subject to the provisions of any other law for the time being in force providing for disclosure of information, a procuring entity shall not disclose any information if such disclosure, in its opinion, is likely to:-
- Impede enforcement of any law.
- Affect the security or strategic interests of India.

- Affect the intellectual property rights or legitimate commercial interests of bidders.
- Affect the legitimate commercial interests of the procuring entity in situations that may include when the procurement relates to a project in which the procuring entity is to make a competitive bid, or the intellectual property rights of the procuring entity.

b) The procuring entity shall treat all communications with bidders related to the procurement process in such manner as to avoid their disclosure to competing bidders or to any other person not authorized to have access to such information.

c) The procuring entity may impose on bidders and sub-contractors, if there are any for fulfilling the terms of the procurement contract, conditions aimed at protecting information, the disclosure of which violates (a) above.

d) In addition to the restrictions specified above, the procuring entity, while procuring a subject matter of such nature which requires the procuring entity to maintain confidentiality, may impose condition for protecting confidentiality of such information.

6 Scope of Work

As part of the AI Powered Virtual Classrooms, Bidder has to setup following infrastructure:

(i) Establishing 04 Main Broadcasting Studio setup at Bhubaneswar/Cuttack.

(ii) Eight Regional Studios in four zonal headquarters.

(iii) AI Powered Virtual Classrooms in 5370 Schools. (List of schools and studio site locations will be intimated at the time of the award of the project)

(iv) Digital Student Assessment sets for conducting student assessment.

(v) Adaptive Remedial Learning Student App and Teacher App for post school hours.

(vi) Providing standard O&M services to achieve project outcomes.

Following instructional services need to be integrated for a duration of O&M Period:

(i) Bidder has to conduct studio operations and class delivery as per an approved program schedule. The sessions should be live broadcasted and also to be recorded. Bidder has to ensure that every live session should work on Hybrid model and can be delivered through Satellite, BharatNet and Internet communication.

(ii) Bidder should ensure that apart from academic programs, special sessions for motivation and skill building should be regularly arranged and integrated in the time table. Sessions like Career Guidance, Competitive Exams, Communicative English, Communication Skills, Health & Nutrition, Sports & Fitness by experts, Soft Skills, Environmental Protection, Teacher Training etc. should be arranged. If the national level experts are unable to come to studios in Odisha, Bidder should arrange national level studios in its network to arrange these special sessions as an additional activity with mutual agreed session prices.

(iii) Bidder should provide Digital Content and Assessment Question Banks required for academic session delivery.

(iv) Bidder should provide student digital assessment and analytics services.

(v) Bidder should provide Teaching Services from the Main studios (aided with digital content) - as per the syllabus prescribed by Board of Secondary Education (BSE) and Council of Higher Secondary Education (CHSE), Odisha in Odia medium and Central Board of Secondary Education (CBSE) syllabus. Bidder should involve department selected Government Teachers in Content Development and Modification activities at Regional Studios.

(vi) Bidder should enable Edge AI supported applications at the schools. Bidder should also host centralized applications. In addition to that, Bidder has to ensure backup hosting services on cloud.

(vii) Bidder should provide Adaptive Remedial Learning Student App. Bidder should enable Adaptive Remedial Learning for students derived through the usage of entire platform (Student

assessment devices, Mobile App, Formative & Summative Assessment). Artificial Intelligence based analytics engine should identify the gaps in student learning and suggest content set to watch in the student app.

Bidder should provide following applications along with centralized applications:
1. Project Monitoring Dashboard
2. Student Digital Analytics System
3. Complaint Management System
4. Asset Management System

(viii)   Bidder should provide the required satellite connectivity and internet connectivity at the Main Studios and at the Regional Studios.

(ix) Bidder should ensure to maintain Uptime as per SLA Clause by providing satellite connectivity/ BharatNet/Fiber connectivity at 5370 schools.

(x) In case smart classrooms/ICT labs/e-libraries already exist in the selected schools, the bidder must ensure that the content can be accessed from the classroom server in the future.

(xi) Bidder should provide adequate manpower for instructional services from studio and support for project duration).

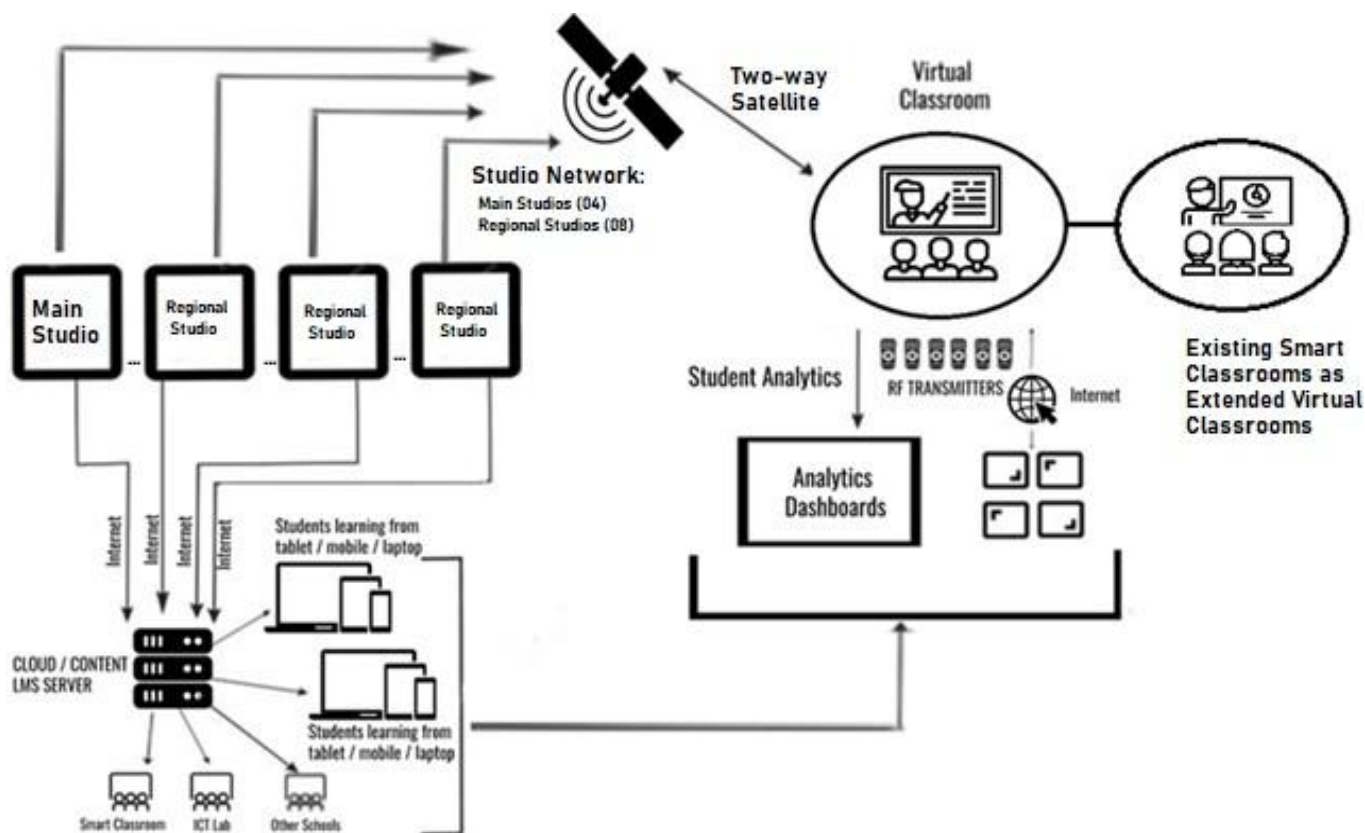(xii) Bidder should provide a Centralized LIVE dashboard for Virtual Classrooms platform usage monitoring.

Connectivity Requirements:
The Bidder should ensure sufficient bandwidth to conduct seamless parallel sessions from studios.

Requirement of BharatNet/Fiber Connectivity/Satellite:
The Bidder should arrange managed connectivity services to connect Virtual Classrooms to studios via two-way satellite/Internet with at least 20 Mbps connectivity at Studios and 10 Mbps at schools to run live classes, interactions and data for real-time student learning analytics and any information exchange with studio. Bidders have to provide necessary infrastructure to establish connectivity at Studios and 5370 Schools.

Solution Architecture

6.1 AI POWERED VIRTUAL CLASSROOMS WITH DIGITAL ASSESSMENT PLATFORM

Bidder should ensure that the solution uses Edge AI in remote virtual classrooms for enabling real-time, efficient, and privacy-preserving learning applications. By processing sensitive data locally, Edge AI should minimize the need to transmit personal information, reducing privacy risks and ensuring compliance with regulations like Digital Personal Data Protection Act, 2023 (DPDPA). It should work independent of connectivity.

Following features should be enabled using Edge AI in the Virtual Classrooms:

1. **Real-Time Engagement and Behavioral Monitoring**

   ✓ Process audio and video streams to assess student engagement in real time. For example, in the camera field view range, application should detect headcount and attention levels in real-time. The remote teacher and class teacher should receive high-level behavior trends, enabling them to adjust lesson pacing without accessing raw data.

2. **Real-time Participation Analysis**

   ✓ Bidder should ensure Digital Assessment RF Tools record 'raise hand' clicks for doubts for detecting hard spots for students in a classroom. Based on this data Edge AI should generate reports on hard spots in the concept being taught and engagement metrics, such as the percentage of students actively participating.

   ✓ The remote studio teacher and class teacher should receive anonymized and summarized real-time engagement reports (e.g., participation trends) on their dashboard, enabling them to adjust LIVE teaching strategies, such as pausing for questions or initiating discussions.

3. **Personalized Analytics through Assessments**:

   ✓ Student answers to objective questions should be processed in the real-time to generate reports for the class and studio teacher.

   ✓ Analyze responses from digital assessment RF tools to identify patterns, such as common incorrect answers, and generate individualized feedback for the class. For instance, if a majority of students struggle with a concept, a pre-loaded mini-lesson/recorded concept video byte should be recommended in the particular classroom.

   ✓ When the studio teacher or class teacher enables the voice command in the digital assessment RF tool students should be able to answer to non-objective questions. Edge AI should be enabled to transcribe these answers to generate relevant analytics to studio/class teacher.

4. **LIVE Question and Answer & Language Support**
   ✓ When the studio teacher enables the voice command in the digital assessment RF tools, students should be able to send their doubts by speaking. These questions should be transcribed/translated, summarized, filtered, and tagged to a question bank in order to answer in subsequent sessions or in special sessions.

5. **Enhanced Privacy**
   ✓ To maintain privacy of students, the application should automatically generate an avatar for each student. No photographs should be used in any reports even in the local dashboards meant for class teachers.

A. CONTENT MANAGEMENT & DISTRIBUTION SYSTEM APPLICATION AT STUDIO AND VIRTUAL CLASSROOMS

i. Bidder should enable interactive live sessions from 'Main Studios' in Bhubaneswar/Cuttack and from Zonal 'Regional studios'. Platform should enable parallel teaching and any virtual classroom should be able to connect to any studio. The platform should have the capability to securely multicast LIVE sessions to connected virtual classrooms.

ii. Entire application should run on BharatNet and satellite-based connectivity as well as on intranet and internet – based network.

iii. The application shall provide cross-platform interoperability with dual-path connectivity architecture: (1) downlink reception of virtual classes on the interactive panel via satellite/fiber/BharatNet networks, and (2) uplink transmission to the remote studio via the same satellite/fiber/BharatNet networks, with local classroom feeds aggregated through LAN-connected peripherals (HD camera, microphone, student assessment tools) on the Edge AI-enabled System, ensuring synchronized bidirectional communication between virtual classroom and remote studio.

iv. Virtual Classroom application in each school should be linked with the server system which should have secured access to Adaptive Remedial Learning System, Asset Management System, and other Dashboards (Monitoring, Analytics).

v. Platform should enable to transform any Virtual Classroom into a 'Teaching End'. The VC application in all the classrooms should have necessary features. Teacher should be able to connect to any school/student, if online, to interact with them.

vi. Teacher should be able to mute/unmute any class or student app while having full control over the system by not allowing the students to unmute/disable the camera by themselves. The platform should have a real-time assessment tracking system for every student through student digital assessment sets. It should be a comprehensive student analytics system.

vii. Platform should support concurrent multiple interactions. Students should be able to connect and ask questions with digital teachers.

viii. Student digital assessment analysis at student, school, district, and state levels.

ix. CMDS application should integrate a question-answer facility where teachers can be connected from any school.

x. LIVE sessions from studios should have the feature to use digital content as a tool for teaching from the studio/other teaching end. They should be able to use the content as teaching aid. Teacher video, audio, and animation or PPT and teacher notes should be synced at the virtual classroom.

xi. Teacher should be able to control the flow of the content i.e. move forward, backward, skip the portion and also directly jump to any sub section while delivery of the sessions.

xii. Any school should be able to take up live sessions using the application.

xiii. The platform should integrate beyond the school education features with Teacher App for teaching and a Student App for receiving lessons.

xiv. The platform should be scalable.

xv. Platform should have a facility for recording LIVE sessions at the studios and virtual classrooms.

xvi. If classroom teachers like to refer specific sessions beyond 30 days, there should be an option to bookmark/ save sessions.

xvii. The session after delivery from the teaching end should be available as a recorded class in the Virtual Classrooms as well as in the Adaptive Remedial Learning app.

xviii. The solution should support receiving digital written queries at the studio sent from schools using interactive panel.

xix. At the school level, during interaction with studio expert, multi-window view should be enabled with classroom view, studio teacher view, and interacting studio view.

xx. CMDS should act as a standalone application which can work offline in the school environment for accessing content locally when the content has been already downloaded.

B. **MULTIMEDIA CONTENT**

i. Digital content should include 2D and 3D animation-based materials mapped to the syllabus prescribed by the Board of Education.

ii. The content must not be PPT- or Canva-based. It should be fully animated and developed using professional 2D/3D production tools. Source files should be in recognized formats such as .fbx/.usd/.max/.vvc/.ma/.mb or other equivalent industry-standard animation formats.

iii. Content should be both in raster and vector graphics format so as to use low bandwidth for transmission.

iv. Content should be embedded with multiple choice questions, survey questions, and feedback questions to ask students. Responses should get synced in analytics system.

v. Each module should consist of content for around 40 minutes long sessions.

vi. Content modules used in studios should not have voiceover as the studio teacher will be narrating it. However, if the content can have an enhanced effect through instrumental music or background sound, that may be made available.

vii. The content and question bank should be compatible with all application software and analytics applications.

viii. The content and the question bank must be easily mappable to the analytics engine. This compatibility must be verified by the content provider and analytics application provider through an undertaking. The bidder shall also provide sample content (Mathematics, Physics, Biology, Chemistry, and English) along with a demo content viewer application. These samples will serve as the reference standard for all content to be supplied by the successful bidder throughout the project duration.

ix. Content should also contain concepts of theory, lab experiments, and practical demonstrations.

x. The digital content provided should run on Windows, Ubuntu, and Android.

xi. After every session, teachers at schools should be able to provide feedback on the sessions. Feedback data log should be maintained to support annual content updates.

xii. Languages, Scope:
   - Digital content provided for teaching should be in English, Odia as required for Class 6 to 12. The content for class 6-12 should cover core subjects: Mathematics, English, Science, Geography and Computer Education.

xiii. Scriptwriting:
   Scripts need to be minutely detailed. Content developers need to address every issue and nothing can be assumed to be the responsibility of another member of the team. The script should serve to inform the Quality Assurance team to ensure that it meets the program requirements as well as the production team who will use it as a blueprint to produce the final product.

For each session, the script should specify:
- Text (exact dialogue)
- Visual appearance and layout of all the elements on each screen
- Media specifications
- Graphics, Animations, Audio
- Close-ups

The script should have detailed plan for video, animation, text and for audio/voiceover, and also specify:
- Interaction logic (feedback, branching or pop-up screen s)
- Content flow, Screenshots

The QA team should look specifically at the following aspects:
- Presentation (clarity of audio, fluency, pronunciation, etc.)
- Content accuracy
- Content treatment (has the content been dealt with in an appropriate way?)
- Learner engagement (will lessons stimulate learning?)
- Visual appearance (hooks, graphics, etc.)
- General strength sand weaknesses of lessons

Integrated MCQ Question Bank to use within Digital Content:
- Multiple Choice Questions should be mapped with the Odisha state board curriculum and should be available in Odia and English. Each of these questions should be mapped with different levels of learning in cognitive topology, mapped with difficulty level.
- Teachers who are selected to conduct Online Classes from any school should be able to generate their own questions and should be provided with a feature to enter these in the CMDS application.

