IMPLEMENTATION OF SMART SCHOOL IN GOVERNMENT SCHOOLS IN ABD AREA AND OPERATION & MAINTENANCE OF THE COMPLETE SYSTEM FOR A PERIOD OF FIVE YEARS UNDER SMART CITY MISSION

Request for Proposal

27-05-2019



Building No. 1, 2nd & 3rd Floor, Adjoining SCO 17-18-19, Over New Bridge, Sector 17-A, Chandigarh – 160017 (INDIA)



Disclaimer

The Chandigarh Smart City Ltd. (CSCL) has prepared this Request for Proposals (RFP) to "Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission". The RFP is a detailed document with specifies terms and conditions on which the bidder is expected to work.

CSCL has taken due care in preparation of information contained herein which may or may not be exhaustive or accurate.

The Bidder acknowledges that prior to the execution of this Agreement; the Bidder has after a careful examination, made an independent evaluation of the Request for Proposals, Scope of the Project, Technical Specifications and all information provided by the CSCL.

The Parties agree that any mistake or error in or relating to any of the matters set forth in above para shall not vitiate this Agreement, or render it voidable.

In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in above paras, that Party shall immediately notify the other Party, specifying the mistake or error; provided, however, that a failure on part of the CSCL to give any notice pursuant to this para shall not prejudice the disclaimer of the CSCL contained in above paras and shall not in any manner shift to the CSCL for any risks assumed by the bidder pursuant to this Agreement.

Except as otherwise provided in this Agreement, all risks relating to the Project shall be borne by the bidder and the CSCL shall not be liable in any manner for such risks or the consequences thereof.





Notice Inviting Tender

Chandigarh Smart City Limited (CSCL) invites e-tender (online tender) from the eligible, reputed and established entities for "Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission".

The detailed Terms and Conditions of this Tender can be obtained from Govt. website http://etenders.chd.nic.in. Prospective Bidders should download the complete Tender Documents only from the website http://etenders.chd.nic.in up to the last date of submission. Addendum/Corrigendum if any, to the Tender Documents shall be uploaded on the aforementioned website only. Hence, the Bidders are advised to visit the same regularly. Bidders are advised to go through the complete bid documents, criteria and scope of work in particular, before submission of online bid.

Chief Executive Officer
Chandigarh Smart City Limited
Building No. 1, 2nd & 3rd Floor, Adjoining SCO 17-18-19, Over New Bridge, Sector 17-A,
Chandigarh – 160017 (INDIA)

smartcity.chd@nic.in



Details Regarding Tender Process

Name of Project	Implementation of Smart School in Government Schools in ABD Area and
	Operation & Maintenance of the Complete system for a period of Five
	Years Under Smart City Mission
Estimated Cost	Rs. 5.00 Crore (Rs. Five Crore Only)
Name of the Employer	Chandigarh Smart City Limited
Address of the Employer	Chief Executive Officer
	Chandigarh Smart City Limited
	Building No. 1, 2nd & 3rd Floor, Adjoining SCO 17-18-19, Over New
	Bridge, Sector 17-A, Chandigarh – 160017 (INDIA)
	smartcity.chd@nic.in
Mode	E- Tendering
Website	https://etenders.chd.nic.in
RFP Fee	Rs. 10,000 /- + 18% GST to be paid by Bank Transfer through RTGS in the
(Non-Refundable)	A/c of CSCL (A/c No.: 50100047016350; A/c Name: Chandigarh Smart City
(i.te.: i.e.a.i.aazie)	Limited.; Bank Name & Address: HDFC Bank, SCO 78-79, Sector 8 – C,
	Chandigarh – 160008; IFSC: HDFC0000107).
Start Date for Download /Purchase	27/05/2019
of RFP	27/03/2013
Last Date for Download /Purchase	05/07/2019, 15:30 PM
of RFP	03/07/2019, 13.30 PW
	Pre-Bid queries to be submitted at smartcity.chd@nic.in by 10/06/2019,
Clarification/Queries	17:00 PM
Date of Pre-Bid Meeting	11/06/2019, 15:00 PM
Last date of Submission of	05/07/2019, 15:30 PM
Proposal	
Date of Time of Opening of	05/07/2019, 17:00 PM
Prequalification / Technical	
Proposal	
Date of Opening of Financial	To be intimate later, after Technical Evaluation
proposal	
Bid Validity Period	75 Days from Last date of Submission of Proposal
Earnest Money Deposit (EMD)	Rs. Ten Lakh (Rs. 10.00 Lakh only) to be paid in the form of Demand Draft
	drawn by one of the Nationalized / Scheduled Banks in India in favor of
	Chandigarh Smart City Limited, payable at Chandigarh or by Bank Transfer
	through RTGS in the A/c of CSCL (A/c No.: 50100047016350; A/c Name:
< /	Chandigarh Smart City Limited.; Bank Name & Address: HDFC Bank, SCO
	78-79, Sector 8 – C, Chandigarh – 160008; IFSC: HDFC0000107).
	Scanned Copy of the Demand Draft or proof of bank transfer of requisite
-	amount of Bid Security shall be submitted online. The Original Demand
	Draft shall be submitted at the office of CSCL, i.e. Building No. 1, 2nd &
	3rd Floor, Adjoining SCO 17-18-19, Over New Bridge, Sector 17-A,
	Chandigarh – 160017 (INDIA) on the date of opening of Pre-Qualification
	Bid.
Performance Security	The successful bidder shall at his own expense, deposit with Employer,
i chombance security	within 7 days of issuance of Letter of Intent (LoI), an unconditional and
	irrevocable Performance Bank Guarantee (PBG) as per Clause 2.30 of ITB,
	•
	in favour of Chandigarh Smart City Limited (CSCL) for the due performance
	and fulfilment of the contract.
	All charges whatsoever such as premium, commission, etc. with respect to
	the Performance Bank Guarantee shall be borne by the Successful Bidder.



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Section 1: Introduction and Background

1.1 About CSCL and MCC

Chandigarh is among the 13 cities selected in second round of smart cities challenge under Government of India's (GoI) smart cities mission to implement the Smart City Proposal (SCP). In this context, Chandigarh has incorporated a Special Purpose Vehicle (SPV) – Chandigarh Smart City Limited (CSCL) (the "Employer") to plan, design, implement, coordinate and monitor the smart city projects in Chandigarh. CSCL is a company incorporated under Indian Companies Act, 2013 with equal shareholding from U. T. (Chandigarh) Administration and Municipal Corporation Chandigarh (MCC).

1.2 About The Project

The Chandigarh Smart City Limited is striving to enhance the learning outcomes of school children using diverse techniques. One of the techniques is to empower teachers by training them to use e-content and interactive techniques. By having the right mix of the conventional blackboard based teaching along with interactive multimedia techniques, the administration believes that students will have an improved learning experience which will convert into better learning outcomes. The use of multimedia techniques in the appropriate manner shall also help slow learning students to grasp concepts in an easier way. The interaction of technology and content with students and teachers during teaching- learning process, the students will be all the more attentive to what is being taught in the class. Hence, with the overall objective of improving learning outcome in mind, Chandigarh Smart City Limited intends to setup smart class rooms in the selected schools in the ABD area of Chandigarh.

S. No	Name of School
1.	Govt. Model Senior Secondary School, Sector 22-A,Chandigarh
2.	Govt. Model Senior Secondary School, Sector 35-D,Chandigarh
3.	Govt. Model High School, Sector 35-D,Chandigarh
4.	Govt. Model High School, Sector 43, Chandigarh

1.3 Project Objectives

- The following are some objectives for a Smart Class Room:
 - To help teachers to meet new challenges and developing students' abilities and performance.
 - To enables teachers to access multimedia content and information that can be used for teaching students more effectively. Pedagogically sound and visually rich curriculum resources.
 - o To enables teachers to express their views and ensures that every child is understanding the undertaken concept which ultimately affects his achievement.
 - To make possible for the concepts to be understood clearly. To makes abstract concept real.
 - To have interactive and live teaching to elaborate and compare different objects and perceptions towards the particular concepts
 - To designed a module of smart class which allows a student to visualize the concept much better than static images. Visuals and animations that students will never forget.
 - To move a step towards development where students' achievement is highlighted.
 - To makes learning an enjoyable experience for students. Activities and games to make learning process easy.
 - To make effective blending of technology with the classroom, and to Inform the teachers of classroom events
 - o To instruct simultaneously remote and local students.
 - o To improve creative thinking in learning process to visualize the concepts and practices with model and demonstrations.



- o To optimize the use of e-resources wise e-books, e-journals, protocols, lecture notes, documentaries and so on.
- To customized content as per the school's scheme of work and to provide facility to update the content.

1.4 Project Benefits

Following are project benefits:

- Access to online information
- Allow for connectivity in different location
- Better understanding
- Countless resources for making learning more fun and effective
- Can automate a lot of teaches tedious task
- Change the way of imparting knowledge
- Enhanced teaching/learning experience
- Improved student engagement
- Interact and share
- Low-Maintenance
- Provide rapid assessment
- Provides Flexibility
- Teachers can do more experiment in pedagogy

1.5 Brief Scope of Work

The Bidder is required to work for Implementation of Smart Classrooms in selected schools of ABD Area in Chandigarh city shall include Supply, Installation, Testing, Commissioning, Operation and Maintenance for 5 years of following Smart Solutions:

- Smart Classroom with content
- Computer Labs
- Intelligent Lighting System
- Fire Alarm System
- Public Address System
- Digital Notice Board
- MCQ based testing with the help of Tablets
- Perimeter surveillance with CCTV
- Visitor Management System



Section 2: Instructions to Bidders

A. GENERAL

2.1 Scope of Bid

- 2.1.1 The Employer invites online bids for "Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission"
- 2.1.2 The successful bidder will be expected to complete the Project as specified in this RFP.
- 2.1.3 Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder/ tenderer, bid/ tender, bidding/ tendering etc.) are synonymous.