License on using digital content and question banks:
- For the schools selected under the contract, the bidder should grant the perpetual license to use digital content and question banks provided as part of the project.
- The digital content developed under the project can be used in any number of Government/Government Aided Schools in Odisha even those which are not under the scope of the current project.
- Department reserves the right to use the multimedia content in other existing digital classroom projects or smart classrooms projects/ICT Labs even when those have minimum computing facility like Desktop / smart board.
- Department reserves the right to deploy the recorded content for student/teacher consumption in Odisha, through mobile apps and/or other portals for online or offline usage.

C. STUDENT DIGITAL ANALYTICS SYSTEM

Assessment devices:

- Bidder should provide on an average 50 Digital Assessment devices and a receiver per school for assessing student involvement and performance during LIVE classes.

- Student digital assessment sets and analytics application should be active within 30 days from the program launch date.

- These devices should be color coded for easier identification, batch management and color house competitions among groups of students. Text on the tools should be inscribed in Odia and English language.

- Student should be able to answer objective questions through keys and non-objective questions through voice.

- The devices should have an embedded mic to support recording of doubts or answers for 20 seconds. This feature should remain disabled by default and should be enabled only by studio teacher or class teacher during their session.

- When the studio teacher or class teacher enables the voice command in the digital assessment RF tool students should be able to answer to non-objective questions. Edge AI should be enabled to transcribe these answers to generate relevant analytics to studio/class teacher.

- Bidder should ensure Digital Assessment RF Tools record 'raise hand' clicks for doubts for detecting hard spots for students in a classroom.

- The dynamic mapping of student devices with the student roll numbers should be enabled during sessions, and this student unique ids/roll number should be registered to the student in computer-based database. Student devices will be rotated in the Virtual Classrooms with students of different grades. The data should be captured in the real-time, session-wise and should be linked to student database.

LIVE Analytics:

- Remote Teacher and Class Teacher should have the ability to poll the class on their understanding of concepts by asking true or false questions, single choice/multiple choice or multiple answer questions, and yes or no questions every session.

- The Analytics System should support concurrent gathering and analysis of the data from all connected Virtual Classrooms for generating immediate response to studio teacher for decision making.

- Remote Teacher and Class Teacher should be able to see Real-time student participation during the session and based on 'hand raise' indicators from students using the assessment devices to indicate a hard spot, they should be able to identify the area of difficulty in the lesson through an AI (Artificial Intelligence) supported mechanism. Edge AI should generate reports on hard spots in the concept being taught and engagement metrics, such as the percentage of students actively participating.

- The remote studio teacher and class teacher should receive anonymized and summarized real-time engagement reports (e.g., participation trends) on their dashboard, enabling them to adjust LIVE teaching strategies, such as pausing for questions or initiating discussions.

Analytics for class teachers in the dashboard after the LIVE session:

- The school should also have access to the individual record of each and every student's answer in the Teacher Tools section of the application which should help in monitoring

class progress and understanding.

- Class Teacher should be able to see student wise participation and performance for a particular topic on all cognitive rigors in order to make decisions on selecting of group of students and provide appropriate remedial teaching for the students individually.

- Teacher should be provided with details on the improvement made by the child with respect to subject/topic on cognitive rigors and on difficulty level and response time.

- Performance report of student should not just be derived on marks cored but also on deeper analytics based on weighted average of cognitive rigors, accuracy, difficulty level and response time.

Integrating results of Ongoing, Formative, and Summative Assessment:
- Analyze responses from digital assessment RF tools to identify patterns, such as common incorrect answers, and generate individualized feedback for the class. For instance, if a majority of students struggle with a concept, a pre-loaded mini-lesson/recorded concept video byte should be recommended in the particular classroom.

- Apart from the automated results of ongoing assessment captured in the virtual classrooms/student app, analytics platform should also allow teachers to feed the results of formative assessment and summative assessment into the artificial intelligence engine to enhance the accuracy of individual student performance reports.

Analytics Dashboard
- Comprehensive dashboards should be made available for decision makers of the department at multiple levels. Performance reports are to be made available at student /school /district /state levels.

- The analysis data derived from analytics dashboard should help in planning remedial teaching at school /district /state levels.

- Reports should also derive different facets of teaching performance and feedback for sessions.

- The student analytics system should integrate gauging different aspects of cognitive rigor of students such as Memory, Understanding, Knowledge Application, and HOTS (Higher Order Thinking Skills). The application should derive various details of student performance such as level of knowledge gained, speed of answering, difficulty level mastered, and analytical skills.

- At school level, the informational data derived from the student analytics system should help in facilitating overall instructional method changes or to help class teachers to give dedicated focus on specific students who need extra support.

Adaptive Remedial Learning for Students through Analytics Derived in Live Classes in Virtual Classrooms and LIVE & Recorded Classes in the Student App

The solution shall provide seamless integration with Student Digital Assessment Devices deployed in virtual classrooms, ensuring accurate linkage of assessment data to individual student profiles in the app through unique student ID mapping. The system shall incorporate an analytics engine capable of generating comprehensive, multi-dimensional reports on student learning performance, which will be used to deliver adaptive and data-driven remedial learning interventions for Class 9 to 12 Students.

ARL TEACHER APP AND STUDENT APP

Features in Teacher App:

a) The platform should enable scheduling and conducting LIVE & Interactive sessions in the app (mobile app and desktop app) by teachers.

b) The platform should allow setting quiz-based check points to assess learning. This should be enabled even for the recorded sessions.

c) At specific intervals during a LIVE session, teacher should be able to allow two-way Question & Answer spots. This function should be enabled even in a recorded session for students who are taking the session online. Any centrally assigned teachers could participate as moderators to take up Q&A spots and interact with online students.

d) The teachers and institutions should be able to take complete control of content - make content visible to select Class/Section and Generate Tests.

e) The school should have complete access to allow or withdraw the content to specific group of students on the basis of courses, subjects, topics etc.

Features in Adaptive Remedial Learning Student App:

a) Watch LIVE sessions, Watch Recorded Lecture Videos online or download and use it offline.
   - Content organized and tagged by grade, subject, chapter, and topic
   - Remedial sessions: simplified explanations, foundational concept videos, and practice exercises
   - Standard level: aligned with grade-level curriculum
   - Advanced topics: enrichment content for excelling students
   - Multiple content formats: video lessons, animations, interactive simulations, text notes, and infographics

b) The platform should allow students to attend live classes. Attendance of students should be recorded automatically.

c) Student learning should be captured at regular intervals through MCQs during LIVE sessions as well as recorded sessions. Student responses should be synced and uploaded whenever internet gets available.

d) Self-analytics for students, Speed and accuracy analysis, Strength and weakness analysis, completing status etc.

e) Students should be able to ask doubts by posting images or post a doubt.

f) Download content for offline viewing to address connectivity challenges in remote areas.

g) Auto-sync when connectivity is restored

h) Offline assessment capability with later synchronization.

i) Compressed content delivery for low-bandwidth scenarios.

Technical & Integration Features of ARL Student App

- Native mobile app for Android
- Support up to 05 lakh concurrent users
- Role-based access control (student, teacher, administrator)
- Automated content tagging and mapping
- Automatic capture and sync of test responses, scores, and performance data
- Support for multiple assessment types: MCQs, true/false, numerical responses, and interactive questions
- AI-driven personalized set of content suggestions for weak areas identified through assessments
- Advanced topic suggestions for high-performing students
- Regular data backups and disaster recovery
- Cloud-based architecture to support state-wide deployment
- Load balancing and content delivery network (CDN) integration
- User management (bulk user creation, role assignment)
- Customizable report generation
- Export functionality (Excel, PDF, CSV)
- In-app help and tutorials
- The Bidder should manage the Hosting Environment, Server Space, and Connectivity required for centrally hosting the application.

D. <u>OTHER CENTRALIZED APPLICATIONS & DASHBOARDS</u>

PROJECT MONITORING DASHBOARD

The Bidder should provide an online project monitoring dashboard to monitor LIVE delivery of the classes, equipment health, manpower for instructional services, complaints, status etc. The reports generated from the monitoring tool will be used to analyze the outcome of the project.

The Project Monitoring Dashboard should be geo-mapped and record the following:

- A summarized class run status report for the entire State on any given day should be made available. This report should be detailed with studio session and virtual classroom status data
- The school locations should be indicated by markers by using latitude and longitude of the school on the State/District/Block map. The map should show the class run status and other respective status represented by different colours in real-time.
- **Virtual Classroom Status**: When a class was run using the virtual classroom facility, system should automatically update the status (Studio Session/Digital Class) and this data should be available online. If the status is not available, then status should be shown as Class Not Run for that Classroom.
- Information regarding subject wise delivery of LIVE classes from studio(s).
- Real time class run status should be available online about the number of classrooms working/ not working, issues at virtual classrooms.
- Category wise and class wise beneficiaries.
- Various types of reports generation from the dashboard- School wise, district wise, State wide for program officials
- The monitoring tool should be able to generate reports regarding the outcome reflecting shortcomings, achievement as well as suggestions for improvement.

- Complaints & resolved issues from virtual classroom should be tracked in the online system.
- The school wise number of teachers trained.
- **Archived Data**: Data captured on the dashboard should be regularly archived and made available for at least a year.
- The monitoring tool should generate reports on the outcome of the project reflecting achievements, shortcomings, as well as suggestions for improvement.

Monitoring system is to be provided at OSEPA/OCAC and S&ME Department and should be linked to Vidya Sameeksha Kendra. Bidder should also develop an interface to integrate the relevant data on State Government Dashboard.

Student Information System

An application to store and track student details including grades, attendance records, and participation and performance in the regular classroom including results of Formative Assessment and Summative Assessment. Provision should be made for Class Teacher to enter the data using mobile app or desktop application and mapping of individual students with their unique student ID which is available with the department. The same unique IDs should be linked to the student digital assessment devices for unification of attendance, participation, and performance data across the platforms.

Complaint Management with Request Tracking System (RTS) for Schools

Complaint Management System should be provided to report the performance issues associated to hardware and Software. The system should accept complaints from Virtual Classrooms which should be tracked from initiation to closure. These should be updated in the real-time for quick resolution of issues. At any point of time, if school faces any technical issues, they should be able to raise a ticket using the RTS – Request Tracking System. This should be a mobile app or website application in the laptop / desktop). Status of the ticket should be up to date until the issue is resolved.

   a) When the admin login is successful, dashboard page for school or district or state should depict the summary of the Tickets raised so far.
   b) Schools should be able to login using a Username and Password allotted to their school
   c) Every ticket should include following details:
      1. Issue type
      2. Issue Category
      3. Issue Sub Category
      4. Mandatory Image Upload to envision the issue
      5. Description of the issue
   d) Once the ticket is raised, status should be always visible

Asset Management System

To monitor the Program implementation at multiple locations, Device Status, should be provided and linked to the Program Monitoring Dashboard. It should manage the status of hardware installation, performance, and maintenance during the project period.

Asset Management System should be cloud hosted with dashboards accessible over various devices. Schools should be able to regularly make data-entry of the status for each equipment.

- **Asset Management**
- **Periodic Asset Tracking**
- **Asset Performance Management**

Note: During the agreement period, if any hardware/software failed and the same is eligible for replacement in compliance with standard warranty terms of Manufacturer in such case bidder has to ensure replacement as applicable at Free of cost. In case of theft, substitute equipment manageable to run the class may be arranged by the Service Provider till the alternate arrangements are made by the school within 45 days.

Help Desk Setup

Helpdesk should comprise of helpdesk tools, policies, and helpdesk personnel. Manpower deployed at the helpdesk should log calls regarding the queries/complaints of Hardware users (Schools). This Helpdesk tool should have a facility which allows user to log ticket and call through the app provided by the Bidder. User should be able to log ticket using any of these options.

Helpdesk tool, if required should be developed/integrated by successful Bidder in consultancy with OCAC, Odisha. Bidder should also manage the inventory of all hardware supplied and installed by them.

A Help Desk coordinator should monitor the Help Desk Operations. The Help Desk Agents should also carry-out project related back-end work. The Help Desk set up should be fully integrated with online project monitoring tool for real-time monitoring. The system should have a common toll-free number facility with a minimum up time of 95% during the working hours.

E. MANPOWER FOR INSTRUCTIONAL SERVICES FROM THE STUDIOS

i.   Successful Bidder should assign experienced teachers to deliver classes from the central studios. Compensation of these teachers will be the responsibility of the Bidder. Bidder should ensure involvement of Government academic teachers for suggestions, during the content modification and up-gradation as per direction of the OSEPA. Any honorarium to Government teachers will be the responsibility of the department.

ii. Successful Bidder should assign dedicated academic manpower for core subjects like Mathematics, Science, English, Geography, Computer Education for Class 6 to 12, Value Addition programs such as Remedial Teaching, Advanced Learning Sessions, Multiple Intelligence Programs for holistic development of students, Career Guidance, Competitive Exams, Communicative English for students, Psychometric Analysis (Annual program with 150 Questions spread throughout the academic year to gauge Intelligence Quotient (IQ), Emotional Quotient (EQ), Social Quotient (SQ), Adversity Quotient (AQ)) etc.

iii. A dedicated team for assessment should be assigned to create analysis reports from the insights generated by artificial intelligence engine. The big data thus gathered should be usable to create remedial teaching plans, advanced learning sessions, and as inputs for other holistic student development programs.

iv. Successful bidder should deploy sufficient resource persons (project staff for core subjects and other programs and external resource persons as required) to cater to the program needs in parallel from studios as per their respective scheduled time table and beyond school hours for conducting remedial sessions.

v.   Successful Bidder should deploy sufficient, qualified, & trained technical manpower to operate and maintain Studios during the O&M Phase after the completion of the setup. All the required manpower to hassle -free running of the solution for project's should be provided by the bidder.

vi. Successful Bidder should also utilize available studios to conduct various co-curricular activities that increase student's interest in sports, culture, and personality development. The successful bidder has to schedule regular sessions on any of the following: multiple intelligence, moral intelligence, and emotional intelligence building through programs such as language learning exercises, speed math, Instructions for science Do-It-Yourself experiments, showing curated children's movies and other special sessions defined at various sections of the RFP - from State studios or national level teaching ends. In addition to this, any special courses to be conducted, The Subject Matter Expert Compensation will be Borne by OSEPA.

vii. Training of Teachers and other Staff

After completion of Set-up, the Bidder needs to train teachers at schools on usage of Virtual Classrooms. The training should include training on hardware and software operations and on the usage of multimedia content. Technical training should also be provided to the selected people of the S&ME department for the operations of Studios at Bhubaneswar and in other location as mentioned in the RFP as directed by the department time to time during the project duration.

<u>Qualification of Trainers</u>

- The Trainers must have relevant experience in the concerned subject and should have full knowledge of Virtual Classrooms setup and its usage.
- Qualification of subject experts should be Graduate or Higher.

Note: OSEPA shall assign an Academic Committee with expert resource persons and academicians for the Verification and Approval of Time Table, Content Creation, and Assessment processes.

INSTRUCTIONAL SERVICES AND SUPPORT MANPOWER REQUIRED (INDICATIVE LIST)

Designation & No. of Manpower	Description
Project Manager (1)	• The Project Manager heads the entire Project and is responsible for successfully implementing the Project according to the Project Plan. Manages the risk, quality and progress of the project to organizational standards, and ensures the project will complete on time. • Project Manager is the execution head and the single point of contact for the entire project. • Project Manager is required to regularly communicate with key stakeholders to ensure project outcomes are met. • Timely submission of all the Reports to OCAC, Odisha as required. • Timely project updates to OCAC, Odisha as required. • Candidate must be BE/BTECH/MBA having an experience of minimum 3 years with minimum 2-years' experience in Education Technology solutions.
Regional Managers (8)	• Schools and studios will be mapped into four zones. Day to day activities at these zones will be overseen by respective regional managers.
Program Manager (1)	• Program Manager will be responsible for planning and implementing education strategies for the program. • Determine the syllabus and session plan for the classes to be run all throughout the State - in coordination with the OCAC, Odisha. • Establish a routine schedule of delivery of LIVE sessions from the Studio/Teaching Ends as per the approved time-table and session plan. • Supervising and giving directions to Regional Studio In-Charges. • Supervises and provides direction to Service Provider's Academic and Multimedia Teams through coordinators. • Formulates and recommends changes in multimedia and delivery based on analytics and feedback from Interaction Centre In-Charges. • Assists the Project Manager in reviewing the program, evaluating and reporting on a continuous basis. • The position ensures compliance requirements are met, adheres to program guidelines, and develop, manages and monitors special topic programs. • Must have a Master's degree with minimum 3 years of experience.

Studio Engineer (12)	• Responsible for the Operation of the Studio. • One person per each of the studio. • Coordinate with Program Manager on program schedule. • Make sure that programmes are broadcast on time and to the highest level of quality with Remote instructions if any. • Support Studio Teacher to take questions and display appropriate dashboard • Servicing and testing equipment. • Minimizing loss of service when equipment fails by quickly identifying and implementing alternative methods of service provision. • Interpreting and implementing instructions and requests from Program manager on need basis for additional sessions.
Camera Man Main Studios (4)	• Minimum one-year experience as cameraman • Assemble, prepare, and set up equipment prior to LIVE Delivery of sessions, which may include tripods, monitors, lighting, cables and leads and headphones. • Practice the camera moves required for any pre-arranged shots for special sessions. • Check for any audio noise in the LIVE Room. • Helping Studio Engineer to deliver high quality sessions.
Audio Video Engineer / Technical Engineers (8)	• Minimum one-year experience in similar environment. • Assemble, prepare, and set up equipment prior to LIVE Delivery of sessions, which may include tripods, monitors, lighting, cables and leads and headphones. • Handle multi-camera switching, live broadcasts, and recording sessions; ensure stable streaming quality and smooth technical operations. • Manage audio levels, noise reduction, camera framing, exposure, and lighting to ensure high-quality educational content. • Diagnose and resolve equipment, connectivity, or signal-flow issues during pre-production, live sessions, and post-production. • Perform routine checks, calibration, and maintenance of studio equipment; coordinate repairs and upgrades with vendors. • Assist educators and content teams in producing instructional videos, demos, and presentations; ensure files are delivered in compatible formats. • Manage recording files, storage, and archiving; perform technical quality checks before content publication.
Content Delivery Experts (60)	• Deliver the content on par with the defined standards; engage and motivate students; make learning participative. • Developing weekly session plan based on the topics assigned. • Look into questions being asked by students. • Prepare for sessions as per session plan and add personalized effective inputs for immediate concept understanding. • Post Graduate/Graduate in specific subject with teaching experience.

Helpdesk/Tech Support (10)	• Helpdesk serves as a single point of contact for all project related incidents and service requests. • The Helpdesk agents are mapped to handle requests from specific schools. They shall also handle any project related back-end work. • They shall provide the support for all kinds of disaster management at the local centers. • Solve all first level issues through phone calls and second level issues to be forwarded to operations team to follow up. • Regularly monitors online project management system and reports any cases where schools are not utilizing the infrastructure. • Candidate should be any graduate/diploma.
Nodal Instructional Executives (268)	• Nodal Instructional Executives are on field personnel who handle any incidents and service requests to help make the Digital Education System meet services availability requirements. • Nodal Instructional Executives shall also train school teachers and students to use the technology set up on need basis. • One Nodal Instructional Executives has to be deployed for every 15 schools on an average. • Candidate should be any graduate/diploma
Zonal Technical Engineers (4)	• To monitor virtual classroom centers. • To provide hands on experience to Master Trainers who entertain school staff/teachers and Nodal Instructional Executives to operate the classrooms after the installations. • To look in to issues and visit schools to rectify when issues are complex in nature. • BE/B-TECH with 2 years of experience in Education Technology solution.
Software Support (2)	• Software expert for managing Applications centrally. • Manage Student and teacher Information system and keep updating time to time with required modifications. • Generate project reports and analytics from various tools.

F. OPERATIONS AND MAINTENANCE:

The scope of work for the bidder is limited to equipment / component procured as part of Virtual Classroom with Digital Assessment solution. Later if any additional hardware or software is required, all additional hardware and software required would be procured by OCAC and would be maintained by the bidder. However, for monitoring these managed devices if any additional hardware / software /licenses are required then the cost will be borne by OCAC.

- The successful bidder should provide operations and maintenance services of studios and virtual classrooms during the O&M period.

- Standard On-site maintenance and provisioning of services of all the ICT Infrastructure and their components supplied after successful execution and acceptance by OCAC.

- On-site/On-field support for Operations by qualified and trained personnel for a period of 5 years to ensure high service availability.
  - Monitor schools to identify and address issues as per defined frequency during contract agreement, ensuring operational efficiency.
  - Conduct once in every quarter school visits for preventive maintenance to ensure the smooth functioning of hardware components.
  - Upon any communication received from OCAC/ User Department regarding any special program/event, Agency should Coordinate with respective schools and district officials during such special programs.

- Once completion of Capex, provide School level training for teachers on operating virtual classroom hardware and software.
- As on when required, Train district officials, block-level personnel, Cluster Resource Centre Coordinators (CRCCs), teachers, and other officials at the block level.
- Offer refresher or retraining sessions for teachers, conducted either on-site or online.
- The successful bidder is required to provide the standard warranty along with maintenance. In case, any replacement needs to be done for the same should item cost will be borne by Department and agency should provide free service cost for installation of same.
- The successful bidder shall be responsible to ensure adequate and timely availability of spare parts needed for repairing the equipment/parts.
- To provide this service the selected bidder must have back-to-back arrangement with the respective OEMs/ OEMs authorized partner.
- If any recurring problem reported, Root Cause Analysis of such incidents (Major & Minor) to identify threat sources and proactive measures to be proposed to user department to avoid recurrence.

7. TERMS AND CONDITIONS

7.1 Definitions:

For the purpose of clarity, the following words and expressions shall have the meanings hereby assigned to them: -

a) "Working Day" means all working calendar days except Government declared Holidays and local holidays in schools.

b) "Contract" means the Agreement entered into between the Purchaser and the Successful Bidder, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

c) "Contract Documents" means the documents listed in the Agreement, including any amendments thereto.

d) "Contract Price" means the price payable to the Successful Bidder as specified in the Agreement, subject to such additions and adjustments there to or deductions therefrom, as may be made pursuant to the Contract.

e) "Day" means a calendar day.

f) "Delivery" means the transfer of the Goods from the selected Bidder to the Purchaser in accordance with the terms and conditions set forth in the Contract.

g) "Completion" means the fulfillment of the related services by the Successful Bidder in accordance with the terms and conditions set forth in the Contract.

h) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Successful Bidder is required to supply to the Purchaser under the Contract.

i) "Purchaser" or "OCAC, Odisha" means the entity purchasing the Goods and related services, as specified in the bidding document.

j) "Related Services" means the services incidental to the supply of the goods, such as transit insurance, installation, and initial maintenance and other similar obligations of the Successful Bidder under the Contract.

k) "Sub contract or" means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Goods to be supplied or execution of any part of the related services is subcontracted by the Successful Bidder.

l) "Successful Bidder" means the person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Successful Bidder.

m) "The Site," where applicable, means the designated project place(s) named in the document.

7.2 General Conditions of the Bid:

a) Agencies which do not hold a valid Permanent Account Number (PAN)from Income Tax department, Government of India and Good Service Tax Certificate from where their business is located will not be eligible to bid.

b) Subject to the order of precedence set for thin the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, & mutually explanatory.

7.3 Sub-contracting

a) Subletting in any form by any bidder (any company or PSU) directly or through a tender is not allowed at any stage. (It excludes work related to Site Preparation, Civil works, Internet Service)

b) A Commitment letter / undertaking on company's letter head in this regard must be submitted along with technical bid.

7.4 Interpretation:

a) If the contexts require it, singular means plural and vice versa.

b) **Entire Agreement:** The Contract constitutes the entire agreement between the Purchaser and the Successful Bidder and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

c) **Amendment:** No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

d) **Non-waiver:** Subject to the condition (f) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time bye it her party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

e) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

f) **Severability:** If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

7.5 Language:

a) The Contract as well as all correspondence and documents relating to the Contract exchanged by the Successful Bidder and the Purchaser, shall be written in English language only. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the special conditions of the contract, in which case, for purposes of interpretation of the Contract, this translation shall govern.

b) The Successful Bidder shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

7.6 Eligible Goods and Related Services:

a) For purposes of this Clause, the term "goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "related services" includes services such as transit insurance, transportation, supply, installation, integration, testing, commissioning, and initial maintenance.

b) For all articles/goods being bid, which are classified as from major OEMs, the bidder/consortium member should submit a letter by a competent authority of the vendor. All products quoted by the Successful Bidder must be associated with specific make and model numbers, item code and names, and with printed literature describing configuration and functionality. Any deviation from the printed specifications should be clearly mentioned in the offer document by the bidder/supplier.

c) The OEM/ Solution Provider of the quoted product must have its own registered spares depot in India having adequate inventory of the equipment being quoted for providing the necessary spares within next working day or maximum 48 hours.

d) Bidder must quote products in accordance with above clause "Eligible goods and related services".

7.7 Notices:

a) Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the contract. The term "in writing" means communicated in written form with proof of dispatch and receipt.

b) A Notice shall be effective when delivered or on the Notice's effective date, whichever is later.

7.8 Governing Law:

a) The Contract shall be governed by and interpreted in accordance with the laws of the Country (India), unless otherwise specified in the contract.

7.9 Scope of Supply:

a) Subject to the provisions in the bidding document and contract, the goods and related services to be supplied shall be as specified in the bidding document.

b) Unless otherwise stipulated in the Contract, the scope of supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining delivery and completion of the goods and related services as if such items were expressly mentioned in the Contract.

7.10 Delivery & Installation:

a) Subject to the conditions of the contract, the delivery of the goods and completion of the related services shall be in accordance with the delivery and completion schedule specified in the bidding document. The details of supply/shipping and other documents to be furnished by the Successful Bidder are specified in the bidding document and/ or contract.

b) The contract for the supply can be repudiated at any time by the purchase officer, if the supplies are not made to his satisfaction after giving an opportunity to the Bidder of being heard and recording the reasons for repudiation.

c) The Successful Bidder shall arrange to supply, install, and commission the ordered materials/ system as per specifications within the specified delivery/ completion period at various departments and/or their offices /locations /schools mentioned in the bidding document and/or contract.

d) Shifting the place of Installation: The end-user will be free to shift the place of installation within the same city /town/ district. The successful Bidder shall provide all assistance, except transportation, in shifting of the equipment. However, if the village/city/town is changed, additional charges of assistance in shifting and providing maintenance services for remaining period would be decided mutually.

7.11 Successful Bidder's Responsibilities:

The Successful Bidder shall supply all the goods and related services included in the scope of supply in accordance with the provisions of bidding document and/or contract.

7.12 Purchaser's Responsibilities:

a) Whenever the supply of goods and related services requires that the Successful Bidder obtain permits, approvals, and import and other licenses from local public authorities, the Purchaser shall, if so, required by the Successful Bidder, make its best effort to assist the Successful Bidder in complying with such requirements in a timely and expeditious manner.

b) The Purchaser shall pay all costs involved in the performance of its responsibilities, in accordance with the general and special conditions of the contract.

7.13 Contract Price:

a) The Contract Price shall be paid as specified in the contract subject to any additions and adjustments thereto, or deductions there from, as may be made pursuant to the Contract.

b) Prices charged by the Successful Bidder for the Goods delivered and the Related Services performed under the Contract shall not vary from the prices quoted by the Successful Bidder in its bid, with the exception of any price adjustments authorized in the special conditions of the contract.

7.14 Recoveries from Successful Bidder:

a) Recovery of liquidated damages, short supply, breakage, rejected articles shall be made ordinarily from bills.

b) The Purchase Officer shall withhold amount to the extent of short supply, broken/ damaged, or for rejected articles unless these are replaced satisfactorily. In case of failure to withhold the amount, it shall be recovered from his dues and performance security deposit available with OCAC, Odisha.

c) The balance, if any, shall be demanded from the Successful Bidder and when recovery is not possible, the Purchase Officer shall take recourse to law in force.

7.15 Taxes & Duties:

a) The OCAC, Odisha shall be responsible for withholding taxes from the amounts due and payable to the Successful Bidder wherever applicable. The Successful Bidder shall pay for all other taxes, duties or levies in connection with this Contract, Operations, and any other Project Engagement Definition including, but not limited to, property, sales, use, excise duty, value-added, goods and services, consumption and other applicable taxes, duties or levies.

b) The OCAC, Odisha shall provide the Successful Bidder with the original tax certificate of any withholding taxes paid by the OCAC, Odisha or its nominated agencies on payments under this Contract. The Successful Bidder agrees to reimburse and hold the OCAC, Odisha or any of its nominated agencies harmless from any deficiency (including penalties and interest) relating to taxes that are its responsibility under this paragraph. For purposes of this contract, taxes, duties or levies shall include taxes, duties, levies or GST incurred on transactions between and among OCAC, Odisha and the Successful Bidder.

c) In the event of any increase or decrease of the rate of taxes and duties due to any statutory notification(s) during the term of the Contract, the consequential effect shall be to the account of the OCAC, Odisha.

7.16 Performance Security Deposit (PSD)/ Performance Bank Guarantee:

a) The Successful Bidder shall, within 30 days of the notification of Contract award, provide a PSD 10% of the ordered project value for the due performance of the Contract in the amounts and currencies specified in the work order. The EMD amount of successful Bidder can be converted as part of the Performance Guarantee. The proceeds of the PSD shall be payable to the Purchaser as compensation for any loss resulting from the Successful Bidder failure to complete its obligations under the Contract. In case of award of contract to more than one bidder, the performance security to be paid by each shall be calculated on proportionate value of the contract awarded to each such bidder.

b) Form of PSD: Successful Bidder will have to deposit PSD in the form of Bank Guarantee issued by one of the Government, Nationalized, and Commercial Scheduled Bank in India drawn in favor of "CEO, OCAC, Odisha" payable at "Bhubaneswar".

c) Refund of PSD: PSD shall be refunded after three months of the successful completion of the contract period.

d) Forfeiture of PSD:PSD shall be forfeited in the following cases: -

- When the Successful Bidder fails to commence supply or stops making the supplies or fail to provide deliverables after partially executing the purchase/ work order.
- To adjust any dues against the firm from any other contract with OCAC, Odisha.

e) No interest will be paid by OCAC, Odisha on the amount of EMD and PSD/PBG.

f) Proper notice will be given to the Successful Bidder with reasonable time before EMD/ PSD is forfeited.

7.17 Confidential Information:

a) The Purchaser and the Successful Bidder shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any drawings, documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract.

b) The Successful Bidder may furnish to its Subcontractor, if permitted, such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Successful Bidder shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Successful Bidder.

c) The Purchaser shall not use such documents, data, and other information received from the Successful Bidder for any purposes unrelated to the Contract. Similarly, the Successful Bidder shall not use such documents, data, and other information received from the Purchaser for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.

d) The obligation of a party under sub-clauses above, however, shall not apply to information that:

   i. The Purchaser or Successful Bidder need to share with Schools OCAC, Odisha other institutions participating in the Contract; now or hereafter enters the public domain through no fault of that party;

   ii. can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

e) The above provisions shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the supply or any part thereof.

f) The provisions of this clause shall survive completion or termination, for whatever reason, of the Contract.

7.18 Specifications and Standards:

a) All articles supplied shall strictly conform to the specifications, trademark laid down in the tender form and wherever articles have been required according to ISI/ISO/other applicable specifications/ certifications/ standards, those articles should conform strictly to those specifications/ certifications/ standards. The supply shall be of best quality and description. The decision of the competent authority/ purchase committee whether the articles supplied conform to the specifications shall be final and binding on the Successful Bidder.

b) Technical Specifications and Drawings-

c) The Successful Bidder shall ensure that the goods and related services comply with the technical specifications and other provisions of the Contract.

d) The Successful Bidder shall be entitled to disclaim responsibility for any design, data, drawing, specification, or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

e) The goods and related services supplied under this Contract shall conform to the standards mentioned in bidding document and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country of origin of the Goods.

f) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the bidding document. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with the general conditions of the contract.

7.19 Packing and Documents:

a) The Successful Bidder shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to with stand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take in to consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.

b) The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the contract, and in any other instructions ordered by the Purchaser.

7.20 Transportation:
a) The Successful Bidder shall be responsible for the proper packing so as to avoid damage under normal conditions of transport by sea, rail and road or air and delivery of the material in the good condition to the consignee at destination. In the event of any loss, damage, breakage or leakage or any shortage the Bidder shall be liable to make goods such loss and shortage found at the checking/inspection of the material by the consignee. No extra cost on such account shall be admissible.
b) All goods must be sent freight paid through Railways or goods transport. If goods are sent freight to pay, the freight together with departmental charge @5% of the freight will be recovered from the Successful Bidder's bill.