2.2 Eligible Bidders

- 2.2.1 This Invitation for Bids is open to established and reputed contracting agencies who fulfil the requirements laid down in Eligibility criteria as specified in this RFP.
- 2.2.2 All bidders shall provide Forms of Bid and Qualification Information, a statement that the Bidder is neither associated, nor has been associated, directly, or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project/ Work or being proposed as Project/ Work Manager for the contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.
- 2.2.3 The bidder could be a Limited Company/corporation/ Registered Partnership firm/ Limited Liability Partnership firm. Consortium are allowed to bid for the Project.
- 2.2.4 Requirements for submitting Proposal by a Consortium
 - There shall not be more than two (2) members of the Consortium.
 - Wherever required, the Proposal shall contain the information required of each of the members of the Consortium.
 - The members of the Consortium shall furnish Power of Attorney duly signed by authorized representative(s) of the members.
 - The Proposal shall be signed by the duly authorized signatory of the Lead Member and shall be legally binding on all the members of the Consortium.
 - The Consortium shall submit a MoU as part of its Proposal.

2.3 Qualification of The Bidder

2.3.1 Eligibility Criteria as tabulated below:

S. No.	Parameter	Eligibility criteria	Supporting documents required
1.	Legal Entity	The Bidder Should be	For Bidder, Copy of Certificate of
		A company incorporated in India	Incorporation/ registration duly
		under the Companies Act,	signed by the authorized
		1956/2013.	signatory of the bidder.
		Registered Partnership Firms.	Bidder's GST Registration Copy
		Limited Liability Partnership Firms	
		registered under LLP Act, 2008.	
2.	Financial Strength	The bidder should have positive	Certificate from the statutory
		Net Worth at the end of last	auditor / CA w.r.t Net worth for
		financial year's i.e. 2017- 2018.	last Financial Year and Annual
		The Bidder should have Average	Turnover for last three Financial
		Annual Turn-Over equivalent or	Years duly certified based on
		more than of Rs. 25.0 crores	audited Financial Statements.



C 1:	- ·	FIT 11 111.	
S. No.	Parameter	Eligibility criteria	Supporting documents required
		during the last three (3) financial	Bidder should attached relevant
		years from Similar Work (2015-	portion of duly audited balance
		2016, 2016-2017, 2017-2018).	sheet for last 5 Financial Years
		The bidder should not have	(2013-2014, 2014-2015, 2015-
		incurred any loss (Profit After Tax	2016, 2016-2017, 2017-2018).
		should be positive) in more than 2	
		(Two) years during available last 5	
		consecutive balance sheet (2013-	
		2014, 2014-2015, 2015-2016,	
		2016-2017, 2017-2018)	
3.	Black Listing	The bidder should not be under a	Undertaking as prescribed in RFP.
		declaration of ineligibility for	
		corrupt or fraudulent practice or	
		blacklisted with any of the	
		Government (Central or State),	
		Semi-Govt. & PSU in India in last 7	•
		years (from the date of submission	
		of bid)	
4.	Technical	The bidder shall have executed	Certificates for Completion &
	Experience:	similar project in at least 500	Satisfactory Commissioning of
		classrooms in last three years.	Works from Clients.
5.	Operation &	Should have satisfactory carried	Bidder should attach/enclose
	Maintenance	out Operation & Maintenance for	certificate from the client.
		Similar Works for a minimum	
		period of 2 years in last 7 years	
		ending last day of the month of	
		the previous to the one in which	
		Bids have been invited.	
		Or	
		Should have satisfactory running	
		equipment for Similar Works for a	
		minimum period of 2 years in last	
		7 years ending last day of the	
		month of the previous to the one	
		in which Bids have been invited.	

Note:

- "Similar Works" stands for "Supply, Installation, Uploading, Commissioning of Both Hardware & Software including Digital Educational Contents of Class Pre - Nursery to XII as per the Syllabus by Central Board for Secondary Education (CBSE)".
- Documentary evidence (Citation, copy of completion / work order / Contract) is required for all project experience.
- For projects where fee has been received in any currency other than Indian Rupees, then the foreign currency conversion rate available on Reserve Bank of India's portal as on the date of publication of the tender document shall be used for conversion of amount in foreign currency to Indian Rupees equivalent.
- Ongoing Work or Partially Completed Work shall not be considered excluding Operation & Maintenance.
- Net Worth shall mean (Subscribed and Paid-up Equity + Reserves) less (Revaluation reserves + miscellaneous expenditure not written off + reserves not available for distribution to equity shareholders)



- 2.3.2 All bidders shall provide Forms of the Bid and Qualifications information as specified in this RFP, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary. The proposed methodology shall include programme of implementation backed with equipment planning and deployment duly supported with quality assurance procedures proposed to be adopted justifying their capability of execution and completion of works as per technical specifications, within stipulated period of completion.
- 2.3.3 Scoring Model

2.3.3	Scoring Model			
S. No.	Criteria	Maximum Marks /	Met	thod of allotting marks for technical
		Weightage	score	
1.	Quality of content	30	a.	Explanation of concepts
			b.	Activity based content
2.	Quality of animation	20	a.	Visual clarity and brightness
			b.	Font size
			c.	Sound Clarity, Audibility, Accent
				Neutrality _
			d.	Sufficient number of animations
				(2D/3D)
3.	Availability of virtual	10		Virtual Laboratories in Maths,
	laboratories and e-			Science,
	library			EVS, ŠST
				Language Laboratory
				e-library
4.	User Friendly Interface	10		Access to teachers for customizing
				the content
				Access of e-content to students
				outside school
5.	Supplementary Material	X ' () '		Variety of assignments and
				worksheets
				Bilingual Assignments
				NCERT solutions
				Additional material related to topic
				including interactive exercises
				Availability of different evaluation
6	Number of deserves as a fire	25		tools as per CCE Pattern
6.	Number of classrooms in India in which similar	25		Less than 500 classrooms = 0 marks 500 to 999 classrooms = 5
	multimedia educational			1000 to 1499 classrooms = 10
	content has been			1500 to 1999 classrooms = 15
	provided nas been			2000 to 2500 classrooms = 20
	provided			Above 2500 = 25
				(Documentary proof required)
		1		(Documentary proof required)

Bidders, whose bids are responsive, based on minimum qualification criteria / documents as in Pre-Qualification Criteria and score at least 75% in the (given) defined scoring mechanism would be considered technically qualified. Such technically qualified Bidders may be called for presentation before opening of Price Bids. Price Bids of such technically qualified Bidders alone shall further be opened.

2.4 One Bid Per Bidder

2.4.1 Each bidder shall submit only one bid for the Project. A bidder who submits more than one Bid will cause all the proposals with the Bidder's participation to be disqualified.



2.5 Cost & Sufficiency of Bidding

- 2.5.1 The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.
- 2.5.2 The bidder shall be deemed to have satisfied himself before bidding as to the correctness and sufficiency of his bid information for the works and of the rates and prices given in the relevant Schedule or quoted by him, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion of the works.

2.6 Site Visit

The bidder at his own responsibility, expenses and risk, is encouraged to visit and examine the Site(s) of Project and its/their surroundings and obtain all information (including that on the risks, contingencies and other circumstances which may affect or influence the bid) that may be necessary for preparing the Bid and entering into a contract. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

B. Bidding Documents

2.7 Contents of Bidding Documents

2.7.1 The set of the bidding documents comprises the documents listed below and addendum/corrigendum issued, if any w.r.t this Project.

Section	Particulars
1.	Introduction & Background
2.	Instructions to Bidders
2.	Bid Data Sheet
4.	Detailed Scope of Work
5	Conditions of Contract
6.	Technical Specifications
7.	Annexures
8.	Documents to be furnished by Bidder

2.7.2 The bidder is expected to examine carefully all instructions, conditions of contract, BDS, forms, terms, and technical specifications, bill of quantities, forms, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the Bidder's own risk. Thereof, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

2.8 Clarification of Bidding Documents

- 2.8.1 A Prospective bidder requiring any clarification of the bidding documents may notify as specified under the Pre-Bid clarification mentioned in DETAILS REGARDING THE TENDER PROCESS.
- 2.8.2 Pre-Bid Meeting (if provided for in RFP)
- The Bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time and date as specified in the DETAILS REGARDING THE TENDER PROCESS.
- The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- The bidder is requested to submit any questions/queries in writing or by e-mail to reach the Employer as specified in the DETAILS REGARDING THE TENDER PROCESS.
- Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be uploaded on the website. Any modification



of the bidding documents which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum/Corrigendum and not through the minutes of the pre-bid meeting.

Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

2.9 Amendment of Bidding Documents

- 2.9.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda/corrigenda.
- 2.9.2 Any addendum/corrigendum thus issued shall be a part of the bidding documents and shall be uploaded on the website as a corrigendum.
- 2.9.3 To give prospective bidders reasonable time to take an addendum/corrigendum into account in preparing their bids, the Employer may, at his discretion, extend as necessary the deadline for submission of bids.

C. Preparation of Bids

2.10 Language of The Bid

2.10.1 All documents relating to the Bid shall be in English Language

2.11 Documents Comprising the Bid

2.11.1 The bid to be submitted on-line by the bidder shall comprise scanned copies of the following in two separate parts:

Part I: Pre-Qualification and Technical Bid

- RFP Fee of Rs. 10,000/-+18% GST
- EMD of Rs. 10.00 lakh
- Bid Cover letter
- Bidder's Particulars
- Power of attorney to the authorized Signatory
- Power of Attorney for Lead Member by The Consortium Member
- Copy of Certificate of Incorporation along with Copy of Memorandum and Articles of Associations
- Copy of GSTIN and PAN
- Certificate from the statutory auditor/ CA towards positive net worth of the company.
- Chartered Accountant/ Statutory Auditor certificate for Turnover for the last three financial years' i.e. 2015-16, 2016- 2017 and 2017-2018
- Affidavit/Undertaking by Bidder
- Detail of Technical Experience
- Authority Letter from Principal Manufacturer/ OEM
- Anti-Collusion Certificate
- The Signed copy of RFP and addendum (if any)
- Proposed Approach & Methodology

Part II: Financial Bid

The Financial Bid shall be submitted online at http://etenders.chd.nic.in as per format and instructions as mentioned therein.

2.12 Bid Prices

- 2.12.1 The contract shall be for the whole Project as specified in this RFP based on the Bill of Quantities submitted by the Bidder online.
- 2.12.2 i) For Item Rate Tenders, the bidders shall make online entries to fill in rates, prices and line item total (both in figures and words) for all items of work described in the Bill of Quantities



- alongwith total bid price (both in figures and words). The items for which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the other rates and prices in the Bill of Quantities.
- 2.12.3 All duties, taxes and other levies payable by the Bidder under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

2.13 Currencies of Bid and Payment

The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees. All payment shall be made in Indian Rupees.