7.21 Extension in Delivery Period and Liquidated Damages (LD):
a) Except as provided under clause "Force Majeure", if the Successful Bidder fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct as liquidated damages, a sum equivalent to the percentage specified in (d) below for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the bidding document and/ or contract for the respective goods or service which is delayed. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to clause "Termination".

b) The time specified for delivery in the tender form shall be deemed to be the essence of the contract and the Successful Bidder shall arrange goods supply and related services within the specified period.
c) Delivery and installation/ completion period may be extended with or without liquidated damages, if the delay in the supply of goods or service is on account of hindrances beyond the control of the Successful Bidder.

  i. The Successful Bidder shall request in writing to the purchaser giving reasons for extending the delivery period of service, if he finds himself unable to complete the supply of goods or service within the stipulated delivery period or is unable to maintain prorate progress in the supply of goods or service delivery. This request shall be submitted as soon as a hindrance in delivery of goods and service occurs or within 15 days from such occurrence but before expiry of stipulated period of completion of delivery of goods and service after which such request shall not be entertained.
  ii. The purchaser shall examine the justification of causes of hindrance in the delivery of goods and service and the period of delay occurred due to that and recommend the competent authority on the period of extension which should be granted with or without liquidated damages.
  iii. Normally, extension in delivery period of goods and service in following circumstances may be considered without liquidated damages:
    • When delay has occurred due to delay in supply of drawings, designs, plans etc., if the School or OCAC, Odisha was required to supply them to the supplier of goods or service provider as per terms of the contract.
    • When delay has occurred in supply of materials etc., if these were required to be supplied to the supplier or service provider by the School or OCAC, Odisha as per terms of the contract.

iv. If the competent authority agrees to extend the delivery period/ schedule, an amendment to the contract with suitable denial clauses and with or without liquidated damages, as the case may be, shall be issued. The amendment letter shall mention that no extra price or additional cost for any reason, what so ever beyond the contracted cost shall be paid for the delayed supply of goods and service.

v. It shall beat the discretion of the concerned authority to accept or not to accept the supply of goods and/ or services rendered by the contractor after the expiry of the stipulated delivery period, if no formal extension in delivery period has been applied and granted.

vi. If School or OCAC, Odisha is in need of the good and/ or service rendered after expiry of the stipulated delivery period, it may accept the services and issue a letter of extension in delivery period with usual liquidated damages and denial clauses to regularize the transaction.

d) In case of extension in the delivery and/ or installation/ completion/ commissioning period is granted with full liquidated damages, the recovery shall be made on the basis of following percentages of value of goods and/ or service which the Successful Bidder has failed to supply or complete: -

No.	Condition	LD%*
a.	For the delay equivalent to the prescribed period of delivery, successful installation, and completion of work	0.5%
b.	Delay exceeding twice but not exceeding thrice of the prescribed period of delivery, successful installation, and completion of work	1%
c.	Delay exceeding thrice but not exceeding four times of the prescribed period of delivery, successful installation, and Completion of work	1.5 %

i. Fraction of a day in reckoning period of delay in supplies, successful installation and completion of work shall be eliminated, if it is less than half a day.

ii. The maximum amount of liquidated damages shall be 5%.

iii. *The percentage refers to the payment due for the associated milestone.

iv. *Penalty is applicable if the reason is attributed to Service Agency Only and if any reason attributed to User Department/OCAC/ Unavoidable Circumstances/ OEMs due to valid reasons the same are exempted from Penalty imposition upon reporting to OCAC/ User Department through e-mail/Letter.

7.22 Authenticity of Equipment:

a) The Successful Bidder shall certify that the supplied goods as per Annexure 11 are brand new, genuine/ authentic, not refurbished, conform to the description and quality as specified in this bidding document and are free from defects in material, workmanship and service.

b) If during the contract period, the said goods be discovered counterfeit/ unauthentic or not to conform to the description and quality aforesaid or have determined (and the decision of the Purchase Officer in that behalf will be final and conclusive), notwithstanding the fact that the purchaser may have inspected and/ or approved the said goods, the purchaser will be entitled to reject the said goods or such portion there of as may be discovered not to conform to the said description and quality, on such rejection the goods will be at the Successful Bidder's risk and all the provisions relating to rejection of goods etc, shall apply. The Successful Bidder shall, if so called upon to do, replace the goods etc., or such

portion thereof as is rejected by Purchase Officer, otherwise the Successful Bidder shall pay such damage as may arise by the reason of the breach of the condition herein contained. Nothing here in contained shall prejudice any other right of the Purchase Officer in that behalf under this contract or otherwise.

c) Goods accepted by the purchaser in terms of the contract shall in no way dilute purchaser's right to reject the same no later than two months from the purchase date.

7.23 Warranty:

a) The Bidder must supply all items with onsite standard warranty for five years.

b) The purchaser shall give a written notice to the Successful Bidder stating the nature of any defect together with all available evidence thereof, promptly following the discovery thereof. The purchaser shall afford all reasonable opportunity for the Successful Bidder to inspect such defects. Upon receipt of such notice, the Successful Bidder shall expeditiously cause to repair the defective goods or parts thereof or replace the defective goods or parts thereof with brand new genuine/ authentic ones having similar or higher specifications, at no cost to the Purchaser. Any goods repaired or replaced by the Successful Bidder shall be delivered at the respective location without any additional costs to the purchaser.

c) If having been notified, the Successful Bidder fails to remedy the defect within the period specified, the purchaser may proceed to take within a reasonable period such remedial action as may be necessary, in addition to other recourses available in terms and conditions of the contract and bidding document.

d) During the warranty period, the Bidder shall also be responsible to ensure adequate and timely availability of spare parts needed for repairing the supplied goods.

7.24 Patent Indemnity:

a) The Successful Bidder shall, subject to the Purchaser's compliance with sub-clause(b) below, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: -

- the installation of the Goods by the Successful Bidder or the use of the Goods in the country where the Site is located; and
- the sale in any country of the products produced by the Goods.

b) Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Successful Bidder, pursuant to the Contract.

c) If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to above, the Purchaser shall promptly give the Successful Bidder a notice thereof, and the Successful Bidder may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

d) If the Successful Bidder fails to notify the Purchaser within thirty (30) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

e) The Purchaser shall, at the Successful Bidder's request, afford all available assistance

to the Successful Bidder in conducting such proceedings or claim, and shall be reimbursed by the Successful Bidder for all reasonable expenses incurred in so doing.

f) The Purchaser shall indemnify and hold harmless the Successful Bidder and its employees, officers, and Subcontractors (if any) from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Successful Bidder may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

g) All right, title, and interest in and to, and ownership in, Proprietary Information of Successful Bidder, which is provided to the OCAC, Odisha for the Project including source code of any pre-existing application of the Successful Bidder, shall remain solely with the Successful Bidder. The OCAC, Odisha shall use such Successful Bidder Proprietary Information in connection with the services or to the extent necessary for the Project's normal operational, repair and maintenance purposes related to the services. The OCAC, Odisha shall not resale or redistribute such Proprietary Information of the Successful Bidder.

h) Transfer the ownership of the Assets (not already with OCAC which shall include the solution and Software including the source code, licenses provided and associated documentation which is the work product of the development efforts involved in the Project) to OCAC, at the appropriate time, with perpetual licenses- in synchronization with the submission of Deliverables thereof by the Implementation Agency - or in accordance with the terms of this RFP.

7.25 Limitation of Liability:

Except in cases of gross negligence or willful misconduct: -

a) neither party shall be liable to the other party for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Successful Bidder to pay liquidated damages to the Purchaser; and

b) the aggregate liability of the Successful Bidder to the Purchaser, whether under the Contract, in tort, or otherwise, shall not exceed the amount specified in the Contract, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Successful Bidder to indemnify the Purchaser with respect to patent infringement.

7.26 Change in Laws & Regulations:

a) Unless otherwise specified in the Contract, if after the date of the Invitation for Bids, any law, regulation, ordinance, order or by law having the force of law is enacted, promulgated, abrogated, or changed in State/India, where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/ or the Contract Price, then such Delivery Date and/ or Contract Price shall be correspondingly increased or decreased, to the extent that the Successful Bidder has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced Cost shall not be separately paid or credited, if the same has already been accounted for in the price adjustment provisions where applicable.

7.27 Force Majeure:

a) The Successful Bidder shall not be liable for forfeiture of its PSD, LD, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

b) For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Successful Bidder that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Successful Bidder. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, pandemics, climate crisis, school closure/holidays, quarantine restrictions, and freight embargoes.

c) If a Force Majeure situation arises, the Successful Bidder shall promptly notify the OCAC, Odisha in writing of such conditions and cause thereof within 15 days of occurrence of such event. Unless otherwise directed by OCAC, Odisha, the Successful Bidder shall continue to perform its obligations under the contract as far as reasonably practical.

d) If the performance in whole or part or any obligation under the contract is prevented or delayed by any reason of Force Majeure for a period exceeding 60 days, both the parties can discuss further action.

7.28 Change Orders and Contract Amendments:

a) The Purchaser may at any time order the Successful Bidder through Notice in accordance with clause "Notices" above, make changes within the general scope of the Contract in any one or more of the following: -

- drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- the method of shipment or packing;
- the place of delivery; and
- the related services to be provided by the Successful Bidder.

b) If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's/ Successful Bidder's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery and Completion Schedule, or both, and the Contract shall accordingly should be amended. Any claims by the Successful Bidder for adjustment under this clause must be asserted within thirty days from the date of the supplier's/ Successful Bidder's receipt of the Purchaser's change order.

c) Prices to be charged by the Successful Bidder for any related services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Successful Bidder for similar services.

7.29 Settlement of Disputes:

a) Any dispute or difference of what so ever nature how so ever arising under, out of, or in connection with this Agreement between the parties shall be resolved through the dispute resolution procedures as set out hereafter.

b) Each party to a dispute shall select and appoint one senior representative within a period of 30 days from the day on which one party has sent the notice of dispute to the other party to the dispute. The representatives shall meet in Bhubaneswar as and when necessary, from time to time and attempt in good faith and use their best endeavors at all times to resolve the dispute and produce written terms of settlement. The meetings of representatives shall be conducted in English.

c) If the dispute has not been resolved as evidenced by the signing of the written terms

of settlement within 30 working days after the receipt of the notice such dispute shall be submitted to arbitration and shall be finally determined in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996 or any modification or amendment thereof (the "Indian Arbitration Act")

d) The venue of arbitration shall be Bhubaneswar and the language of the arbitration shall be English and the award shall be made in the English language. The number of arbitrators shall be three. The Contractor shall nominate one arbitrator, the Employer shall nominate another, and the presiding arbitrator shall be jointly appointed by the two arbitrators so appointed by the parties.

e) If the other party fails to appoint an arbitrator within thirty (30) days from the receipt of the request to do so from the aggrieved party or if the two (2) appointed arbitrators fail to agree on the presiding arbitrator within thirty (30) days from the date of their appointment, the parties shall be free to approach the Secretary, Indian Council of Arbitration, Tansen Marg, New Delhi (without application of the ICA Rules) for appointment of an arbitrator or the presiding arbitrator and his decision shall be final and binding on the parties.

f) Each of the Parties expressly understands and agrees that the award shall be the sole, exclusive, final and binding remedy between them regarding the Dispute (s) presented to the arbitral tribunal. The parties hereto agree that the arbitral award may be enforced against the Patties or their assets wherever they may be found and that a judgment upon the arbitral award may be entered in any court having jurisdiction.

g) The existence of any dispute(s) or difference(s) or initiation or continuance of the arbitration proceedings shall not permit the Parties to postpone or delay the performance by the parties to the arbitration of the irrespective obligations pursuant to this Agreement. If court proceedings to stay litigation or compel arbitration are necessary, the Party who unsuccessfully opposes such proceedings shall pay all associate cost, expenses and attorney's fees, which are reasonably incurred by the other party to the arbitration.

h) Each Party shall bear its respective costs in relation to any arbitration proceedings.

i) The provision with respect to arbitration on these clauses shall survive on termination of this Agreement or any takeover of the Project by GoO.

7.30 PROJECT TIMELINES AND PAYMENT TERMS

a) Payment schedule–Payments to the Bidder, after successful completion of the target milestones (including specified project deliverables), would be made as under:

	Deployment Phase		
Sl. No	**Description**	**Deliverables**	**Payment %**
1	• Delivery/Verification of equipment (IT and non-IT at site). Payment shall be released on pro-rata basis on delivery/verification of minimum **100** sites.	• Original Delivery Challan • Original Invoice (In triplicate)	90% (pro-rata basis)
2	• Installation, Commissioning, and Orientation of Equipment (IT and Non-IT at site) on pro rata basis on Installation/verification of minimum **100** sites.	• Installation Certificate from the School	10% (pro-rata basis)
	Post Implementation Phase		
3	Operations & Maintenance (O&M) [Continuous activity for 05 years after Project Go-Live]	**Quarterly:** ▪ Bidder has to submit functionality report from schools every quarter approved by competent authority of the school. ▪ Bidder has to submit quarterly studio report	Quarterly payment (**as per Billing and implementation completed**)
Note: The RFP is floated by Odisha Computer Application Centre (OCAC) as per requirement of Odisha School Education Programme Authority (OSEPA), S&ME Department, Govt. of Odisha. **** Release of payment to the Implementing Agency is subject to receipt of fund from OSEPA.***			

b) The Bidder's request for payment shall be made to the purchaser in writing, accompanied by invoices describing, as appropriate, the goods delivered and related services performed, and by the required documents submitted pursuant to general conditions of the contract and upon fulfillment of all the obligations stipulated in the Contract. The deployment phase should be completed within 240 working days from the date of signing of the contract. If delay occurred due to the reason not attributed to Service Partner, the same amount of time may be extended for execution of the Project.

c) All payments including advances, if any, will be as per GFR guidelines.

d) The currency or currencies in which payments shall be made to the Successful Bidder under this Contract shall be Indian National Rupees (INR) only.

e) The contractor shall quote the annual recurring cost based on billing for all 12 months of the calendar year. The required bandwidth for the project, as well as the availability of the project team, must be ensured throughout the year, including during school closures, holidays, and vacation periods.

f) All remittance charges will be borne by the Successful Bidder.

g) In case of disputed items, disputed item's amount shall be withheld and remaining amount will be released. While, the withheld amount will be paid only after due clarifications are received / settlement of the dispute if any.

h) Any penalties/ liquidated damages, as applicable, for delay and non-performance, as mentioned in this bidding document, will be deducted from the payments for default from the prescribed milestones.

i) Report submission for payment during restrictive conditions:

During School Holidays/Closure on account of epidemics/ pandemic/ climate emergency/ other restrictive situations/ Government imposed lockdown or restrictions/ or any Other Planned Closure which are not directly or indirectly under the control/scope of the Contractor, Payment shall be made as per the approved BOQ based on the Studio reports/Online reports and related invoices.

During such restrictions the School Reports shall not be required for making the payments. Also, deductions/ penalty shall not be applicable under situations which are not under the control of the contractor.

j) Functionality of the school means that bidder has to ensure that the equipment's are in working condition for the virtual classroom sessions.

k) Service Level Requirement: Virtual Classrooms Uptime under standard Operating Conditions

Item	Time to resolve after lodging of complaint	Penalty/Damages
Items		
From the date of lodging of complaint within next 72 hours (i.e. up to 4th working day)		No penalty
(A)	For every extra 48 hours (working days)	0.1% of item value
(B)		• If the call is not resolved and penalty amount reaches 2% on account of school unable to access the virtual classes, then NOTICE shall be issued. • The tendering authority will be free to initiate action as per tender terms and condition for breach and if such occurrences are repetitive in nature (if three such notices are issued during a year for same item) or if tendering authority feels that Successful Bidder is not performing as per requirement, then tendering authority may get the equipment replaced by the bidder as no extra cost within 30 days of issuing replacement notice.
The penalty amount will be recovered from the next payment due to the supplier. The Bank Guarantee (for proper maintenance during warranty period) will be returned only after settling the penalty amounts, if any.		

Teaching End Uptime	Penalty
95%and above	No Penalty
90%to 95%	0.5% of Monthly Invoice Value of all the affected Schools
85%to 90%	1% of Monthly Invoice Value of all the affected Schools
Below 85%	1.5% of Monthly Invoice Value of all the affected Schools

Payment will not be deducted in case of holiday/any scheduled closure of schools/ Not Accessible Time Period by the Department.