2.14 Bid Validity

- 2.14.1 Bids shall remain valid for a period specified in the DETAILS REGARDING THE TENDER PROCESS after the deadline date for bid submission. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
- 2.14.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidder's responses shall be made in writing. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension and in compliance with the provisions of RFP in all respects.

2.15 Bid Security (Earnest Money)

- 2.15.1 The bidder shall furnish, as part of his Bid, a Bid Security (Earnest Money) as specified in the DETAILS REGARDING THE TENDER PROCESS, in original form and, in the amount and currency specified in the DETAILS REGARDING THE TENDER PROCESS.
- 2.15.2 Any bid not accompanied by an acceptable Bid Security, shall be rejected by the Employer as non- responsive.
- 2.15.3 The EMD given by all the bidder except the lowest bidder shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of successful bidder, whichever is earlier without any interest. The EMD submitted by the Successful Bidder shall be released without any interest upon furnishing of the Performance Security, by way of an irrevocable Bank Guarantee, issued by a scheduled bank located in India in favour of CSCL for due and punctual performance of the obligations relating to the Project.
- 2.15.4 The Bid Security may be forfeited.
- a. If the Bidder withdraws the Bid or seeks to modify, alter, add or subtract or put any rider on any ground whatsoever, after Bid opening during the period of Bid Validity; or
- b. In the case of a successful Bidder, if the Bidder fails within the specified time limit to:
 - i. sign the Agreement; or
 - ii. furnish the required Performance Security.

2.16 Alternative Proposals by Bidders

2.16.1 Alternative/Conditional offers will not be considered and shall be rejected by the Employer as non- responsive.

2.17 Format and Signing of Bid

2.17.1 The bidder shall submit the bid online comprising of documents as specified in the RFP.



D. Submission of Bids

2.18 Submission and Marking of Bids

The Bidder shall submit its bid online in two folders separately i.e., "Pre-qualification & Technical Bid (Part-I)" and "Financial Bid (Part-II)"

The contents of Technical and Financial Bids will be as specified in this RFP. All documents are to be signed by the authorized representative of the Bidders.

2.19 Deadline for Submission of the Bids

- 2.19.1 Complete Bids (including Technical and Financial) shall be received by Employer online not later than the date and time specified in the DETAILS REGARDING THE TENDER PROCESS. In the event of the specified date for the submission of bids declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day.
- 2.19.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with provisions of RFP, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

2.20 Late Bids

The electronic bidding system would not allow any late submission of bids after due date and time as per server time.

E. Bid opening and Evaluation

2.21 Bid Opening

- 2.21.1 The Employer shall open the bids online and the same shall be evaluated by the Employer. The bids shall be opened in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in the DETAILS REGARDING THE TENDER PROCESS. In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.
- 2.21.2 The Part-I containing Pre-Qualification and Technical Bid shall be opened first.

 In the first step, CSCL will evaluate the Technical Proposal submitted by the Bidders as per the eligibility criteria as specified in the RFP Document.

CSCL would subsequently evaluate the adequacy of the technical information so as to comply with the conditions set out in the Agreement. However, no weightage will be given for the same. The objective of the Technical Evaluation shall be to access the technical competence of the Bidders. However, if required at any stage during technical evaluation of Bids, clarifications may be sought from the bidders. Also, Bidders may be asked to make presentation on their technical competence, if required.

After completion of Technical evaluation, CSCL would prepare a list of Technically Qualified/Eligible Bidders. Therefore, all the Technically Qualified/Eligible Bidders will be notified and requested to attend the opening of their Financial Bids, Date and Time and Venue of the same will also be intimated to respective Bidders.



Thereafter, Financial Bids of only technically qualified/eligible Bidders shall be opened in the presence of authorized representatives of the Bidders, who choose to attend. The names of authorized representatives of the Bidders will be announced at the Bid Opening and recorded.

2.22 Process to be Confidential

2.22.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing the Bids, or award decisions may result in the rejection of his bid.

2.23 Clarification of Financial Bids

2.23.1 To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any bidder for clarification of his Bid, including breakdown of unit rates or analysis etc. The request for clarification and the response shall be in writing.

2.24 Examination of Bids and Determination of Responsiveness

- 2.24.1 During the detailed evaluation of Qualification Information/"Pre-qualification & Technical Bids", the Employer will determine whether each Bid (a) meets the eligibility criteria; (b) documents has been properly signed; (c) is accompanied by the required securities and; (d) is substantially and unconditionally responsive to all the requirements of the Bidding documents.
- 2.24.2 A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one:
 - a. which affects in any substantial way the scope, quality, or performance of the Works;
 - b. which limits in any substantial way, inconsistent with the Bidding documents, the Employer's right or the Bidder's obligations under the Contract; or
 - c. whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 2.24.3 If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

2.25 Evaluation and Comparison of Financial Bids

- 2.25.1 The Engineer will evaluate and compare only the Bids determined to be substantially responsive.
- 2.25.2 The estimated effect of the price adjustment condition under the General conditions of contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.
- 2.25.3 If the Bid of the successful Bidder is seriously unbalanced by more than or less than 15% in relation to the estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analysis, the Employer may require that the amount of the performance security set forth in this RFP be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.



2.26 Eligible Goods and Services, and OEM Criteria

- 2.26.1 The Bidder shall quote only one specific make and model from only one specific OEM, for each of the goods. Providing more than one option shall not be allowed. All goods quoted by the Bidder must be associated with 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.
- 2.26.2 The OEM for each products or technology quoted should be in the business of that product or solution or technology for at least 1 (One) year as on the date of release of the RFP.
- 2.26.3 All the OEMs should have authorized presence in India either directly or through channel partner(s) as on the date of release of RFP.
- 2.26.4 The OEM for all active components should give a declaration that products or technology quoted are neither end-of-sale nor end-of-life as on the date of installation and commissioning and are not end-of support till the successful completion of O&M period of the project.
- 2.26.5 The bidder's proposed OEM should not have been blacklisted by any State / Central Government Department or Central /State Public Sector Undertaking as on bid submission date.
- 2.26.6 Adequate supporting documents pertaining to the above points, along with a summary compliance table, should be submitted in the proposal by the Bidder.
- 2.26.7 The PA System products offered should have the following certification EN55013:2013, EN61000-3-2:2014, EN61000-3-3:2013, EN55020:2007+A12:2016, EN62368-1:20142. Speakers IP certifications should be at least 7 years old, Amplifier, Audio Control Matrix & Paging Microphone certifications should be at least 3 years old.
- 2.26.8 Wireless Display and MCQ testing software OEM should have own office and service center in India.

2.26.9 OEM for CCTV

- a. Camera should be SRTP complaint.
- b. Camera OEM should have a service center in India to support service life of the product.
- c. Camera OEM should have office in INDIA from last 10 years and registered under Companies Act.
- d. Camera OEM should be ISO9001: 2015 certificated.
- e. Cameras should have MTBF value more than 10 years to support life cycle of product
- f. OEM should be a member of ONVIF Steering Committee.
- 2.26.10 Fire Alarm system OEM should have a service center in India to support service life of the product and should have office in INDIA from last 10 years and registered under Companies Act. OEM should be ISO9001: 2015 certificated.

F. Award of Contract

2.27 Award Criteria

2.27.1 The Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price.

2.28 Employer's Right to Accept Any Bid and Reject Any or All Bids

2.28.1 The Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and rejects all Bids, at any time prior to the 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 the Employer's action.

2.29 Notification of Award and Signing of Agreement

- 2.29.1 The Bidder whose bid has been accepted by the Employer will be notified of the award by the Employer prior to expiration of the Bid validity period.
- 2.29.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of this RFP.
- 2.29.3 The agreement will incorporate all relevant correspondence between the Employer and the Successful Bidder. It will be signed within 15 days following the issuance date of Letter of Intent.

2.30 Performance Security

2.30.1 The successful bidder shall at his own expense, deposit with Employer, within 7 days of issuance of Letter of Intent (LoI), an unconditional and irrevocable Performance Bank Guarantee (PBG), in favour of Chandigarh Smart City Limited (CSCL) for the due performance and fulfilment of the contract. For extension of time for submission of Performance Guarantee beyond stipulated time, CSCL will charge 12% per annum on daily basis but such extension shall not exceed by another seven (7) days. However, in case last date of submission of performance guarantee happens to be bank holiday the last day of submission shall be the next working day. The PBG shall be submitted in two part.

2.30.2 Part I

This part of PBG equivalent to 5% of Capex value shall be submitted within 7 days of issuance of Letter of Intent. This part of PBG shall be valid for minimum period of 60 days beyond the date of completion of the implementation phase. This part of PBG shall be released without any interest upon furnishing of the PBG Part II.

2.30.3 Part II

This part of PBG equivalent to 5% of Opex value shall be submitted within 7 days of date of issuance of Go – Live Certificate. This part of PBG shall be valid for minimum period of 60 days beyond the date of completion of the Operation & Maintenance phase. This part of Bank Guarantee will be released upon issue of Certificate of Completion of O&M phase by the CSCL.

2.30.4 The Bank Guarantee shall be invoked by Chief Executive Officer, Chandigarh Smart City Limited in case of deficiency in services provided by the Successful Bidder.

2.31 Corrupt or Fraudulent Practices

2.31.1 The Employer will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the Bidder/firm ineligible, either indefinitely or for a stated period of time.

For the purpose of this Clause,

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

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







Section 3: Bid Data Sheets

3.1 Formats for Pre-Qualification and Technical Bid

3.1.1 Checklist

Sl. No.	Items	Attached	Documentary	Proof
		(Yes /No.)	(Page No.)	
1.	Proof of RFP Fee, i.e. Rs. 10,000/-+GST 18%			
2.	Proof of EMD of Rs. 10 Lakh			
3.	Bid Cover letter			
4.	Particulars of the Bidder			
5.	Power of Attorney to the Authorized Signatory			
6.	Power of Attorney for Lead Member by The Consortium Member			
7.	Copy of Certificate of Incorporation along with Memorandum of Association and Article of Association			
8.	Copy of PAN			
9.	Copy of GSTIN			
10.	Certificate from the Statutory Auditor/ Chartered Accountant towards positive net worth of the company.	0	7	
11.	Certificate from the Statutory Auditor/ Chartered Accountant of Turnover for the last three financial years i.e. 2015-16, 2016- 2017 and 2017-2018)		
12.	Affidavit/Undertaking by the Bidder			
13.	Detail of Technical Experience			
14.	Authority Letter from Principal Manufacturer/ OEM			
15.	Anti-Collusion Certificate			
16.	Signed Copy of RFP along with Addendum, if any.			
17.	Proposed Methodology			



3.1.2 Format for Bid Cover Letter [ON BIDDERS LETTERHEAD]

To
The Chief Executive Officer
Chandigarh Smart City Limited
Chandigarh
Date: DD/MM/YYYY

Sub: Submission of Eligibility Proposal

Ref: Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission.

Dear Sir,

Having examined the RFP, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to product and services as required and outlined in the RFP. We attach hereto our responses to Eligibility Criteria.

We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to CSCL is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP document and also agree to abide by this RFP response for a period of 75 days from the date fixed for bid submission.

We hereby declare that in case we are chosen as successful bidder, we shall submit the PBG in the form prescribed in the RFP. We do hereby undertake, that until a contract is prepared and executed, this bid together with your written acceptance thereof, the RFP and letter of Intent for awarding the contract, shall constitute a binding contract between us.

We agree that you reserve the right in absolute sense to reject all or any of the products/ services specified in the RFP response with or without assigning any reason whatsoever.

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

Date:

Signature of Authorized Representative Name of Bidder: Full Address: Telephone No.:



3.1.3 Format for Particulars of the Bidder

Details	s of the Bidder (Company)	
A.	Name of the Bidder	
B.	Address of the Bidder	
C.	Year of Incorporation	
D.	Registration Number	
	& Registration Authority	
E.	Legal Status (Public/Private)	
F.	Name & Designation of the	
	Authorized person to whom all	
	references shall be made	
	regarding this RFP	
G.	Telephone No. (with STD Code)	
H.	E-Mail of the Contact person:	
I.	Fax No. (with STD Code)	
J.	Website	
K.	Financial Detail (Organization's	FY 17-18:
	turnover of last three financial	FY 16-17:
	years)	FY 15-16:
L.	GSTIN Number	
M.	PAN	
N.	EMD Details	

Date:

Signature of Authorized Representative

Name of Bidder:

Full Address:

Telephone No.



3.1.4 CA Certificate For Net Worth For Bidder

Date: dd/mm/yyyy

To The Chief Executive Officer Chandigarh Smart City Limited Sir/Madam,

This is to certify that the Net worth as per books and records of ______ for the following financial year ending is as under.

S. No.	Financial Year ending	Networth (Rs in Crores)
1.	31 st March, 2018	

Yours Sincerely,

Signature of	f Auditor	(with	official	seal

Membership No. :

Name :

Designation :

Address:

Telephone& Fax:

E-mail address:



3.1.5 Bidders Annual Turnover (Turnover of Bidder) Over Last 3 Financial Years Date: dd/mm/yyyy

_	
	റ
	v

The Chief Executive Officer

Chandigarh Smart City Limited

Subject: Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission.

(RFP No:	Dated: /	/	,
Sir/ Madam,			

I have carefully gone through the Terms & Conditions contained in the RFP Document for Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission.

I hereby declare that below are the details regarding turnover of _____over last 3 financial years :

S.	Details	FY 2015-16 (in	FY 2016-17 (in	FY 2017-18 (in	Average Turnover
No		Crores) (i)	Crores)	Crores)	[(i)+(ii)+(iii)/3]
			(ii)	(iii)	
1	Overall Annual				
	Turnover-				

I hereby declare that below are the details regarding Profit After Tax of _____over last 5 financial years :

S.	Details	FY 2013-14 FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
No		(in Crores) (in Crores)	(in Crores)	(in Crores)	(in Crores)
1	Profit After				
	Tax				

The above information is based on the audited financial statements.

Signature of Auditor (with official seal)

Membership No. :

Name :

Designation :

Address:

Telephone& Fax:

E-mail address:



3.1.6	Format for Self-De	eclaration/Unde	rtaking by Bid	lder		
Affidavit,	Undertaking (duly	attested by Nota	ary Public/Firs	t Class	Magistrate	on stamp paper of Rs. 50/-
)						
I,		authorized	signatory	of	M/s	sole
proprieto	rship/partnership fi	rm/public/privat	te limited con			principal place of business/

registered office at.....(Full Address) do hereby solemnly affirm and declare

- a. That I/We do hereby undertake that I/We have not been black listed / Debarred / suspended by any Govt. or Semi Govt. or Corporation or Private Organization during the last seven years ending last day of the month previous to the one in which Bids are invited.
- b. That I/We do hereby undertake and confirm that eligible similar works has / have not been executed though another contractor on back to back basis.
- That I/We do hereby undertake that no complaint / FIR has been registered / no criminal proceedings against the firm / partners of the firm or its director are pending / ongoing in any court of law regarding any offence punishable under IPC / any other law of the land applicable. If any such fact comes to the notice of the CSCL, the CSCL shall reject the tender / bid straightway without assigning any reason.
- d. That I/We do hereby undertake that he / she / Director / Partner of the firm / company / agency have never been convicted of any criminal offence.
- e. That I/ We do hereby undertake that the particulars given by me are true and correct to the best of my knowledge and belief and nothing has been concealed thereof. I am aware that in case of any discrepancy/ false statement found, it will lead to rejection of my bid / tender and CSCL will debar / blacklist the firm / agency as per policy of blacklisting issued by Chandigarh Administration vide notification dated 27-02-2009.
- f. That I/We do hereby undertake that there are no pending dues to be deposited by the agency with any Government Department / Govt. Undertaking or Board or Organization / Public Sector Undertaking anywhere in the country.
- That I/We do hereby undertake that in case any such violation comes to the notice of Authority before the date of start of work or during the execution of work, CSCL shall be free to forfeit the entire amount of earnest money and / or performance guarantee deposited by me.

Signed by an authorized Officer of the Entity

Date	
	,

as under:-



3.1.7 Details of Technical Experience Required for Pre-Qualification.

Sl. No.	Name of Project	Year of Project	Page Number
1.			
2.			
3.			
4.			
5.			





3.1.8 Detailed Project Experience (please provide separate table for each project)

Client Certificate/ others (if any)

, 1 · · ·	1 7 7					
Project Information						
Name of the project						
Client Name						
Name and contact details of the client						
Description of the project						
Scope of services						
Start date						
Completion date						
Duration of the project						
Other Relevant Information (if any)						
Please check (√) on the supporting documen	its enclosed:					
Work Order received from Client						
Agreement signed between Bidder and Clien	t					



3.1.9 Anti-Collusion Certificate

To Whomsoever It May Concern

- 1. That we hereby certify and confirm that in the preparation and submission of our Proposal, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing which is or could be regarded as anti-competitive.
- 2. We further confirm that we have neither offered nor will offer any illegal gratification in cash or kind to any person or agency in connection with instant proposal.





3.1.10 Authority Letter from Principal Manufacturer/ OEM

To, The Chief Executive Officer Chandigarh Smart City Limited Chandigarh Dear Sir, Ref: Tender No. We ______, (name and address of the manufacturer) are established and reputed manufacturers of _____ having factories at _____ (addresses of manufacturing / development locations) do hereby authorize M/s ______ (name and address of the bidder) to bid, negotiate and conclude the contract with you against the above mentioned RFP for the equipment/ software manufactured/ developed by us in adherence to the requirements of the RFP. We herewith certify that the above mentioned equipment/ software products are not end of the life and we hereby undertake to support these equipment/ software for the minimum duration of 3 years from the date of from Go-Live (as stated in RFP). Yours faithfully, (Name) (Name of Producers) Signature Name Designation



3.1.11 Power of Attorney

(On a non-judicial stamp paper of appropriate value duly attested by notary public)

Know all men by these presents, we (name and address of the registered office of the Sole Applicant) do hereby constitute, appoint and authorize Mr./ Ms._______R/o ______ who is presently employed with us and holding the position of _______, to do in our name and on our behalf, all such acts, deeds and things, necessary in connection with or incidental to the bid for "Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission, including signing and submission of all documents and providing information/ responses to Chandigarh Smart City Limited and representing us in all matters in connection with our bid for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For (Signature)
(Name, Title and Address)
Accept
......(Signature)
(Name, Title and Address of the Attorney)

Notes:

- 1. To be executed by the Applicant.
- 2. The mode of execution of Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- 3. Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a resolution/ Power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the bidder.



3.1.12 Power of Attorney for Lead Member by The Consortium Member (On Non- Judicial Stamp Paper of appropriate Value to be purchased in the name of Consortium)

Know All Men By These Presents That We, the Members whose details are given hereunder
"Implementation of Smart School in Government Schools in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under Smart City Mission", as per the Scope of Work stipulated therein for which bids have been invited by the Chandigarh Smart City Limited, to undertake
the following acts:
 i. To submit proposal, participate and correspond in respect of the aforesaid Bid – Specification of Chandigarh Smart City Limited on behalf of the "Consortium". ii. To negotiate with Chandigarh Smart City Limited the terms and conditions for award of the contract pursuant to the aforesaid bid and to sign the contract with the Chandigarh Smart City
Limited for and on behalf of the "CONSORTIUM". iii. To do any other act or submit any document related to the above. iv. To receive, accept and execute the contract for and on behalf of the "Consortium". v. To submit the Performance Bank Guarantee in the prescribed format and as per terms of the
Contract. It is clearly understood that the Lead Member shall ensure performance of the Contract and if one or both the members fail to perform their respective portion of the Contract, the same shall be deemed to be a default by all the members.
It is expressly understood that this power of Attorney shall remain valid, binding and irrevocable till completion of the Contract period i.e., from the date of execution of the Contract.
The Consortium hereby agrees and undertakes to ratify and confirm all the whatsoever the said Lead Member quotes in the bid, negotiates and signs the Contract with the Chandigarh Smart City Limited and/ or proposes to act on behalf of the Consortium by virtue of this Power of Attorney and the same shall bind the Consortium members as if done by itself.
In Witness Thereof, the members constituting the Consortium as aforesaid have executed these present on this day ofTwo Thousand Nineteen.
for and on behalf of the member of the
Consortium 1
Accept
(Signature)
(Name, Title and Address of the Attorney)

1. The mode of execution of Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so

Notes:



- required the same should be under common seal affixed in accordance with the required procedure.
- 2. Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a resolution / Power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executant(s).