Exclusions:

- Any approved planned down time of the solution
- Any issues which are outside the scope of the Bidder to attempt.

7.31 Acceptance Testing and Certification

a. The primary goal of Acceptance Testing and Certification is to ensure that the Project (including all the project components as discussed in the scope of work) meets requirements, standards, specifications and performance, by ensuring that the following are associated with clear, quantifiable metrics for accountability:

    i. Infrastructure (Hardware and Network) Compliance Review
    ii. Performance of the Software
    iii. Project Documentation

b. **Infrastructure Compliance Review:** OCAC, Odisha shall perform the Infrastructure Compliance Review to verify the conformity of the infrastructure (both IT, non-IT) supplied by the Successful Bidder against the requirements and specifications provided in the tender and/or as proposed in the proposal submitted by the Successful Bidder. Compliance review shall not absolve the Bidder from ensuring that proposed infrastructure meets the terms of requirements.

c. **Performance of the Software:** Performance is another key requirement for the project and the agency shall review the performance of the deployed solution against certain key parameters.

d. **Project Documentation:** The Agency shall review the project documents developed by the Successful Bidder including deliverables given in the scope of work and other documents as required.

7.32 EXIT MANAGEMENT-

a. Preamble

    i. The word 'parties' include the tendering authority and the Bidder.

    ii. This Schedule sets out the provisions, which will apply on expiry or termination of the Project Implementation and Operations and Management.

    iii. In the case of termination of the Project Implementation and/or Operation and Management due to illegality, the Parties shall agree at that time whether, and if so during what period, the provisions of this Schedule shall apply.

    iv. The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Schedule.

b. Handover-

    i. The Bidder shall start the exit management and transition at least three months before the expiry of the Contract.

    ii. Supplied goods by Bidder at School or OCAC, Odisha shall be the legal properties of School or OCAC, Odisha.

    iii. Satellite Interactive Terminal (SIT)/Bharat net/Internet related or any network equipment deployed in schools under services shall also be handed over to school by the Bidder.

c. Cooperation and Provision of Information during the exit management period-

    i. The Bidder will allow the School or OCAC, Odisha access to the information reasonably required to define the current mode of operation associated with the provision of the services to enable School or OCAC, Odisha to assess the existing services being delivered.

    ii. Confidential Information, Security and Data: - On the commencement of the exit management period, the Bidder will promptly supply the Project related data and confidential information to School or OCAC, Odisha or its nominated agencies.

d. <u>General Obligations of the Bidder-</u>
   i. The Bidder shall provide all such information as may reasonably be necessary to effect as seam less during hand over as practicable in the circumstances –to School or OCAC, Odisha or its nominated agencies or its replacement operator and which the operator has in its possession or control at any time during the exit management period.
   ii. The Bidder shall commit adequate resources to comply with its obligations under this Exit Management Clause.

8. BID DOCUMENT FORMATS

Annexure-1: Particulars of the Bidders

Sl. No.	Information Sought	Details to be Furnished
1	Name of the bidding Company	
2	Address of the Company	
3	Incorporation status of the firm (Public limited / Private limited, etc.)	
4	Year of Establishment	
5	Date of registration	
6	RoC Reference No.	
7	Details of company registration	
8	Details of registration with appropriate authorities for GST	
9	Name, Address, e-mail ID, Phone nos. and Mobile Number of Contact Person	
10	Roles & Responsibilities	

Name of the Bidder: ....
Authorized Signatory: ....
Signature:
Seal:
Date:
Place:

Annexure-2: Bidder's Authorization Certificate

(To be filled by the Bidder)

To,

The General Manager (Admn.)
Odisha Computer Application Centre (OCAC)
OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square,
RRL Post Office, Bhubaneswar-751013

I/ We {Name/ Designation} hereby declare/ certify that {Name/ Designation} is hereby authorized to sign relevant documents on behalf of the company/ firm in dealing with RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 00-00-2025. He/she is also authorized to attend meetings & submit technical & commercial information/ clarifications as may be required by you in the course of processing the Bid. For the purpose of validation, his/ her verified signatures are as under.

Thanking you,

Name of the Bidder: -   Verified Signature
Authorized Signatory:-
Seal of the Organization: -
Date:
Place:

Annexure-4: RFP Form

(To be filled by the Bidder)

1) Addressed to:

Name of the Tendering Authority	The General Manager (Admin.)
Address	Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square, RRL Post Office, Bhubaneswar-751013 (INDIA)
Telephone	0674-2567280 / 2567064 /2567295 / 2588283
Tele Fax	0674-2567842
Email	gm_ocac@ocac.in

2) Firm Details:

Name of Firm				
Name of CMD of the firm with email id, contact number				
Name of Contact Person with Designation				
Registered Office Address				
Address of the Firm				
Year of Establishment				
Type of Firm Put Tick (√) mark	Public Limited	Private Limited	Partnership	Proprietorship
Telephone Number(s)				
Email Address/ Web Site	Email:		Web-Site:	
Fax No.				
Mobile Number	Mobile:			
Certification/Accreditation/Affiliation, if Any				

3) The requisite tender fee amounting to Rs.___/- (Rupees <in words>) has been deposited vide DD/BC/ receipt no._____dated_____.

4) The requisite EMD amounting to Rs._____/- (Rupees <in words>) has been deposited vide Bank Guarantee /DD No._____dated_____. (If applicable)

5) We agree to abide by all the terms and conditions mentioned in this form issued by the Empanelment Authority and also the further conditions of the said notice given in the attached sheets (all the pages of which have been signed by us in token of acceptance of the terms mentioned therein along with stamp of the firm).

Date:

Name & Seal of the firm:_____

Authorized Signatory: _____

Annexure-5: Covering Letter – Technical Bid

(To be filled by the bidder and signed in Company Letter Head)

The General Manager (Admin)
Odisha Computer Application Centre
(Technical Directorate of I.T. Dep't, Govt. of Odisha)
N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar - 751013

Subject: Technical Proposal for Selection of Agency for the Implementation, Operations and Maintenance of AI Powered Virtual Classrooms with Digital Assessment vide RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025

Sir/Madam,

We, the undersigned, offer to provide our services against your RFP enquiry no. *<Insert RFP no>*dated *<insert date>*. We are hereby submitting our Proposal, which includes this Technical Bid sealed in the envelope.

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

We agree to abide by all the terms and conditions of the tender document. We would hold the terms of our bid valid for 180 days as stipulated in the RFP document.

We agree that you are not bound to accept the lowest or any bid response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products / services specified in the bid response without assigning any reason whatsoever.

It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company /firm/organization and empowered to sign this document as well as such other documents which may be required in this connection.

Yours sincerely,
Authorized Signature [*In full and initials*]: _____
Name and Title of Signatory: _____
Name of Firm: _____
Address:_____

Letter No._____   Date:_____

To

The General Manager (Admin)
Odisha Computer Application Centre
Plot No. - N-1/7-D, Acharya Vihar, P.O.
RRL, Bhubaneswar – 751013

Sub: OEM Authorization Letter
RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025

Dear Sir,

We, who are established and reputable manufacturers /producers of _____
having factories / development facilities at (*address of factory / facility*) do hereby authorize M/s
_____*(Name and address of Agent)* to submit a Bid, and accept the Purchase
Order against the above Bid Invitation.

We hereby extend our full guarantee and support for the Solution, Products, and services offered by
the above firm against this Bid Invitation.

SUPPORT AND MAINTENANCE: In the event that, during the contract term specified in the RFP,
_____(Bidder Name) is unwilling or unable to fulfil its
maintenance and support in respect of the Hardware or Software products in accordance with the RFP,
_____(OEM Name) undertakes to provide such support and
maintenance obligations (either by ourselves or through a subcontractor) in accordance with the RFP
Technical Terms of Service for the duration of any paid-up Support and Maintenance Term provided
always that you have a valid Subscription Agreement.

We duly authorize the said firm to act on our behalf in fulfilling all installations, technical support and
maintenance obligations required by the Project.

Yours faithfully, (Name)
Seal

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

Annexure-7: Financial Bid Cover Letter and Format

(To be filled by the bidder and signed in Company Letter Head)

Location:

Date:

To

The General Manager (Admin)
Odisha Computer Application Centre
(Technical Directorate of I.T. Dep't, Govt. of Odisha)
N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar – 751013

Subject: Submission of the financial bid for Selection of Agency for the Implementation, Operations and Maintenance of AI Powered Virtual Classrooms with Digital Assessment.
RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025

Dear Sir/Madam,

We, the undersigned, offer to provide the services in accordance with your Request for Proposal cited above and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of [*Amount in words and figures*] for 5 Years support & update. This amount is inclusive of the applicable taxes.

1. Price and Validity

All the prices mentioned in our RFP are in accordance with the terms as specified in the RFP documents. We declare that our Bid Price is for the entire scope of the work as specified in the appropriate section in the RFP. All the prices and other terms and conditions of this Bid are valid minimum for a period 180 days from the date of opening of the Bid. However, we also confirm that our price bid will remain valid for 1 years from the opening date, if selected.

We understand that the actual payment would be made as per the existing tax rates during the time of payment.

2. Unit Rates

We have indicated in the relevant forms enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to / decrease from the scope of work under the contract.

3. Qualifying Data

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our bid, we agree to furnish the same in time to your satisfaction.

4. Bid Price

We declare that our Bid Price is for the entire scope of the work as specified in the RFP. These prices are indicated at Price Bid attached with our bid as part of the Bid.

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

We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

We understand that our bid is binding on us and that you are not bound to accept a bid you receive.

Thanking you,

Yours sincerely,

Authorized Signature:

Name and Title of Signatory: Name of Firm:

Address:

Annexure-8: Financial Capabilities

(To be filled by the Bidder)

Bidder should provide financial capability details for the latest three financial years. (2022-23, 2023-24, 2024-25)

Turnover (Rs. In Crores)		
2022-23	**2023-24**	**2024-25**
Net worth (Rs. In Crore)		
2022-23	**2023-24**	**2024-25**

Name of the Bidder: ....
Authorized Signatory: ....
Signature:

Seal:

Date:

Place:

Annexure-9: Self-Declaration

(Non-blacklisted in company Letter Head)

To
The General Manager (Admin)
Odisha Computer Application Centre
(Technical Directorate of I.T. Dept., Govt. of Odisha)
N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar - 751013

Sir
In response to the RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025, for RFP titled "Selection of Agency for the Implementation, Operations, and Maintenance of AI Powered Virtual Classrooms with Digital Assessment", as an owner/ partner/ Director of (organization name) _____I/We hereby declare that presently our Company/ firm is not under declaration of ineligible for corrupt & fraudulent practices, blacklisted either indefinitely or for a particular period of time, by any State/ Central government/PSU.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

Thanking you,
Name of the Bidder: ....
Authorized Signatory: ....
Signature: Seal:
Date: Place:

Annexure-10: Project Citation Format

(To be filled by the Bidder)

Relevant IT Project Experience	
General Information	
Name of the project	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the project	
Scope of services	
Other Details	
Total cost of the project	
Duration of the project (no. of months, start date, completion date, current status)	

Name of the Bidder: ....

Authorized Signatory: ....

Signature: Seal:

Date: Place:

Annexure-11: Detailed Bill of Material and Technical Specifications

Sl.No	BOM for Studio Description	Quantity
A. Main Studio Setup (4 Nos)	
1	Digital Video Camera	2
2	Video Switcher	1
3	Audio mixer	1
4	Camera Tripod	2
5	Teleprompter 32 inch with stand	1
6	Microphone: Lapel	2
7	Wired Mic with Table Mic Stand	2
8	Audio Monitor	1
9	Studio Communication Intercom System	1
10	Multi-touch Interactive Panel with Laptop	1
11	65 inches Professional Display	2
12	Interactive Panel 85 inches	1
13	Transmission Server	2
14	Laptop with HDMI output	1
15	Preview Setup-Laptop with Application Software	1
16	LED Lights with ceiling mount movable Grid and mounting clamps	6
17	Video light	2
18	Editing Setup	1
19	Furniture	1
20	Earthing+ Cabling & Installation + Integration +Testing	1
21	Accessories for integration	1
22	Acoustic, Fabric above Acoustics, Green Screen (Chromakey) with Air Conditioning	1
23	Recording Server	1
24	UPS (10KVA) for Main studio	1
25	High-End Studio Headphone	3
26	Ceiling Mount Camera Holder Kit	1
27	TV Stand Trolley (86" & 65")	2
28	AI Server for Analytics & Data Processing	1
29	ATS Switch	1

SI.No	BOM for Studio Description	Quantity
	B. Regional Studio Setup (8 Nos)	
1	Digital Video Camera	1
2	Camera Tripod	1
3	Microphone: Lapel	1
4	Audio Monitor	1
5	Teleprompter 32 inches with stand	1
6	Studio Communication Intercom System	1
7	Multi-touch Interactive Panel with Laptop	1
8	65 inches Professional Display	1
9	Transmission Server	2
10	Laptop with HDMI output	1
11	Preview Setup with Application Software	1
12	LED Lights with ceiling mount movable Grid and mounting clamps	2
13	Furniture	1
14	Installation and Integration	1
15	Accessories for integration, Electrical fitting, Earthing	1
16	Acoustic and Sound proofing with Air Conditioning	1
17	UPS (6KVA)	1
18	ATS Switch	1
19	High-End Studio Headphone	2

Sl. No	BOM for Virtual Classroom	Sl. No
C. AI Powered Virtual Classroom with Digital Assessment
1	Classroom AI Server	1
2	75" Touch Screen IFPD	1
3	Virtual Classroom Application Software	1
4	HD Camera	1
5	Mic System	1
6	Student Digital Assessment Sets (50 tools + 1 receiver)	1
7	e-Podium	1
8	Wi-Fi router with Network accessories	1
9	1 KVA UPS with 60 minutes backup	1
10	Electrical fitting, Earthing	1
11	Transportation, Installation, Integration and Testing	1

Detailed Specifications

A. Main Studio Setup

S.No.	Technical specification of each line items as per scope of work	
	Digital Video Camera	
1	Parameter	Specification
	Sensor Type	1/2-type (7.6 mm x 4.0 mm) Exmor R 3CMOS sensor / Super 35 high-resolution 2/3 inches sensor
	Max Recording Resolution	4K UHD up to 60p / 6K
	Frame Rates	24p–60p
	Lens System	Fixed professional zoom lens / Interchangeable lens mount system
	Lens Mount Type	Integrated ENG zoom / Broadcast B4 mount with optional adapters
	Optical Zoom	16x optical zoom / Depends on attached lens
	ND Filters	Electronic ND / Optical ND filter wheel
	Color Science / Image Engine	Advanced broadcast processing + LUT / Gen 5 color science + 3D LUT
	ISO / Gain Range	Broadcast gain range / ISO100–25,600 (native 400)
	Recording Formats	XAVC, MPEG HD, MXF / RAW, ProRes, H.264/265
	Recording Media	CFexpress A + SD / CFast 2.0, SD, USB-C
	Audio Inputs	Dual XLR
	Video Outputs	SDI + HDMI / 12G-SDI multi-rate
	Streaming Capability	Network/5G/Wi-Fi streaming / SRT/RTMP via USB-C/Ethernet
	Power Options	NP-style batteries + DC / 12V broadcast batteries + DC
	Body Form Factor	Handheld ENG / Shoulder-mount modular
	Approx Weight Class	~2.6–3 kg / Higher studio-weight class
	Monitoring / Display	LCD + EVF / LCD + studio VF
	Special Features	AI autofocus + content signature / RAW modes + studio/film modes
2	**Video Switcher**	
	Video Inputs	8 SDI
	Video Outputs	8 channel SDI Rates: 270Mb, 1.5G, 3G.
	HD Video Standards	720p50, 720p59.94, 720p60 1080i50, 1080i59.94, 1080i60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60
	Upstream Keyers	4 with Chroma/Linear/Luma key
	Number of Layers	8
	Multi View Monitoring:	·1 x multi view via SDI and HDMI configurable to 16, 13, 10, 7 or 4 views. · Monitoring of Program, Preview, Inputs, Media Players, DSKs, SuperSource, Clean Feed with optional labels and audio meters.