3.2 Financial Bid Format and Instructions

3.2.1 General Instructions

- a. Financial Bid needs to be submitted online as per the instructions given in the RFP in the format prescribed in this section.
- b. Bidder should provide all prices as per the prescribed format under this Section.
- c. All the prices are to be entered in Indian Rupees (Rs.) only
- d. Prices indicated in the schedules shall be inclusive of all taxes, levies, duties, etc.
- e. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for.
- f. CSCL reserves the right to ask the bidder to submit proof of payment against any of the taxes, duties, levies indicated.
- g. The variation in individual item of quantities permitted, provided it shall not exceed \pm 30% in individual item of quantities. The successful bidder shall not object to the upward or downward variation in quantities of any item within the variation limits.
- h. Payment for additional quantities within the variation limit shall be made at tender rates and the tender rates shall be valid for entire duration of the contract.
- i. No claim shall be entertained or become payable for price variation of additional quantities
- j. No escalations of prices will be considered under any circumstances.
- k. Bidders must carefully read the Scope, Technical Requirements and the SLAs mentioned in this RFP and accordingly propose the software, hardware, accessories and services and their respective quantities required to completely meet the requirements of this RFP.





3.2.2 Format for Financial Bid As per E Bid Format





Section 4: Detailed Scope of Work

4.1 Scope of Work ("Service")

"Smart Class" as a technology is being introduced in the Government Schools in Chandigarh to improve the existing teaching-learning system, which can evoke a new learning environment in the classrooms of the Government Schools in Chandigarh.

Smart Classes to be introduced in the below mentioned Government Schools in Chandigarh as part of Smart City Module:

List of Schools

There are 4 Schools under the ABD Region, namely:

- 1. Govt. Model Senior Secondary School, Sector 22-A, Chandigarh
- 2. Govt Model Senior Secondary School, Sector 35-D, Chandigarh
- 3. Govt Model High School, Sector 35-D, Chandigarh
- 4. Govt Model High School, Sector 43, Chandigarh

There are a total of 90 classrooms that need to be upgraded into smart classrooms. The List is as under:

S. No.	Name of the	No. of Se	ection	s per C	lass										Total No.
	School	Pre-Pry	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	1 0 th	11 th	12 th	of
		-									ľ				Classrooms
1	G.M.S.S.S 22 A	2	1	1	1	1	1	2	2	2	3	2	5	5	28
2	G.M.S.S.S 35 D	-	-	-	-	-	-	-	-		-	-	10	9	19
3	G.M.H.S 43	2	1	2	2	2	2	2	2	2	3	2	0	0	22
4	G.M.H.S 35 D	1	2	2	2	2	2	2	2	2	3	1	0	0	21
															90

The scope of services described hereunder is neither exhaustive nor complete and is indicative only. The Bidder shall undertake detailed investigation of the project facilities, study, make assessments and ascertain all by itself the required tasks, interventions, inputs and all other necessities to determine the complete Scope of Services. The Bidder needs to do the appropriate solution design and sizing for the project as per the scope of work and other terms and conditions of the RFP. In case SI has not considered any component/service which is necessary for the project requirement as specified in the BoQ, the same needs to be brought by the BIDDER at no additional cost to CSCL. The BIDDER will have to Install, Operate and Maintain the "Project" for Five years.

The scope of the Project shall entail the design, supply, install, operate and maintain for 5 years (including 1 year of Defects Liability Period) smart components in 4 schools identified in ABD Area of Chandigarh Smart City Limited.

- The bidder is required to undertake the following Scope of work for setting up 90 Smart Classrooms in 4 Schools in ABD area of Chandigarh Smart City:
 - The bidder should ensure proper installation of the infrastructure of Smart Classrooms having Educational Digital Content in 90 Smart Classrooms in Government Schools and the proper functioning of all the equipments. The Principal of the school concerned will certify the successful installation.
 - Supply installation, commissioning and maintenance of infrastructure /equipments including CCTV cameras and 32 inch LED TV as per the Technical specification mentioned in Section 6.
 - Provide, upload, maintenance and up gradation of Educational Digital Contents as per the syllabus of Pre – Nursery to XII including all the specification mentioned in Section
 - o Supply, installation and maintenance of Educational Digital Content should be as per



the subject, class, syllabus and medium as stated in Section 4. Provide Educational Digital contents for other major/elective subjects, as specified by CBSE for class XI and XII, whenever the same are introduced in Government schools during the period of contract without any extra cost.

- Provide training on usage of supplied Educational Digital Content, operations of all the hardware installed in the schools to all the subject teachers at the concerned schools and also provide subsequent refreshers training as and when required as per the following details:
 - Training for all the courses (as specified in Section 4) to the teachers in each school needs to be provided by the bidder. Teachers who will undertake the training will be selected by the principal of the respective school.
 - Post the installations of the hardware and software required for the smart classroom, at-least 7 days of initial intensive training should be conducted by the bidder covering all schools to ensure maximum adoption of the smart classroom in each school
 - Post this training independent evaluations will be carried out by DPI officers/independent consultants to understand the readiness of the teachers in each school in adoption of the smart teaching mechanism
 - In case DPI officers find out there are still training requirements based on the above evaluation, the bidder needs to undertake further training as specified in the evaluation report prepared by the DPI officers/ independent consultants
 - In addition to the above, at-least 3 days of refresher training needs to be conducted by the bidder in every quarter
- All equipments of the Smart Classrooms shall be delivered and installed at location/site of 4 Schools as located in the ABD area of Chandiagrh Smart City. The list of schools containing details of Locations is given at Section 4.
- The list of school wise requirement of CCTV cameras, DVR, HDD and Media channels and 32 inch LED TV is given in Section 4.
- The Bidder shall bear all the costs for the supply, installation and maintenance to respective locations.
- All the equipments should be labeled with a permanent sticker (i.e. screen printing, etc.) with logo of 'CSCL' for easy identification. The monogram will be made available to the successful bidder.
- The bidder shall provide spares and necessary support to CSCL, on technical issues for all hardware equipments. These include full guarantee as well as warranty for one year & also quote the rate of comprehensive maintenance (with all spares) for succeeding two years.
- The equipment & peripherals must be supported for perfect installation at the delivery site & the bidder should indicate the proposed arrangement / spare parts stocking for providing high quality services.
- The successful bidder will maintain atleast 2% spare parts at the designated School or site so that the parts can be replaced immediately.
- The successful bidder shall have to supply all necessary accessories along with the supplied goods viz. appropriate cable, power supply cords/wires/cables etc. and appropriate licenses, device drivers and documentation that may be required, whether mentioned or not mentioned in the tender, for successful acceptance of the quoted product by CSCL.
- The bidder must have the full licensed rights of the software nationally as well as internationally of all software/operating systems developed and /or supplied to the CSCL through this tender.



4.2 The specification of the module of the educational Digital content & software of the smart classrooms (multimedia based educational content):

The bidder shall supply the module of the multimedia educational digital content having the features and activities indicated below:

- Understanding the requirement for developing and installation of customized
 Computer aided teaching and Computer Aided Learning product.
- o Concepts should be explained through good and effective graphics, and animations based on imaginative analogies.
- Conceptualizing the multimedia content based on story lines, minimum 2D animation, interactive games, live coverage, real life examples, music and riddles having good voice over etc.
- The multimedia educational content should be categorized class wise and subject wise.
- The bidder will also provide multimedia educational content usage utility software in order to access the exact usage of content in each Smart Classroom. The utility software should generate subject wise, class wise and teacher wise usage report of each topic taught in the Smart Classroom.
- Relevant manual pertaining to academic/administration etc. will have to be provided to each of the school. Two copies of the same have to be provided at the Office of DPI.
- o The bidder has to consult the syllabus and books prescribed by the Board as stated Section 4.
- The bidder has to install the software/ Educational Digital Contents in the standalone Smart Classroom CPU also so that the failure of network does not affect the working of Smart classroom.
- In case of any change in syllabus at any point of time during contract period, the bidder has to supply Educational Digital Content on new topics incorporated, changed topics without any additional payment.
- without any additional payment.

 o If any technical/operational defects are found in the Multimedia Educational Content at any point of time (during the period of contract), the same will have to be rectified/replaced free of cost by the bidder.
- The bidder is also bound to make the necessary modification in the Multimedia educational content as per the feedback received from the teachers throughout the contract period.

4.3 The Features of Software of Educational Digital Content

The software of the Educational Digital Contents should have the following features:

- User Interface: The proposed system components should be simple comprehensive, learner centric and easy to use.
- GUI: The proposed solution should be based on graphical interpretation and windows architecture.
- Learning Objective: The Multimedia content should meet out all the academic objectives in respect of all the multimedia educational content.
- o Interactive: Multimedia contents should provide many interactions during the use of Multimedia Educational Content. There should have a facility whereby a teacher/student can stop at any point and restart after a pause from the same point in the topic. All modules should have pause, play, fast forward, index, assessment and rewind facilities.
- Learning approaches: 2-3 different learning approaches should be used during the preparation of the contents.
- o Accuracy: The contents should be clearly represented, structured and accurate.
- o Accessibility: All contents should be accessible with good response time.



- Other features: Quality of contents, innovation, instructional language of content, flow of logic, clarity and relevance of voice over, methodology, assessment, and examples etc
- Voice Over: The voice of Male and female experts be used during recording.

4.4 Visitor Management System

This will be a Fingerprint based time and attendance access control system to be placed.

Features to be included in Visitor Management System

- Record in and out entry of visitors, contract workers, vehicles material
- Authorize every entry
- Gives a Pop-up and alerts on client PCs for Visitor authorization
- It allows Hold or Reject a visitor

4.5 Training/ Capacity Building of Teacher

The teachers are to be trained through a trainer to be made available by the service provider to effectively use the hardware and software of the smart class.

A training program will have to be prepared with training manual, Do's and Don'ts etc. The training shall include comprehensive use & operation of the system and effective use of the digital content. The teachers 'user manual should be made available to all trainee teachers in Hindi and English.

Qualification Required for the Trainer: Should be a BCA/MCA with three years of relevant experience in training for similar modules.

Training Schedule: The training needs to commence 7 days prior to the go live period and a total no of 304 hours of training spread across 5 years needs to be imparted as per details below:

Intensive Training: Month 1: 4 schools x 2 hours x 3 days a week x 4 weeks i.e. 4 x 2 x 3 x 4 = 96 hours

Training: Month 2: 4 schools x 2 hours x 2 days a week x 4 weeks i.e. 4 x 2 x 2 x 4 = 64 hours

Half Yearly Refresher Training at intervals of 6 months starting from month 9: 4 schools x 2 hours x once a week x 2 weeks x 9 times (In Month No 9, 15, 21, 27, 33, 39, 45, 51 & 57 from Go Live Month) i.e. $12 \times 2 \times 1 \times 2 \times 5 = 144$ hours

4.6 Help Desk Service

Manpower for Operation, Management & Technical Support:

The successful bidder will provide help desk services which will serve as a Single Point of Contact (SPOC) for all Hardware /Software related incidents and service requests.