3	**Audio mixer**
	- Channels: 12
	- AUX: 3 x Pre/Post or better
	- Subgroups: 2 mono/1 stereo or better
	- Inputs - Mic Preamps: 8 x XLR
	- Phantom Power: Required
	- Fader: 13 x 60mm Throw
	- USB Interface: Required
	- Bands: 3-band
4	**Camera Tripod**
	- Camera Plate Features: Sliding Balance Plate
	- Base Mount: 75 mm
	- Drag Control: Fixed
	- Counter Balance: Fixed
	- Head Mount Type: 75 mm Bowl
	- Materials: Aluminium
	- Pay Load: 12Kg or better
5	**Teleprompter 32 inch with stand**
	- Size: 32" HD monitor
	- Reflector: Anti-glare High Efficiency Reflector
	- Adjustment: Angle adjustment for reflector
	- Mount: Adjustable balanced Floor Stand
6	**Microphone: Lapel**
	- System: Dual channel wireless microphone system2.4GHz digital transmission
	- Encryption: 128-bit encryption
	- Output 3.5mm TRS analogy output, USB-C and iOS compatible digital audio output Ability to switch between mono or stereo output
	- Battery: In-built rechargeable lithium-ion battery – up to 5 hours' battery life
	- Range: 200m transmission range
7	**Wired Mic with Table Mic Stand**
	- Connectors: 3-pin XLR-3
	- Frequency Range: Dynamic cardioid microphone
	- Polar Pattern: Transparent high-end and warm but defined lower mids
	- Housing: Extremely rugged metal housing
	- Phantom Power: Yes
8	**Audio Monitor**
	- Type: 2 Way Active Studio Monitor
	- Frequency Range: 50 Hz-18 kHz or better
	- Max Peak SPL: 100 dB or better
	- LF Driver Size: Min. 5" to Max. 6.6"
	- HF Driver Size: 1" or better
	- Low-Frequency Amplifier Power: 40 watts or better
	- High-Frequency Amplifier Power: 40 watts or better
	- Total Power Output: 80 Watt or Better
	- Input Types: 1 x XLR, 1 x TRS Balanced
	- AC Input Voltage: 100-240 VAC +/- 10% 50/60 Hz
9	**Studio Communication Intercom System**
	- Users – minimum 4 wireless headsets
	- Connection Type – wireless intercom
	- Controls Volume, mute, and call button
	- Audio Quality –Clear, Low-latency digital audio
	- Headsets – Over-ear /single-ear
	- Battery Backup – 1-2 hours

	Multi-touch Interactive Panel with laptop

Multi-touch Interactive Panel
- Min 13.0-inch display
- Resolution support up to 1920 x 1080
- HDMI Input
- Stylus Pen
- Color Displays: 16.7M
- Contrast Ratio: 700:1
- Viewing Angle: 168°
- Response time: 25ms or less

Laptop

Technical Details	Description
Processor	i5 Intel Core 13th Gen or Better
Chipset	System on Chip
RAM	One DIMM slot with 16 GB DDR4 3200 MHz and Laptop should support upgradable to 32 GB
Display	14" FHD display or higher, Antiglare
Graphics	Integrated Graphics
Audio	Two built-in stereo speakers with HD audio support; Built-in Dual microphones
Bluetooth	5.0 or higher
Webcam	Inbuilt HD Webcam
Ethernet Controllers	Gigabit Ethernet
Wireless Device	Wireless 802.11 AX + BT 5.0 or higher
Keyboard & Touch Pad Device	Spill-resistant backlit keyboard with multi-gesture touchpad
Security	BIOS password, Inbuilt Fingerprint Reader, Hardware TPM 2.0
Interfaces	RJ-45, Min. 2 Type-A USB 3.0, 1 Type-C USB 3.0, Audio combo port, AC adapter jack, HDMI port
SSD	512GB SSD NVMe or higher
Accessories	3-pin Indian Adapter
Weight	Not exceeding 1.45 KGS including battery
Battery Backup	Minimum 3-cell or higher battery with 41 Whr or higher, 8 hours backup or more
Certifications	CE/UL, FCC, RoHS, Energy Star, Windows, ISO 9001, ISO 14001, ISO 27001, MIL Standard 810H, Compliance with GFR Land Border Clause
Software	MS Office A3 with Authorization Letter
Operating System (OS)	Windows 11 Home SL
Manageability Software/Tool	Pre-installed OEM Manageability Tool/Software
Data Backup/Recovery Tool	Pre-installed Data Backup/Recovery Tool (Factory Preloaded)

The row number "10" appears in the left margin.

	65 inches Professional Display		
	Sl. No	**Parameter**	**Specification**
	1	Diagonal Size	65"or higher Commercial Grade TV
	2	Panel Type	E-LED/Direct LED or better
	3	Resolution	3840*2160 (4K UHD) or better
	4	Dynamic/Native Contrast Ratio	1100:1 or Higher
	5	Viewing Angle(H/V)	178:178
	6	Display Colour	16.7 M or High
	7	Audio	Built in Speakers minimum 20 W or Higher Output
	8	Input Type	HDMI x 3 or more
			HDCP 1.4 / 2.2
			USB (1), RF Port -1
11	9	Duty Cycle	16x7 Hr
	10	Required Features	USB port lock
			OEM should have own Operating System.
			OTT apps (Netflix, Prime, Hotstar etc.,) should not be preloaded with OS.
	11	File Support	Direct viewing of Images and Video from pen drive
	12	External Control	RJ45, Wi-Fi 5, Bluetooth supported
	13	Power Consumption (Typical)	200W or lower
	14	Standby Mode Power	Consumption should be less than 0.5W
	15	Product Safety Certifications	CE, UL/CB, BIS, ROHS/EMC- Class B
	16	Factory Certification	TV OEM should have owned Factory BIS, ISO:9001, ISO:14001. ISO 45001
	17	Make In India	Yes
	18	OEM IDC/ Omedia Ranking	TV OEM must be in top 3 in 2024 sales of TV/Displays sales in India as per IDC/Omedia Report

	85 inches Interactive Panel Display:
	- Panel Size: 85" or more
	- Panel Grade: Professional A- Grade Panel
	- Type/Tech: LED Backlight
	- Aspect Ratio 16:09
	- Native Resolution: 3840*2160 (UHD)
	- Colors: 1.07 Billion (10 bit)
	- Brightness: 350nits
12	- Contrast Ratio: 1200:1
	- Response Time: 8ms
	- Refresh Rate: 60Hz
	- Viewing Angles: H = 178, V = 178 typ.
	TOUCH
	- Type/ Tech: Infra-Red
	- Touch Point: 10 Point Multi Touch
	INPUT
	- HDMI x2

- Touch USB x2	
- Audio x1	
- MIC(Microphone) x1	
- OPS: OPS Slot support 4K@60HZ	

OUTPUT:

- Audio x1

USB

- Type A x2
- SPEAKERS: 10Wx2
- Certifications: ROHS, BIS, FCC, CE

13

(Transmission Server)

- Dual Vector-MPEG-4 codec SD/HD 4:2:0/4:2:2 encoding
- Broad SD/HD format input support
- Audio encoding of up to 32 stereo or 64 mono channels
- Broadcast-quality video content distribution
- IP outputs
- Ultra-low delay mode
- User-friendly web-based control panel
- Fast boot time
- Dual codec (Vector)
- Color space Conversion Hardware based real time
- Vector encoder using custom encryption algorithm
- HD Down Conversion Built-in, high-quality software down converter on playback & capture
- HD Up Conversion Built-in, high-quality software up converter from SD to 720HD or1080HD on input
- Color Space REC 601, REC 709
- Color Precision 8, 10, 12-bit RGB 4:4:4 in all modes
- Video Sampling 8, 10, 12-bit RGB 4:4:4 in all modes
- SDI Video Inputs bidirectional 12-bit SD/HD independently configurable as either Input or Output.
- SDI Video Outputs bidirectional 12-bit SD/HD independently configurable as either Input or Output.
- SD Video Standards 525i59.94 NTSC, 625i50 PA
- Supports Background noise removal and echo cancellation of audio.
- Supports controlling frame rate and resolution
- Supports Multiple Video and audio input.
- Create PIP with multiple video inputs and positioning.
- Supports multiple types of content/documents.
- Support Whiteboard collaboration.
- Supports Whiteboard write/Type.
- Screen sharing support partial/Full (Customizable)
- Streaming content auto-save

14

Laptop with HDMI Output

Technical Details	Description
Processor	i5 Intel Core 13th Gen or Better
Chipset	System on Chip

RAM	One DIMM slot with 16 GB DDR4 3200 MHz and Laptop should support upgradable to 32 GB
Display	14" FHD display or higher, Antiglare
Graphics	Integrated Graphics
Audio	Two built-in stereo speakers with HD audio support; Built-in Dual microphones
Bluetooth	5.0 or higher
Webcam	Inbuilt HD Webcam
Ethernet Controllers	Gigabit Ethernet
Wireless Device	Wireless 802.11 AX + BT 5.0 or higher
Keyboard & Touch Pad Device	Spill-resistant backlit keyboard with multi-gesture touchpad
Security	BIOS password, Inbuilt Fingerprint Reader, Hardware TPM 2.0
Interfaces	RJ-45, Min. 2 Type-A USB 3.0, 1 Type-C USB 3.0, Audio combo port, AC adapter jack, HDMI port
SSD	512GB SSD NVMe or higher
Accessories	3-pin Indian Adapter
Weight	Not exceeding 1.45 KGS including battery
Battery Backup	Minimum 3-cell or higher battery with 41 Whr or higher, 8 hours backup or more
Certifications	CE/UL, FCC, RoHS, Energy Star, Windows, ISO 9001, ISO 14001, ISO 27001, MIL Standard 810H, Compliance with GFR Land Border Clause
Software	MS Office A3 with Authorization Letter
Operating System (OS)	Windows 11 Home SL
Manageability Software/Tool	Pre-installed OEM Manageability Tool/Software
Data Backup/Recovery Tool	Pre-installed Data Backup/Recovery Tool (Factory Preloaded)

	Preview Setup with Application Software
15	**Classroom AI Server:** (Refer the Classroom Specification)
	Interactive Flat Panel: (Refer the Classroom Specification)
	Student Assessment Devices: (Refer the Classroom Specification)
	HD Camera (Refer the Classroom Specification)
	Single Mic System (Refer the Classroom Specification)
16	**LED Studio Lights with ceiling mount movable Grid and mounting clamps/hooks**
	- Color temperature: 5600 K/3200K
	- Dimmable output from 100% to 10%
	- Power consumption: Less than 180W.
	- Ceiling mounts facility
	- AC Adaptor
	- Operated from nominal 230 V/50 Hz Ac Supply
17	**Video Light**
	- Studio Grade LED stand lights with soft box, minimum 190 watt
18	**Editing Machine**
	- Processor: 1 x Intel Ultra 7 Series Processor
	- RAM: 64GB DDR5 RAM

	- Storage: 1x 512 GB SSD, 2 x 2TB SATA Enterprise
	- Network: RJ45 Gigabit Ethernet LAN ports
	- Graphics Card: 12GB DDR6 Dedicated Graphics card
	- OS: Windows 11
	- Capture Cards: Capture card with SDI/HDMI input
	- Supports 4k, HD and SD Video formats
	- Live Stream and Recording
	- Supports Multiple Camera inputs, Video files
	- Peripherals: 2x 24" LED Monitor, Speaker, USB Keyboard & Optical Scroll Mouse
19	**Furniture requirement**
	Technical Table, Studio Room Table, Executive Chairs , Wooden Almira
	Earthling + Cabling & Installation + Integration + Testing
	1. Cabling
	It is required to set-up the facility for HD/SD operations; therefore, all the cabling should seamlessly support required operations.
	2. Installation Material
20	All installation materials including, equipment racks, power cables, interconnection cables, connectors and other accessories (including nuts, bolts, screws etc.) required for installation of the complete system shall be quoted
	3. System Completeness
	Completeness of the system will be responsibility of the Bidder. Any hardware and/or software including passive and active devices required for completeness of the technical workflow shall be quoted. Bidder shall be responsible for technical and operational completeness of the entire system.
	4. Workflow Diagram
	The Bidder has to provide schematic diagram of the technical workflow to ensure the workability of the offered solution in all respects.
	5. Any Additional Items for Complete the workflow
	Bidder must mention any additional items required to complete the workflow with proper justification.
21	**Accessories for integration**
	Accessories like required convertors, cables, audio/video connectors, adopters etc.
	Acoustic, Fabric above Acoustics with Air Condition, Green Screen Provision & fixing of Pyramid acoustic panels for the walls inside the studio, Required Partitioning of room, Closing of windows. Green Screen on one side wall.
	1. Interior
	Provision & fixing of Pyramid acoustic panels for the walls inside the studio.
	2. Carpet
	Providing and Fixing Wall to Wall
22	**3. Door Type and Size**
	- DGU Door of 3Ft X 7Ft with provisioning and fixing panel with vision panel between Live room and control room.
	- Provision & fixing of frame and sound proof casement door with multipoint locking system and both sides handle with locking arrangement with vision panel.
	4. Window
	- Provisioning and fixing sound proof window hermitically sealed with Glass (Size 3' X 6')
	5. Air-Conditioning (As required)
23	**Recording Server**
	- Processor-Intel Core Ultra 7

- RAM-Minimum 16GB	
- SSD-256 GB	
- Storage-Minimum 1 TB HDD	
- Graphics-Minimum 4GB	
- Display -24" Monitor	
- Inputs -Keyboard and Mouse	
- Outputs-HDMI	
- Operation System –Windows 11	
- Playback card- 4K SDI/HDMI Video Monitoring Card	

UPS 10 KVA

CAPACITY	10KVA	
DC VOLTAGE	216VDC and can be adjustable to 192VDC and 240VDC	
PHASE	1 PHASE IN 1 PHASE OUT	
Input		
NOMINAL VOLTAGE	208/220/230/240 VAC	
VOLTAGE RANGE	110-300VAC + 3 % @ 50% Load / 176-300VAC + 3 %@ 100% Load	
FREQUENCY RANGE	46-54 Hz	
POWER FACTOR	$\geq$ 0.99 @ 100% Load	
TOTAL HARMONIC DISTORTION THD(i)	<4% @100% Load, <6% @50% Load	
Output		
NOMINAL VOLTAGE	208/220/230/240 VAC	
AC VOLTAGE REGULATION	+1% (Battery Mode)	
FREQUENCY RANGE	46-54Hz (Synchronized Range)/ 50 Hz + 0.1 Hz (Battery Mode)	
CURRENT CREST RATIO	3:1 (Max)	
HARMONIC DISTORTION	$\leq$ 1% THD (Linear Load); $\leq$ 4% THD (Non-Linear Load)	
OVERLOAD CAPABILITY	AC Mode: 100%-110%: 10min; 110%-130%: 1min; >130%:1sec Battery Mode:100%-110%: 30sec; 110%-130%:10sec; >130%: 1sec	
Transfer Time		
AC MODE TO BATTERY MODE	Zero	
INVERTER TO BYPASS	Zero	
WAVEFORM (BATTERY MODE)	Pure Sine Wave	
EFFICIENCY	AC Mode: 94% / BATTERY Mode: 91%	
Battery		
BATTERY TYPE	VRLA / SMF	
NUMBER OF BATTERIES	18 Nos. can be adjustable 16 and 20 Nos batteries	
CHARGING CURRENT (Max.)	4.0A	
Battery capacity	9072VAH	
Environment		
OPERATING HUMIDITY / TEMP.	20-90%RH and non-condensing / 0-40°C	

Note: The row number "24" appears in the left margin spanning this section.