Apart from normal means of reporting, a toll free no and an online system should also be used for reporting any smart class issues.

The Help Desk shall undertake the following activities:

- Log issues /complaints related to issues within the scope of work and issue an ID number against the complaint.
- Track each issue /complaint to resolution.
- Once resolved provide feedback to the school principal or a nodal officer appointed by the school.
- Creation of knowledge base on frequently asked questions (FAQs) to aid users (teachers)
- On the request of the DPI or CSCL Office, provide detailed reports of all incidents raised by users and resolution time



The contractual terms of service shall be monitored on a monthly basis as per the individual service requirements. However, if the performance of the system/ services is degraded significantly at any given point of time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of the AUTHORITY or an agency designated by it, then the AUTHORITY shall have the right to take appropriate punitive actions including termination of the contract.

Onsite comprehensive (including all Hardware, Software, network cabling for all types of defects and problems) maintenance services shall be provided by the Supplier / OEM during the period of warranty and Comprehensive Annual Maintenance Contract (CAMC). In case the supplier fails to rectify the problem within required timelines including holidays then OEM shall be required to provide second level support, service to rectify the problem or replace the faulty system or part thereof. The performance of the system shall be measured and applicable penalties shall be calculated and imposed on the bidder, in case the performance is below the required thresholds.

Qualification & Experience required for the Help Desk Personnel: BCA will be preferred with minimum two years of relevant experience in similar capacity.

4.7 Computer Labs:

Provision of 21 Computers with Furniture in each school.

- Supply, install, commission of the computers and furniture.
- Supply, install, commission IT Network to these 4 Schools.
- Provide comprehensive maintenance of the equipment(s) as well as connectivity for the duration of 5 years from the date of commissioning of the overall system.
- Deploy technical manpower at City Level and School Level for operational support.

4.8 School Addressing System

Multipurpose central announcement system to be setup in the campus. A central station will be used to control and operate the system while Speakers shall be installed to cater the corridors, classrooms, labs and the playground.

- The building shall be split into atleast 5-6 zones, wherein selective announcement would be possible in each zone.
- Pre-recorded messages and facility to play USB shall be provided.
- Should have the capability of accepting trigger from the Fire alarm system and relaying a message accordingly.
- Facility of scheduling of bell ring shall also be provided.
- The system should have the capability of accepting a secondary microphone to be installed in the Principal room

4.9 Fire Alarm System

Fire Alarm system to be installed in the complete school with detectors in all the rooms and corridors. Hooter should be installed in the corridors to sound the alarm in case of fire. The fire system is an essential component in the safety of the school. It is the bidder's responsibility to survey all the schools in order to provide an accurate proposal. The system will be responsible for:

- Sensing fire or smoke and generating an alarm.
- Manual trigger of alarm using manual call points in the corridors.
- Maintaining the log of all faults and alarms.
- Multi-criteria sensors to ensure low to none false alarms.



4.10 Digital Notice Board

Traditional notice boards to be replaced with digital notice boards with multimedia content which would provide a much richer experience for students. LED TV screen to be setup inside the building to act as digital notice board.

- The screens should be capable of dividing the screen into multiple areas displaying a variety of content.
- All the content should be uploaded once on the central server.
- The system should be able to support videos, images, ticker, browser display and RSS feeds.
- Scheduling of content should be possible for atleast a month in advance.

4.11 MCQ Based Testing with tablets

Custom MCQs Based testing to be setup in each classroom.

- Students would be able to take the test on Tablets.
- Standard template to be provided to teachers for preparing and uploading of the question paper.
- The system should be able to provide instant results and produce a report in Excel to reduce the workload of the teacher.
- Timed tests should be possible with system.

4.12 Perimeter Surveillance

Surveillance to implemented on the perimeter for 24x7 security. Smart CCTV to be included in the system which generate alarms based on the metadata.

- The cameras monitoring perimeter will be able to generate alarm if anybody tries to jump the fence, throws something over the fence, finds an unattended object left in the field of view.
- They should also be able to automatically configure the quality of video according the school timings so as to save on the storage space as well.
- Alarms should also be generated if somebody tries to tamper with the camera or if it loses connectivity to the storage server

4.13 Intelligent Lighting System

- Intelligent Sensor based LED Lighting system.
- Rooms will be equipped with occupancy sensor and ambient light sensing sensor which can dim the lights automatically according to ambient light.
- Automatic lighting up of corridors when sensing occupancy.
- Automatic scheduling of lights.
- Central control through PC to monitor the complete lighting system including status of lights

4.14 Operation and Maintenance for a Period of 5 Years

- The bidder will be responsible for Maintenance of all the Hardware and Software procured and installed as part of the project for five years after the issuance of "Go-Live".
- The bidder will be required to provide the Technical Support and training and hand holding for the smart class room systems.
- Resolution of all complaints, bugs & issues including improvements in presentation and/or functionality to be done within specified duration as per agreed resolution time as per contract.
- Any issues in the hardware and software will be resolved promptly as per agreed timelines as per contract. An escalation matrix will be prepared and shared with Chandigarh Smart City Limited for resolution of all issues.



4.15 Warranty Support

- The bidder shall provide comprehensive on-site support and warranty for all the equipment supplied under the contract at least for a period of 5 years from the date of final acceptance (Go-live) of the system. The bidder and OEM should support next business day delivery against defective spares through major locations in India. The OEM should have 24x7x365 support in India.
- The bidder will provide maintenance services, including spares free of cost during the support period of go-live plus 5 years and technical man power services for onsite support to the Education department during implementation phase and support phase.





Section 5: Conditions of Contract

1 Definitions

1.1 Terms which are defined in the RFP may not necessarily have been defined in the conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

Agreement shall mean this agreement executed between CSCL and the SUCCESSFUL BIDDER and shall, unless repugnant to the context include all schedules, exhibits, annexes, addendums and alterations hereof.

ABD Area means area consisting of Sector 17, Sector 22, Sector 35 and Sector 43 of Chandigarh, selected for Area Based Development under Smart City Project.

Bill of quantities means the priced/unpriced and completed Bill of Quantities forming part of the Bid.

The Completed Work means the work completed in all respects as per laid down specifications & conditions of the contract to the entire satisfaction of CSCL.

Communication between parties are the written and signed letters, notices, reminders, memorandum and instructions recorded in the instruction book or books kept at site.

Contract is used synonymously with Agreement. A contract entered into between the procuring entity and a successful bidder concerning the subject matter of procurement.

The Contractor is a person or corporate body whose Bid to carry out the Project/Works has been accepted by the Employer.

The Contractor's Bid is the completed Bidding Documents submitted by the Contractor to the Employer and includes Pre-Qualification & Technical Bids and Financial Bids.

The Contract Price is the price stated in the Letter of Intent and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; Months are calendar months.

A **Defect** is any part of the Project/Works not completed in accordance with the Contract.

The **Employer** means Chandigarh Smart City Limited.

Educational Digital Content means Multimedia content based on images, Audio, Video, having interactivity and other type of digital content incorporating the software to run digital educational content as per the syllabus adopted by Government Schools from class Pre – Nursery to XII.

Equipment is the Contractor's machinery brought to the Site to construct the Project/Works.

Go Live means start of Operation and Maintenance Period when the complete system becomes operational.

Implementation Period shall mean the period of 3 months from the date of signing of the Agreement.



Materials are all supplies, including consumables, used by the Contractor for incorporation in the Project/Works.

OEM means Original equipment manufacturer (OEM) (A company that makes a part or subsystem that is used in another company's end product.)

Party means the CSCL (Chandigarh Smart City Limited) or Bidder, individually and "Parties" mean CSCL and the bidder collectively.

Service means provision of Contracted service viz., supply, installation, operation, maintenance and associated services for Smart Classrooms in Government Schools.

The Site shall mean school premises of Government Schools in ABD area of Chandigarh Smart City as mentioned in Section 4 of the tender document, for which the contract has been issued and where the services shall be provided as per the agreement.

Smart Classroom means supply, uploading and maintenance of Educational Digital contents of Pre - Nursery to XII as per the syllabus mentioned at Section 4 and future upgradation, supply, installation, commissioning & functioning of Hardware, including maintenance, networking and setting up of server, training to teachers, providing learning analytics through MIS, providing IT Assistants cum Resource Persons, supply, installations and commissioning of CCTV cameras including DVR, Converter and 32' inch LED TV and onsite comprehensive warranty for five years.

Specifications means the Specification of the Project/Works included in the Contract in accordance with Section 6 RFP.

The Chandigarh Smart City Limited [CSCL] is the Company incorporated under the Indian Companies Act, 2013, a SPV of Municipal Corporation Chandigarh for inviting, receiving, opening and processing of the bids under Smart City Mission.

The Project/Works, means supply, uploading and maintenance of Educational Digital contents of Pre - Nursery to XII as per the syllabus mentioned at Section 4 future upgradation, supply, installation, commissioning & functioning of Hardware, including maintenance, networking and setting up of server, training to teachers, providing learning analytics through MIS, providing IT Assistants cum Resource Persons, supply, installations and commissioning of CCTV cameras including DVR, Converter and 32' inch LED TV and onsite comprehensive warranty for three years.

Timelines means a period of time on which project milestones or important events w.r.t. performance of the Scope of Work and delivery of the Services are marked.

2 Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter and the other way around. Headings have no significance.
- 2.2 Works have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of the Contract.
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
 - a. Agreement
 - b. Conditions of Contract



- c. Letter of Intent
- d. Scope of Work & Specifications
- e. Contractor's Bid
- f. any other document as forming part of the Contract

If there are varying or conflicting provisions in the documents forming part of the contract, the authority competent to approve the tender shall be the final deciding authority with regard to the intention of the document.

3 Language and Law

3.1 The language of the Contract shall be English and the laws of Union of India shall govern the contract. No proceeding relating to this contract shall be taken by the successful bidder in any court of law except in Chandigarh.

4 Period of Contract

4.1 The tender for establishing and maintaining smart classrooms shall be allotted for a period of 60 months (five years) from the date of commissioning & functioning of 90 Smart Classrooms in Government Schools in ABD area of Chandigarh Smart City, for which an agreement with the successful bidder shall be signed as per Section 7.1 and the conditions described herein shall also be part of the agreement. However, the contract period shall be valid for 60 months or completion of Academic Session after 60th month from the start date of Go - Live, whichever is later.

5 Successor Body

5.1 In case, there is a change in the constitution of the implementing agency, its successor body shall be bound by the agreement during its tenure.

6 Liability of Taxes

- 6.1 The successful bidder shall be fully liable to pay for all/any of the charges/fee/GST/tax/cess levied by any statutory/government authority from time to time and that failure/inability to do so would ipso facto terminate this agreement with the forfeiture of security deposit and CSCL shall not entertain any claim (s) in this regard.
- 6.2 GST as applicable will be borne by the Contractor on Liquidated Damages and Penalties.
- 6.3 GST will be deducted from the payment made to the Contractor as per the GST Act and instructions issued from time to time.

7 Means of Communications

7.1 That the parties to this agreement shall expressly communicate in writing as regards any change in/of address, constitution or otherwise at the address & manner of communication as set in this agreement. Such communication shall be sent at the last recorded address of the Party concerned.



8 Performance Security

8.1 The successful bidder shall at his own expense, deposit with Employer, within 7 days of issuance of Letter of Intent (LoI), an unconditional and irrevocable Performance Bank Guarantee (PBG), in favour of Chandigarh Smart City Limited (CSCL) for the due performance and fulfilment of the contract. For extension of time for submission of Performance Guarantee beyond stipulated time, CSCL will charge 12% per annum on daily basis but such extension shall not exceed by another seven (7) days. However, in case last date of submission of performance guarantee happens to be bank holiday the last day of submission shall be the next working day. The PBG shall be submitted in two part.

8.2 Part I

This part of PBG equivalent to 5% of Capex value shall be submitted within 7 days of issuance of Letter of Intent. This part of PBG shall be valid for minimum period of 60 days beyond the date of completion of the implementation phase. This part of PBG shall be released without any interest upon furnishing of the PBG Part II.

8.3 Part II

This part of PBG equivalent to 5% of Opex value shall be submitted within 7 days of date of issuance of Go – Live Certificate. This part of PBG shall be valid for minimum period of 60 days beyond the date of completion of the Operation & Maintenance phase. This part of Bank Guarantee will be released upon issue of Certificate of Completion of O&M phase by the CSCL.

8.4 The Bank Guarantee shall be invoked by Chief Executive Officer, Chandigarh Smart City Limited in case of deficiency in services provided by the Successful Bidder.

9 Security Deposit

- 9.1 CSCL shall retain 5% of the amount of each payment due to the Contractor until Completion of the whole of the Project/Work to cover the cost that may be involved in removal of defects, imperfections, or taking remedial measures in the work executed.
- 9.2 The Security Deposit shall be collected from running bill as well as from final bill as per the provisions of this agreement
- 9.3 Security Deposit deducted during Implementation phase shall be released after 60 days beyond date of issue of Go Live Certificate.
- 9.4 Security Deposit deducted during O&M phase shall be released after 60 days beyond the date of completion of the Operation & Maintenance phase.

10 Implementation & Payment Schedule

S. No.	Milestone	Timeline	Payment
Implementation Phase			
1.	Signing of Contract	Within 15 days of the	Nil
		issuance of letter of Intent	
2.	Establishment of Smart	23 days from the date of	25% of Capex
	Classrooms in 1 School	signing of Agreement	
3.	Establishment of Smart	45 days from the date of	50% of Capex
	Classrooms in 2 Schools	signing of Agreement	
4.	Establishment of Smart	68 days from the date of	75% of Capex
	Classrooms in 3 Schools	signing of Agreement	



5.	Establishment of Smart	90 days from the date of	100% of Capex
	Classrooms in 4 Schools	signing of Agreement	
Operation & Maintenance Phase			
6.	O&M Period	5 years from the date of	Quarterly Payment of Opex in
		issue of Go – Live Certificate	20 equal instalment in 5 years.

11 Go-live & Commencement of O&M Phase

CSCL shall issue Go – Live Certificate to the successful bidder upon completion of implementation phase as per scope of work. Date of issue of Go – Live certificate shall be date of start of O&M period.

12 Payment Terms

- 12.1 Payment of Hardware cost will be released after successful supply, installation and commissioning of the Hardware required for the Smart Classrooms after deduction applicable TDS/GST/Education Cess, taxes etc.
- 12.2 The payment for the O&M Phase i.e. educational digital contents and IT (Resource Persons) will be released on Quarterly basis.
- 12.3 The supplier shall be entirely responsible for all taxes, duties, license fee etc. All custom duties and levies, payable on components, raw materials and any other items used for their consumption or dispatched directly to the CSCL from their Sub-Supplier shall deemed to be included in the contract price and any such taxes, duties and levies additionally payable will be to supplier's account and no separate claim on this behalf will be entertained by the CSCL.
- 12.4 The payments shall be made after deducting all penalties imposed on the bidder.

13 Provisions for Unsatisfactory Services

13.1 If services of bidder are not found satisfactory, at any stage during the period of contract, in such situations the entity shall be bound to remove the deficiencies at its own cost within the time period fixed by CSCL. In case the firm is not able to remove and rectify the deficiencies within the given time period, the CSCL will be competent to impose the penalty provisions stated in this tender document.

14 Work Completion and Liquidated Damage

levied for a maximum period of 5 weeks.

- 14.1 Penalty for non-commencement of installation in time
 In the event of the successful bidder not starting the job of preparing the Smart
 classrooms & installing the Hardware of Smart classrooms within 10 days of time after
 signing the agreement, the Performance Guarantee, deposited by the successful bidder
 shall be forfeited.
- 14.2 Penalty for delay in execution of scheme:

 If the installation and commissioning of the system is not completed in full within the stipulated period as prescribed in the implementation schedule, a penalty at the rate of 0.5% per week with the maximum of 5 % of the total value for the Capex will be
- 14.3 Liquidated damages will be recovered from the Bank Guarantee or from any sum that may become due to the companies out of this contractor any other contract with CSCL.



15 Liabilities

- 15.1 In case of a default on contractor's part or other liability, CSCL shall be entitled to recover damages from contractor. In each such instance, regardless of the basis on which CSCL is entitled to claim damages from contractor (including fundamental breach, negligence. misrepresentation, or other contractor to claim), the companies shall be liable for not more than payments referred to in the Patents and Copyrights section below:
 - Liability for bodily injury (including death) or damage to real property and tangible personal property limited to that caused by contractor's negligence; and
 - As to any other actual damage arising in any situation involving non-performance by contract or pursuant to or in any way related to the subject of this Agreement, the charge paid by CSCL for the individual product or service that is the subject of the claim.
 - The successful bidder will be liable for licensing fee of operating system like Windows, Annotation Software, Antivirus and other software required for functioning of the Smart classrooms.

16 Disputes Resolution Mechanism

16.1 Amicable Settlement

- a. Save where expressly stated to the contrary in this agreement, any dispute, difference or controversy of whatever nature between the parties, howsoever, arising under, out of or in relation to this agreement including those arising with regard to acts, decision or opinion of the CSCL ("the Dispute") shall in the first instance be attempted to be resolved amicably in accordance with the procedure Set Forth in clause (b) below.
- b. The Parties may refer such dispute to the Chief Executive Officer, CSCL (or the person holding charge) for the time being, for amicable settlement. Upon such reference, the parties shall meet at the earliest mutual convenience and in any event within 15 days of such reference to discuss and attempt to amicably resolve the dispute. If the disputes not amicably settled within 15 days of such meeting between the two, either party may refer the dispute to Arbitration in accordance with the provisions of Clause 15.2 Below.

16.2 Arbitration

a. Any dispute difference or Claim arising out of or in connection with this agreement which is not resolved amicably shall be settled by Arbitration in accordance with the Provisions of the Arbitration and Conciliation Act, 1996 including the Arbitration and Conciliation (Amendment) Act, 2015 and any statutory modification/amendments thereof for the time being in force to be read with the Chandigarh Arbitration Centre (CAC) Rules, 2018. The appointment of Arbitrator(s) shall be made from the approved Panel of Arbitrators provided under the Chandigarh Arbitration Centre (CAC) (Arbitration Proceedings) Rules, 2018 as available on the website of High Court of Punjab and Haryana at Chandigarh i.e. https://highcourtchd.gov.in/?trs=adr rules by the parties. The Dispute shall be referred to a Sole Arbitrator to be appointed by mutual consent of the Parties herein. In case of disagreement on the appointment of Sole Arbitrator by the parties, there shall be a Board of Three (3) Arbitrators of whom one shall be appointed by the Employer, one shall be appointed by the Successful Bidder, and the third shall be appointed by the two arbitrators appointed as aforesaid. The award resulting from arbitration shall be final and binding upon the Parties and shall be enforceable in accordance with the provisions of the Arbitration Act subject to the rights of the aggrieved parties to secure relief from any higher forum. The fees of the Arbitral Tribunal and the cost of the arbitration proceedings shall be



borne by the Parties in equal proportions. Each Party shall be bear its own legal fees incurred as a result of any Dispute under this Clause. Pending the submission of and/or decision on a Dispute and until the arbitral award is published; the Parties shall continue to perform their respective obligations under this Agreement.

b. The arbitration proceedings shall be conducted in Chandigarh and the venue of the Arbitration proceedings shall be the Chandigarh Arbitration Centre. The arbitration proceedings shall be conducted in the English language.

17 Force Majeure

- 17.1 Any war or hostility
- 17.2 Acts of public enemy, civil commotion, sabotage, explosions
- 17.3 Effects of flood, epidemics, quarantine restrictions, freight embargoes general strikes, bandhs
- 17.4 Acts of God
- 17.5 Hereinafter referred to as EVENT, neither party shall, by reason of such EVENT, be entitled to terminate this contract, nor shall any party have any claim to the damages against the other in respect of such non-performance or delay in performance, provided that notice of happening, of any such EVENT is given by either party to the other within 7(Seven) days from the date of occurrence of the EVENT.
- 17.6 Unless otherwise directed by the CEO, CSCL in writing, the companies shall continue to perform its obligations under the contract as far as reasonably practicable and shall seek all reasonable alternative means for performance not prevented by the Force majeure event.
- 17.7 Expected work and deliveries under this contract shall resume as soon as practicable after such EVENT comes to an end or ceases to exist.
- 17.8 If the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such EVENT for a period exceeding 90 (ninety) days, the CEO, CSCL may at its option, terminate this contract.
- 17.9 Case of termination of contract due to force majeure event, CSCL would not pay any amount to the bidder.

18 Penalty

- 18.1 Penalty for failure of equipment(s):
 - No computer system (CPU, monitor, keyboard, mouse, speakers, UPS) or ultra short throw Projector or Interactive White Board or Integrated Computer Projector, security cameras and components of security camera system installed in the smart classrooms and elsewhere shall be down for more than 24 hours continuously from the date of the lodging of complaint (even if computer system/ Projector/Interactive board is down during part of a calendar day, it will be counted as one calendar day). For downtime beyond 24 hours, the penalties will be imposed as under:

No. of working Day in which system is not	Penalty Amount for per class per day
working	
01-02	Rs.500/-
02-05	Rs.1,000/-
06-15	Rs.1,500/-

• The following penalty will be imposed for the non-working of the networking, if the problem is not rectified within 24 hours from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:



No. of working Day in which system is not	Penalty Amount for per School per day
working 01-02	Rs.500/-
02-05	Rs.1,000/-
06-15	Rs.1,500/-

• The following penalty will be imposed for the non working of the Server, if the problem is not rectified within 24 hours from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:

No. of working Day in which system is not	Penalty Amount for per School per day
working	
01-02	Rs.500/-
02-05	Rs.1,000/-
06-15	Rs.1,500/-

• The following penalty will be imposed if multimedia educational content remains non-functional for more than 24 hours from the lodging of the complaint. The penalty will be counted from day one and will be calculated as under:

No. of working Day in which system is not	Penalty Amount for per School per day
working	
01-02	Rs.500/-
02-05	Rs.1,000/-
06-15	Rs.1,500/-

- The Penalty on multimedia educational content will be applicable only when Projector/system/Interactive White Board is operational and multimedia educational content is non-functional.
- Even after 15 days, if the rectification does not take place and the problem still persists, the Principal of the concerned School, Resource person along-with Engineer of the service provider will check & verify the faulty component/ equipment/hardware and the successful bidder is liable to replace the component/ equipment/hardware of same or higher specifications & same brand, which should be compatible with the existing hardware/software. For the purpose a show cause notice will be issued to rectify the system in next 7 days otherwise the contract will be terminated and the security amount will be forfeited. During the period of show cause notice penalty @ Rs.5000 per day per class shall be imposed.
- In case of loss or damage to the products & non-replacement of the same, the security money deposited by the companies will be forfeited by the CSCL.
- If the bidder fails to conduct the training program of teachers as per the schedule, Penalty @ Rs 1000/-per day training per school will be imposed till the bidder conducts the training of teachers.
- If the bidder fails to complete other liabilities covered under the scope of work in a school with in a stipulated period as mentioned in implementation schedule, the penalties will be imposed as under:

No. of working Day in which system is not working	Penalty Amount for per School per day
01-02	Rs.500/-
02-05	Rs.1,000/-
06-15	Rs.1,500/-

• All the power point fittings need to be repaired/ replaced, as per the requirement which will arise during the contract period. During rectification/ repair of any equipment, the bidder will install a new equipment of same or higher configuration till the repaired equipment is received and installed. The bidder is allowed to take away the faulty equipment after replacement with a new one of same or higher configuration.



19 Termination Clause

19.1 Termination of Contract for Default

- CSCL without prejudice to any other remedy available for breach of contract, may terminate the contract in whole by a 15 (fifteen) days' notice in writing to the company in the event of any one or all of the following:
 - If the installation and commissioning is not completed within the implementation schedule given in this RFP, the contract may be terminated in part or whole at the risk and cost of the company.
 - If the Liquidated Damages exceeds the amount equivalent to 5% of Capex or total delay exceeds 5 weeks over stipulated period of implementation phase.
 - If the firm fails to provide any one or all services as per this Contract, and fails to set right the disruption in service within the 30 (thirty) days' notice period.
 - If the firm has engaged in corrupt or fraudulent practices in executing the Contract.
 - In the event of termination of the contract in part or in whole for default of the firm, CSCL is entitled to forfeit the proportionate amount from the security deposits of the firm.
 - o In case of termination of contract, entire infrastructure like instruction material, software, hardware, furniture and site installations etc. will become the property of the CSCL. No compensation/payment of any kind shall be made to the bidder. Also the Performance Bank Guarantee submitted by the bidder will be invoked by the CSCL.

19.2 Termination for Insolvency

- If the bidder becomes bankrupt or is otherwise declared insolvent, then CSCL may at any time terminate the contract by giving written notice of 30 (thirty) days to the bidder. Such termination shall not prejudice or preclude any right of the action or remedy, which has accrued or will accrue to the CSCL and vice versa.
- In case of the termination of the contract, no compensation shall be due to the bidder and the entire infrastructure like instruction material, software, hardware, furniture, books and site installations etc. would become the property of CSCL.

20 Completion

- 20.1 The Successful bidder shall request CSCL to issue a Certificate of Completion of the works and the CSCL, within 15 days of the receipt of such request, shall inspect the work and if there is no defect in the work, shall furnish the Contractor with a certificate of completion.
- 20.2 After the Contract Completion Certificate has been issued, each party shall remain liable for the fulfilment of any obligation under the Contract which remains unperformed at the time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

21 Property

21.1 All materials on the Sites and Equipment are deemed to be the property of the CSCL/DPI at the end this contract.



22 Confidential Information

- 22.1 CSCL 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 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.
- 22.2 The Successful Bidder shall not use the documents, data, and other information received from CSCL for any purpose other than the services required for the performance of the Contract.

23 Change in Laws and Regulations

23.1 Unless otherwise specified in the Contract, if after the date of the Invitation for bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed 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.

24 Risk Purchase

24.1 In case the Successful Bidder fails to deliver the project due to inadvertence, error, collusion, incompetency, termination, misconstruction or illicit withdrawal, the CEO, CSCL reserves the right to procure the same or similar services from the alternate sources at risk, cost and responsibility of the Successful Bidder.

25 Indemnity

25.1 The Successful Bidder shall indemnify the CSCL/ Education Department, Chandigarh Administration/End-user departments against all third party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied items and related services or any part thereof. Education Department, Chandigarh Administration/End-user department stand indemnified from any claims that the bidder's manpower may opt to have towards the discharge of their duties in the fulfilment of the work orders. CSCL/ Education Department, Chandigarh Administration/End user department also stand indemnified from any compensation arising out of accidental loss of life or injury sustained by the bidder's manpower while discharging their duty towards fulfilment of the work orders. The bidder shall solely responsible for any damage, loss or injury which may occur to any property or to any person by or arising out the execution of the works or temporary works or in carrying out of the contract otherwise than due to the matters referred to in this agreement hereinbefore. The bidder would ensure for observance of all labour and other laws applicable in the matter and shall indemnify and keep indemnified the CSCL/ Education Department, Chandigarh Administration/End-user against the effect of nonobservance of any such laws.



5.2 General Conditions

- 1. Neither party can assign its rights or delegate its obligations under this Agreement without the prior written consent of the other party.
- 2. Services of the successful bidder regarding up gradation, grievance against complaint will be evaluated after every three months and report will be placed before the Competent Authority, CSCL for information.
- 3. Review of teaching staff regarding digital contents will be collected after every three month and report will be placed before the Competent Authority, CSCL for information.
- No equipment shall be removed from the school premises by the successful bidder without the
 concurrence of the school Principal/Head in writing including for purposes of replacement of
 spares, etc.
- 5. Safety, security, maintenance & insurance of the equipment and infrastructure including cabinet installed at the school shall be responsibility of successful bidder during the implementation of the project. Thereafter, it will be the responsibility of the concerned HoS.
- 6. CSCL reserves the right to change any terms and condition before award of the contract.
- 7. Curriculum for Digital Contents would be designed as per the syllabus of CBSE/ NCERT.
- 8. The successful bidder shall not change the legal entity of the company during the contact period without the permission of CSCL. The bidder will submit the declaration (on affidavit) in this regard. If this is violated at any point of time during the currency of the contract, CSCL reserves the right to cancel the agreement and the entire infrastructure installed in the School will become the property of the CSCL and no payment due of any kind will be made to the bidder.
- 9. Any claim for remission on the basis of loss/harm to business interest on extraneous / unforeseen conditions / reasons whatsoever, shall be summarily rejected by the CSCL without any kind of response to the successful bidder the successful bidder shall not be entitled to make any claim / remission on that account.
- 10. Any equipment including hardware/ software's/ infrastructure once installed will become the property of CSCL.
- 11. The Bidder shall bear all the cost and expenses associated with onsite warranty support to 4 Government Schools in ABD Area of Chandigarh Smart City Limited.
- 12. If any technical/operational defects are found in the Educational Digital Contents at any point of time (during the period of contract), the same will have to be rectified/replaced free of cost by the bidder. The bidder is also bound to make the necessary modification in the Educational Digital Contents as per the feedback received from the teachers throughout the contract period.
- 13. All equipment once installed in smart classrooms will not be taken away by the bidder in any case. CSCL has ownership rights on the entire infrastructure supplied and installed in the Classroom and Server which is placed in Computer Lab of the School.
- 14. The successful bidder shall be liable and responsible for any loss of life and / or physical harm and any type of misconduct to the students and Schools staff on account of negligence on the part of employees of the successful bidder during the installation and maintenance of the Smart Classrooms. (The employees of the bidder should be of the high integrity and moral value)
- 15. Support services from the selected agency/firm/company would be required to Smart classrooms items on regular basis to CSCL on all working days between 09:00 Hrs to 17:30 Hrs. No separate charges for delivery of goods would be paid by the office.
- 16. The successful bidder shall not cause any damage to the property i.e. Government Schools in ABD Area of Chandigarh Smart City either by himself or through his employees. The successful bidder shall repair immediately, at his own cost, the damages that may have been caused to the school wall / boundary / gate / advertisements etc. as a result of negligence during the establishment of Smart Classrooms. The decision of CSCL will be final and binding upon the successful bidder with regard to liability and quantum of damages to be paid by him.
- 17. The bidder should have substantial presence in Chandigarh\ Panchkula \ Mohali. In case bidder has