	NOISE LEVEL	Less than 55dB @ 1 Meter
	LCD INDICATION	UPS Status, Load Level, Battery Level, Input/Output Voltage, Input/Output Freq. / Discharge Timer / Fault Status
	Management	
	Communication Port	SMART RS-232 OR USB, Port for SNMP available
		Power Management from SNMP Manager and Web Browser
	Degree of Protection	IP-20
	Certification	
	SAFETY	BIS
	Certification	ISO 9001, ISO 14001, ISO 14025, ISO/IEC 20000-1, ISO 45001, ITL9000, Certificate of Compliance CE, ROHS, FCC and E-waste Certificate from CPCB
	Additional Feature	
	• DSP technology guarantees High Performance	
	• Active Input Power Factor correction 0.99	
	• Emergency Power Off function (EPO)	
	• ECO mode for Energy Saving	
	• Maintenance Bypass & Static Bypass Available	
	• Inbuilt Surge Protection with OVCD Available	
	• Generator Compatible	
25	**High-End Studio Headphone**	
	- Type – Over-ear Studio Headphone	
	- Design – Closed-back / Semi-open	
	- Frequency Response – Wide Range	
	- Impedance – Studio Compatible	
	- Sound Quality – Neutral and Clear	
	- Cable – Detachable	
	- Connector – 3.5 mm with 6.3 mm adapter	
	- Use Case – Recording, Mixing, Monitoring	
26	**Ceiling Mount Camera Holder Kit**	
	- Product Type – Ceiling-Mount Camera Holder	
	- Mount Type – Fixed / Adjustable Ceiling Bracket	
	- Material – Metal / Aluminum	
	- Camera Compatibility – DSLR / Compact / Action Camera	
	- Adjustability – Height & Angle Adjustable	
	- Load Capacity – Supports Studio Cameras	
	- Installation – Ceiling Screw Mount	
	- Use Case – Top-View Recording, Studio Overhead Shots	
27	**TV Stand Trolley (86" & 65")**	
	- Type – Heavy-Duty TV Stand Trolley	
	- Display Support – Up to 85-inch IFP & 65-inch Display	
	- VESA Compatibility – Universal VESA Mount	
	- Material – Metal / Steel Frame	

	- Height Adjustment – Adjustable Mounting Height
	- Mobility – Lockable Caster Wheels
	- Shelf – Optional Equipment Shelf
	- Load Capacity – Supports Heavy IFP Panels
	- Use Case – Classrooms, Conference Rooms, Studios
28	**AI Server for Analytics & Data Processing**
	− Edge AI Server
	− Processor Form Factor: Ball Grid Array (BGA) / System on module (SOM)
	− BGA/SOM Make - Intel / Nvidia / AMD
	− MEMORY: 5th Gen 16 GB DDR OR Higher (Standard/LP)
	− CPU: 64-bit multi-core processor (8-core or higher; 2.0 Ghz or Higher)
	− AI Peak performance: 120 AI Tera Operations per second
	− Storage: 1TB NVMe M.2 SSD
	− Display: 1x DisplayPort (DP 1.2 or higher) or HDMI 2.1
	− USB: 4x USB 3.0 or 3.2 (Type-A or Type-C)
	− Networking: 1x Gigabit Ethernet (1GbE)
	− Power consumption: 50 watt or lower
29	**ATS SWITCH** - Current Rating – 32A - Voltage – 230V/415V AC - Transfer Type – Automatic - Sources – UPS power + Generator/Backup - Transfer Time – Fast switching - Indicators – Main, Backup, Load - Manual Override – Yes - Enclosure – Metal box, wall-mount

B. Regional Studio Setup

Sl.No.	Technical specification of each line item as per scope of work
	Digital Video Camera
	Parameter — Specification
	Sensor Type — 1/2-type (7.6 mm x 4.0 mm) Exmor R 3CMOS sensor / Super 35 high-resolution 2/3 inches sensor
	Max Recording Resolution — 4K UHD up to 60p / 6K
	Frame Rates — 24p–60p
	Lens System — Fixed professional zoom lens / Interchangeable lens mount system
1	**Lens Mount Type** — Integrated ENG zoom / Broadcast B4 mount with optional adapters
	Optical Zoom — 16× optical zoom / Depends on attached lens
	ND Filters — Electronic ND / Optical ND filter wheel
	Color Science / Image Engine — Advanced broadcast processing + LUT / Gen 5 color science + 3D LUT
	ISO / Gain Range — Broadcast gain range / ISO100–25,600 (native 400)
	Recording Formats — XAVC, MPEG HD, MXF / RAW, ProRes, H.264/265
	Recording Media — CFexpress A + SD / CFast 2.0, SD, USB-C
	Audio Inputs — Dual XLR
	Video Outputs — SDI + HDMI / 12G-SDI multi-rate
	Streaming Capability — Network/5G/Wi-Fi streaming / SRT/RTMP via USB-C/Ethernet
	Power Options — NP-style batteries + DC / 12V broadcast batteries + DC
	Body Form Factor — Handheld ENG / Shoulder-mount modular
	Approx Weight Class — ~2.6–3 kg / Higher studio-weight class
	Monitoring / Display — LCD + EVF / LCD + studio VF
	Special Features — AI autofocus + content signature / RAW modes + studio/film modes

Sl.No.	
2	**Camera Tripod**
	– Camera Plate Features: Sliding Balance Plate
	– Base Mount: 75 mm
	– Drag Control: Fixed
	– Counter Balance: Fixed
	– Head Mount Type: 75 mm Bowl
	– Materials: Aluminium
	– Pay Load: 12KG or Better

Sl.No.	
3	**Microphone: Lapel**
	– System: Dual channel wireless microphone system2.4GHz digital transmission
	– Encryption: 128-bit encryption
	– Output 3.5mm TRS analogy output, USB-C and iOS compatible digital audio output Ability to switch between mono or stereo output
	– Battery: In-built rechargeable lithium-ion battery – up to 5 hours' battery life
	– Range: 200m transmission range

Sl.No.	
4	**Audio Monitor**

	– Type: 2 Way Active Studio Monitor
	– Frequency Range: 50 Hz-18 kHz or better
	– Max Peak SPL: 100 dB or better
	– LF Driver Size: Min. 5" to Max. 6.6"
	– HF Driver Size: 1" or better
	– Low-Frequency Amplifier Power: 40 watts or better
	– High-Frequency Amplifier Power: 40 watts or better
	– Total Power Output: 80 Watt or Better
	– Input Types: 1 x XLR, 1 x TRS Balanced
	– AC Input Voltage: 100-240 VAC +/- 10% 50/60 Hz
5	**Teleprompter 32 inches with stand**
	– Size: 32" HD monitor
	– Reflector: Anti-glare High Efficiency Reflector
	– Adjustment: Angle adjustment for reflector
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6	**Studio Communication Intercom System**
	– Users – minimum 4 wireless headsets
	– Connection Type – wireless intercom
	– Controls Volume, mute, and call button
	– Audio Quality –Clear, Low-latency digital audio
	– Headsets – Over-ear /single-ear
	– Battery Backup – 1-2 hours
7	**Multi-touch Interactive Panel with laptop**
	– Min 13.0-inch display
	– Resolution support up to 1920 x 1080
	– HDMI Input
	– Stylus Pen
	– Color Displays: 16.7M
	– Contrast Ratio: 700:1
	– Viewing Angle: 168°
	– Response time: 30 ms or less

Laptop Specifications

Technical Details	Description
Processor	i5 Intel Core 13th Gen or Better
Chipset	System on Chip
RAM	One DIMM slot with 16 GB DDR4 3200 MHz and Laptop should support upgradable to 32 GB
Display	14" FHD display or higher, Antiglare
Graphics	Integrated Graphics

	Audio	Two built-in stereo speakers with HD audio support; Built-in Dual microphones
	Bluetooth	5.0 or higher
	Webcam	Inbuilt HD Webcam
	Ethernet Controllers	Gigabit Ethernet
	Wireless Device	Wireless 802.11 AX + BT 5.0 or higher
	Keyboard & Touch Pad Device	Spill-resistant backlit keyboard with multi-gesture touchpad
	Security	BIOS password, Inbuilt Fingerprint Reader, Hardware TPM 2.0
	Interfaces	RJ-45, Min. 2 Type-A USB 3.0, 1 Type-C USB 3.0, Audio combo port, AC adapter jack, HDMI port
	SSD	512GB SSD NVMe or higher
	Accessories	3-pin Indian Adapter
	Weight	Not exceeding 1.45 KGS including battery
	Battery Backup	Minimum 3-cell or higher battery with 41 Whr or higher, 8 hours backup or more
	Certifications	CE/UL, FCC, RoHS, Energy Star, Windows, ISO 9001, ISO 14001, ISO 27001, MIL Standard 810H, Compliance with GFR Land Border Clause
	Software	MS Office A3 with Authorization Letter
	Operating System (OS)	Windows 11 Home SL
	Manageability Software/Tool	Pre-installed OEM Manageability Tool/Software
	Data Backup/Recovery Tool	Pre-installed Data Backup/Recovery Tool (Factory Preloaded)

65 inches Professional Display

8	1	Diagonal Size	65"or higher Commercial Grade TV
	2	Panel Type	E-LED/Direct LED or better
	3	Resolution	3840*2160 (4K UHD) or better
	4	Dynamic/Native Contrast Ratio	1100:1 or Higher
	5	Viewing Angle(H/V)	178:178
	6	Display Colour	16.7 M or High
	7	Audio	Built in Speakers minimum 20 W or Higher Output
	8	Input Type	HDMI x 3 or more
			HDCP 1.4 / 2.2
			USB (1), RF Port -1
	9	Duty Cycle	16x7 Hr
	10	Required Features	USB port lock
			OEM should have own Operating System.
			OTT apps (Netflix, Prime, Hotstar etc.,) should not be preloaded with OS.

	11	File Support	Direct viewing of Images and Video from pen drive
	12	External Control	RJ45, Wi-Fi 5, Bluetooth supported
	13	Power Consumption (Typical)	200W or lower
	14	Standby Mode Power	Consumption should be less than 0.5W
	15	Product Safety Certifications	CE, UL/CB, BIS, ROHS/EMC- Class B
	16	Factory Certification	TV OEM should have owned Factory BIS, ISO:9001, ISO:14001. ISO 45001
	17	Make In India	Yes
	18	OEM IDC/ Omedia Ranking	TV OEM must be in top 3 in 2024 sales of TV/Displays sales in India as per IDC/Omedia Report

9	**Transmission Server**
	– Dual Vector-MPEG-4 codec SD/HD 4:2:0/4:2:2 encoding
	– Broad SD/HD format input support
	– Audio encoding of up to 32 stereo or 64 mono channels
	– Broadcast-quality video content distribution
	– IP outputs
	– Ultra-low delay mode
	– User-friendly web-based control panel
	– Fast boot time
	– Dual codec (Vector)
	– Color space Conversion Hardware based real time
	– Vector encoder using custom encryption algorithm
	– HD Down Conversion Built-in, high-quality software down converter on playback & capture
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	– Color Space REC 601, REC 709
	– Color Precision 8, 10, 12-bit RGB 4:4:4 in all modes
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	– SDI Video Inputs bidirectional 12-bit SD/HD independently configurable as either Input or Output.
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	– SD Video Standards 525i59.94 NTSC, 625i50 PA
	– Supports Background noise removal and echo cancellation of audio.
	– Supports controlling frame rate and resolution
	– Supports Multiple Video and audio input.
	– Create PIP with multiple video inputs and positioning.
	– Supports multiple types of content/documents.
	– Support Whiteboard collaboration.
	– Supports Whiteboard write/Type.
	– Screen sharing support partial/Full (Customizable)
	– Streaming content auto-save
10	**Laptop with HDMI Output**

Technical Details	Description
Processor	i5 Intel Core 13th Gen or Better
Chipset	System on Chip
RAM	One DIMM slot with 16 GB DDR4 3200 MHz and Laptop should support upgradable to 32 GB
Display	14" FHD display or higher, Antiglare
Graphics	Integrated Graphics
Audio	Two built-in stereo speakers with HD audio support; Built-in Dual microphones
Bluetooth	5.0 or higher
Webcam	Inbuilt HD Webcam
Ethernet Controllers	Gigabit Ethernet
Wireless Device	Wireless 802.11 AX + BT 5.0 or higher
Keyboard & Touch Pad Device	Spill-resistant backlit keyboard with multi-gesture touchpad
Security	BIOS password, Inbuilt Fingerprint Reader, Hardware TPM 2.0
Interfaces	RJ-45, Min. 2 Type-A USB 3.0, 1 Type-C USB 3.0, Audio combo port, AC adapter jack, HDMI port
SSD	512GB SSD NVMe or higher
Accessories	3-pin Indian Adapter
Weight	Not exceeding 1.45 KGS including battery
Battery Backup	Minimum 3-cell or higher battery with 41 Whr or higher, 8 hours backup or more
Certifications	CE/UL, FCC, RoHS, Energy Star, Windows, ISO 9001, ISO 14001, ISO 27001, MIL Standard 810H, Compliance with GFR LandBoarder Clause
Software	MS Office A3 with Authorization Letter
Operating System (OS)	Windows 11 Home SL
Manageability Software/Tool	Pre-installed OEM Manageability Tool/Software
Data Backup/Recovery Tool	Pre-installed Data Backup/Recovery Tool (Factory Preloaded)

11	**Preview Setup with Application Software** **Classroom AI Server** (Refer the Classroom Specification) **Interactive Flat Panel** (Refer the Classroom Specification) **Student Assessment Devices** (Refer the Classroom Specification) **HD Camera** (Refer the Classroom Specification) **Single Mic System** (Refer the Classroom Specification)
12	**LED Studio Lights with ceiling mount movable Grid and mounting clamps/hooks** – Color temperature: 5600 K/3200K – Dimmable output from 100% to 10% – Power consumption: Less than 80W – Ceiling mounts facility – AC Adaptor, Barn door and filters – Operated from nominal 230 V/50 Hz Ac Supply
13	**Furniture required** Technical Table, Studio Room Table, Executive Chairs, Wooden Almira

14	**Installation and Integration**		
	Earthling + Cabling & Installation + Integration + Testing Cabling		
	It is required to set-up the facility for HD/SD operations, therefore all the cabling should seamlessly support required operations.		
	Installation Material		
	All installation materials including, equipment racks, power cables, interconnection cables, connectors and other accessories (including nuts, bolts, screws etc.) required for installation of the complete system shall be quoted		
	System Completeness		
	Completeness of the system will be responsibility of the Bidder. Any hardware and/or software including passive and active devices required for completeness of the technical workflow shall be quoted. Bidder shall be responsible for technical and operational completeness of the entire system.		
	Workflow Diagram		
	The Bidder has to provide schematic diagram of the technical workflow to ensure the workability of the offered solution in all respects.		
	Any Additional Items for Complete the workflow		
	Bidder must mention any additional items required to complete the workflow with proper justification		
15	**Accessories for integration**		
	Accessories like required convertors, cables, audio/video connectors, adopters etc.		
16	Acoustic and Sound proofing with Air Conditioning		

		UPS (6 KVA)	
17		CAPACITY	6KVA
		DC VOLTAGE	216VDC Can be adjustable to 192VDC and 240VDC
		PHASE	1 PHASE IN 1 PHASE OUT
		Input	
		NOMINAL VOLTAGE	208/220/230/240 VAC
		VOLTAGE RANGE	110-300VAC $\pm$ 3 % @ 50% Load / 176-300VAC $\pm$ 3 %@ 100% Load
		FREQUENCY RANGE	46-54 Hz
		POWER FACTOR	$\geq$ 0.99@100% Load
		TOTAL HARMONIC DISTORTION THD(i)	<4% @100% Load, <6% @50% Load
		Output	
		NOMINAL VOLTAGE	208/220/230/240 VAC
		AC VOLTAGE REGULATION	$\pm$1% (Battery Mode)
		FREQUENCY RANGE	46-54Hz (Synchronized Range) / 50 Hz + 0.1 Hz (Battery Mode)
		CURRENT CREST RATIO	3:1 (Max)
		HARMONIC DISTORTION	$\leq$ 1% THD (Linear Load); $\leq$ 4% THD (Non-Linear Load)
		OVERLOAD CAPABILITY	AC Mode: 100%-110%: 10min; 110%-130%: 1min; >130%: 1sec Battery Mode: 100%-110%: 30sec; 110%-130%: 10sec; >130%: 1sec
		Transfer Time	
		AC MODE TO BATTERY MODE	Zero
		INVERTER TO BYPASS	Zero
		WAVEFORM (BATTERY MODE)	Pure Sine Wave
		EFFICIENCY	AC Mode: 94% / BATTERY Mode: 91%
		Battery	
		BATTERY TYPE	VRLA / SMF
		NUMBER OF BATTERIES	18 Nos. can be adjustable to 16 and 20 Nos batteries

CHARGING CURRENT (Max.)	4.0A
Battery Capacity	9072 VAH
Environment	
OPERATING HUMIDITY / TEMP.	20-90%RH and Non-Condersing / 0-40°C
NOISE LEVEL	Less than 55dB @ 1 Meter
LCD INDICATION	UPS Status, Load Level, Battery Level, Input/Output Voltage, Input/Output Freq. / Discharge Timer / Fault Status
Management	
Communication Port	SMART RS-232 OR USB, Port for SNMP available
	Power Management from SNMP Manager and Web Browser
Degree of Protection	IP-20
Certification	
SAFETY	BIS
Certification	ISO 9001, ISO 14001, ISO 14025, ISO/IEC 20000-1, ISO 45001, ITL9000, Certificate of Compliance CE, ROHS, FCC and E-waste Certificate from CPCB

Additional Feature

- DSP technology guarantees High Performance
- Active Input Power Factor correction 0.99
- Emergency Power Off function (EPO)
- ECO mode for Energy Saving
- Maintenance Bypass & Static Bypass Available
- Inbuilt Surge Protection with OVCD Available
- Generator Compatible

18	**ATS Switch** - Current Rating – 32A - Voltage – 230V/415V AC - Transfer Type – Automatic - Sources – UPS power + Generator/Backup - Transfer Time – Fast switching - Indicators – Main, Backup, Load - Manual Override – Yes - Enclosure – Metal box, wall-mount
19	**High-End Studio Headphone** - Type – Over-ear Studio Headphone - Design – Closed-back / Semi-open - Frequency Response – Wide Range - Impedance – Studio Compatible - Sound Quality – Neutral and Clear - Cable – Detachable

	• Connector – 3.5 mm with 6.3 mm adapter • Use Case – Recording, Mixing, Monitoring

C.AI Powered Virtual Classroom with Digital assessment

Sl. No.	Description
1	**Classroom AI Server**
	− Edge AI Classroom Server
	− Processor Form Factor: Ball Grid Array (BGA) / System on module(SOM)
	− BGA/SOM Make - Intel / Nvidia / AMD
	− MEMORY: 5th Gen 16 GB DDR OR Higher (Standard/LP)
	− CPU: 64-bit multi-core processor (8-core or higher; 2.0 Ghz or Higher)
	− AI Peak performance: 120 AI Tera Operations per second
	− Storage: 1TB NVMe M.2 SSD
	− Display: 1x DisplayPort (DP 1.2 or higher) or HDMI 2.1
	− USB: 4x USB 3.0 or 3.2 (Type-A or Type-C)
	− Networking: 1x Gigabit Ethernet (1GbE)
	− Power consumption: 50 watt or lower
	− OS Support: Ubuntu server 22.04 or higher with optimizations
2	**Interactive Flat Panel**

Parameter	Description
Size	75 inch or Higher
Resolution	3840 X 2160p(UHD) or more
Display Type	Touch interactive Display
Brightness	400 nits with TUV Rinland/OEM own Lab Certified Screen
Duty Cycle	16x7 Hr Grade
Response Time G to G	8 MS
Life Time	30000 Hrs or more
SOC	Minimum Quad Core
System Memory	Minimum 8 GB
Storage	Minimum 64 GB Storage
Operating System	Android 13 os with EDLA Certified
Touch Technology	IR
Touch Capacity	Min 40 Points
Haze	25% Or Higher
Multi Touch On/Off	Yes
Video Input	Minimum - HDMI 2 (Rear 2, Front 1). USB C (Front). OPS
Audio Input USB	1 (Stereo, Mini Jack) 3 (2.0 x1,3.0x2) or Higher
Video Output	HDMI Out
Audio	1 (Stereo Mini lack)
Touch Out	Front 1

	External Control	R232C in/out, RJ45 (In/Out)	
	Wireless Connectivity	Bluetooth 5.0 ,WiFi	
	Audio Speaker (Inbuilt)	Bulit in Speaker (15W X 2CH)	
	Accessory	Stylus	
	Eye Care	Anti Glare screen	
	Mandatory Certifications	BIS,CE, EMC/FCC, Energy Star, ISO 9001:2015, ISO 14001. ISO45001.	
	Installation & Wall Mount	Installation & Wall mount Provided by OEM directly	
	Compliance On OEM Letterhead	Yes Specification Compliance On OEM letterhead only	
	Other Conditions	OEM should have its own R&D center and manufacturing facility in India, Minimum 10 active Service centers in Odisha from last 5 years, centralized call center for service 24X7 call logging, OEM must have experience of selling the IFP in Govt institution in India from past 6 years with documentary proof - Govt customer order with completion certificate.	
	Supporting Accessories	Android BOX Specification: CPU: Quad Core or Better RAM: 2GB RAM or Better ROM: 16 GB or higher External storage: Micro SD up to 256 GB Supported OS: Android 11 or better OEM should have supplied minimum 10,000 BIS certified Units for School Education Department in any state Government Department for Digital Classroom. OEM should be from India and have to comply with GFR 144 (xi) Land Boarder Clause	

4 **Virtual Classroom Software**
As per the RFP needs

5 **HD Camera**

SI	Parameters	Generic Technical Specification
1	Device type	Plug & play web camera
2	Connectivity Technology	Wired
3	Resolution	Minimum 2MP and shall support upto 1080P video capture at minimum 30 fps
4	Image sensor	CMOS
5	Features	Clear and richer picture with 5G/>=55-degree wide angle Lens, brightness controller, digital zoom, Integrated Privacy shutter
6	OS Support	Windows, Mac and Android
7	Video input	Color

	8	Audio	Built-in mics with auto noise reduction
	9	Interfaces	USB 2.0 and above connector
	10	Cable details	USB cable min 1 meter
	11	Model specific Certification	BIS
	12	Compliance	ROHS, ISO 9001

6 **MIC System**
- RF Output Power:10Mw or better, Modulation Mode: FM
- Microphones:1 microphone (wireless Handheld)
- Frequency Response: 50-12,000Hz or better
- Controls: On /Off Switch
- Indication: For Mic ON

7 **Student Digital Assessment Set (50:1)**

Receiver
- 2.4GHz digital two-way RF technology, 32 RF channels
- Should have common channel for all receivers as set up frequency for configuration
- Should be able to change operating channel in real-time from the application
- Port: USB port
- Should be integrated with Virtual Classroom application

Transmitter Devices – 50 Nos.
- Button to press 0-10, ABCDEF, true/false, like/dislike and hand-raise question
- Text on the tools should be inscribed in Odia & English languages
- Min 11 buttons with Functional Test report*#
- Three modes configurable–RF receiver, Bluetooth, and Local Storage
- 2.4GHz two-way RF with resting and operating channel managed by application
- Should be able to send data over Bluetooth without receiver
- LED status: green and red with various status indication
- ID Address mapping from Application for real-time Roll number allocation
- Store capacity of responses of 500 questions and auto-sync on Bluetooth/RF
- The system must automatically transmit the battery energy status with its ID Address to identify the device
- It should also include an automatic battery replacement notification
- Should be able to capture and send audio over RF
- Transmission distance: around 50meters*#
- Transmission angle:360 degree
- Vibration test as per IS-9000*#
- Drop Test as per IS-9000*#
- Operable environment (10°C to 55°C) as per IS-9000*#
- Color coded (Red, Green, Yellow, Blue)
- Transmitting Distance of 10-50 feet controllable from application real-time
- Should be operable by replaceable two AAA batteries
- OEM Should be ISO certified
- Should be ROHS Compliant*#
- Storage Rack should hold 50+Transmitter devices

*#Testing Certificate from Government/ Government authorized testing LAB required

8	**E-Podium**
	− Podium can be of wood or metal or combination of both with the lockable door in the back for storage.
	− Monitor: 19.5" LED Display (FHD)
	− The storage inside the podium should be capable of accommodating the server, keyboard, mouse, Camera, Router, Student Digital Assessment sets and Satellite/internet modem and lock facility for safety.
	− The podium should have the mounting option for the monitor on the top and should be comfortable to read the content in the standing position
	− The approximate height of the podium can be between 3ft and 3.5ft
	- If the metal is used for the podium then the metal thickness should be minimum .8mm and if wood to be used then 17mm natural wood color MDF sheet.

9	**Wi-Fi Router**	
	Specifications	**Detailed Description**
	Interfaces	1 x Gigabit Ethernet WAN port
		4 x Gigabit Ethernet LAN port
		1 x power connector
		1 x WPS button
	Operation Modes	Router mode
		Access Point mode
		Repeater mode
	Management	Should have WEB GUI Management
		TR-069 client
	Wireless Standard	IEEE 802.11 ac/n/g/b/a wireless LAN Standard
	WAN Type	Static IP
		Dynamic IP
		PPPoE
		PPTP
		L2TP
	Antenna	Should have At least Four external 5 dBi antennas
	Wi-Fi Data Rate	5 GHz up to 867 Mbps or Better
		2.4 GHz up to 300 Mbps or Better
	Advanced Features	Periodic scan of channels, automatic switch to least loaded channel
		Should have Guest Wi-Fi network
		Stateful Packet Inspection (SPI)
		WMM (Wi-Fi QoS)
		DMZ (Demilitarized Zone)
	VPN	Should Support Site to site IPsec VPN tunnel
	VPN Pass-Through	Should support L2TP, PPTP, IPSec
	Security Protocol	WPA/WPA2-Enterprise
		WPA/WPA2-Personal
		WPA3-Personal
		WPS (Push Button Configuration)
	Certifications	MTCTE, CE
	OEM Criteria	Country of Origin: Non-MIC

		OEM should have ISO 9001 Certification for Quality Management System, ISO 27001 Certification for Information Security Management System, ISO 45001 and ISO 14001 Certification for Environmental Management System.
		OEM should have L2 & L3 technical support (TAC) and Repair centre in India
		Should submit MAF from OEM for authorization
	Warranty	Minimum 3 Years Warranty
10	**UPS 1 KVA**	
	CAPACITY	1KVA /800W
	DC VOLTAGE SYSTEM	36VDC
	INPUT	
	VOLTAGE RANGE	110VAC ±5%-300VAC ±5%
	FREQUENCY RANGE	40Hz-70Hz
	PHASE	SINGLE PHASE WITH GROUND
	POWER FACTOR	≥0.99@FULL LOAD
	OUTPUT	
	OUTPUT VOLTAGE	200/208/220/230/240VAC
	AC VOLTAGE REGULATION	±1%
	FREQUENCY RANGE (BATTERY MODE)	50 Hz ± 0.1 Hz OR 60Hz+0.1Hz
	CURRENT CREST RATIO	3:1
	HARMONIC DISTORTION	≤3% THD (Linear Load): 6% THD (Non-Linear Load)
	OVERLOAD CAPABILITY	105-110% UPS SHUTS DOWN AFTER 10 MINUTES AT BATTERY MODE OR TRANSFER TO BYPASS WHEN THE UTILITY IS NORMAL. 110%-130%: UPS SHUTS DOWN AFTER 1 MINUTE AT BATTERY MODE OR TRANSFER TO BYPASS WHEN THE UTILITY IS NORMAL >130%: UPS SHUTS DOWN AFTER 3 SECONDS AT BATTERY MODE OR TRANSFER TO BYPASS WHEN THE UTILITY IS NORMAL
	TRANSFER TIME	AC MODE TO BATTERY MODE: 0/INVERTER TO BYPASS: <4 ms
	WAVEFORM (BATTERY MODE)	PURE SINEWAVE
	EFFICIENCY	
	EFFICIENCY (AC MODE/BATT. MODE)	89%/85.5%
	BATTERY & CHARGER	
	BATTERY TYPE/BATTERY NUMBERS	SMF
	Battery capacity	1512 VAH (12V/42AH X 3 Nos)
	CHARGING CURRENT	1A/2A/4A/6A (default) Selectable via LCD settings
	ENVIRONMENT	
	OPERATING HUMIDITY/TEMP.	20-95% RH @ 0-40°C (Non-Condensing)
	NOISE LEVEL	LESS THAN 50 dBA @ 1 METER (WITH FAN SPEED CONTROL)
	STATUS INDICATIONS	
	LED/LCD	LCD DISPLAY INDICATIONS
	MANAGEMENT	
	SNMP (OPTIONAL)	POWER MANAGEMENT FROM SNMP MANAGER AND WEB BROWSER

	Degree of Protection	IP-20
	SAFETY	BIS
	Certification	ISO 9001, ISO 14001, ISO 14025, ISO/IEC 20000-1, ISO 45001, ITL9000, Certificate of Compliance CE, ROHS, FCC and E-waste Certificate from CPCB, GFR Land Border Clause Declaration, Made in India.
11	**Electrical Fitting** Successful bidder should provide necessary electrification to UPS, Server, and IFP in every virtual classroom with ISI Standard Cables with PVC Pipe Protection, Switches and Switch Boards.	
12	Transportation, Installation, Integration and Testing	

Annexure-12: PRICE BID FORMAT

Schedule-I: Capex Phase:

Annexure-12: PRICE BID FORMAT

SI.No.	Item	Quantity (a)	Unit Cost (in Rs.) (b)	Total Cost (in Rs.) (c=a*b)
D. Main Studio Setup				
1.	As per BOQ Item list from A. Main Studio 1 to 29 (Annexure-11)	04		
			Total Cost including GST	

SI.No.	Item	Quantity (a)	Unit Cost (in Rs.) (b)	Total Cost (in Rs.) (c=a*b)
B. Regional Studio Setup				
1.	As per BOQ Item list from B. Regional Studio 1 to 19 (Annexure-11)	08		
			Total Cost Including GST	

SI.No.	Item	Quantity (a)	Unit Cost (in Rs.) (b)	Total Cost (in Rs.) (c=a*b)
D. Virtual Classroom with Digital Assessment				
1.	As per BOQ Item list from C. AI Powered Virtual Classrooms with Digital Assessment 1 to 11 (Annexure-11)	5370		
			Total Cost Including GST	

[D] Recurring Cost per Annum				
SL.No.	Item	Quantity (a)	Unit Cost (in Rs.) (b)	Total Cost (in Rs.) (c=a*b)
1.	Operations and Management including Instructional Expenses, Digital Content, Training, Connectivity Support, Analytics, Assessment, Manpower and Support Charges for 01 year	5370		
Total Cost Including GST for the Operations & Management per Annum				
Grand Total Cost i.e. [A] + [B] + [C] + [D] Including GST				

Annexure-13: Pre-Bid Query Format

PRE-BID QUERIES FORMAT					
RFP ENQ. No.			**, Dated**		
Request for Proposal (RFP) :					
Name of the Company/Firm:					
Name of the Person(s) Representing the Company/Firm:					
Name of Person		**Designation**	**Email ID(s)**	**Tel. Nos. & Fax Nos.**	
Sl. No.	**Page No.**	**Clause No**	**RFP Clause**	**Query /Clarification**	**Suggestion if any**
Note: The pre-bid queries should necessarily be submitted in soft copy in MS Excel format only. **Any other format will not consider for reply.**					

Annexure-14: Details of documents to be submitted by the bidder

Sl. No.	Documents to be Submitted		
	Pre-qualification bid	**Technical Bid**	**Financial Bid**
1	Bidder's Authorization Certificate **(Annexure-2)**	Technical Bid Covering Letter **(Annexure-5)**	Financial Bid Cover letter and Format **(Annexure-7)**
2	Particulars of the Bidder (**Annexure-1**)	Detailed Bill of Material as per components indicated in Bill of Quantity **(Annexure-11)**	Price Bid **(Annexure-12)**
3	a. Valid copy of Certificate of incorporation and Registration Certificates b. Copy of GST registration. c. Copies of relevant Certificates of Registration, Income Tax/ PAN Number from the respective Government Department	Technical Compliance with Relevant Supporting Documents	
4	Audited Balance Sheets		
5	CA Certificate with CA's Registration Number & Seal **(Annexure-8)**		
6	Valid ISO certificate		
7	Relevant Documents supporting Office addresses/Undertaking. (Local presence)		
8	RFP Form **(Annexure- 4)**		
9	MAF **(Annexure- 6)**		
10	Self-Declaration – Non-Blacklisted **(Annexure- 9)**		
11	Acceptance of Terms & Conditions of RFP **(Annexure- 15)**		
12	Project Citation Format **(Annexure- 10)**		
13	Project References (**Technical Capability**)		
14	**RFP document fee** as mentioned in the Eligibility/ Pre-qualification Criteria of the RFP		
15	**EMD** as mentioned in the Eligibility/ Pre-qualification Criteria of the RFP		

Annexure-15: Acceptance of Terms & Conditions

To,

The General Manager (Admin)
Odisha Computer Application Centre
(Technical Directorate of I.T. Dept, Govt. of Odisha)
N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar - 751013

Sir,

      I have carefully gone/examined through the Terms & Conditions mentioned in "RFP for Selection of Agency for Implementation, Operations and Maintenance of AI Powered Virtual Classroom with Digital Assessment", RFP Enquire No: OCAC-SEGP-INFRA-0056-2023/25117, Dated 31-12-2025 and I declare that all the previous/clause mentioned in this RFP Document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Authorized Signatory Name:
Designation: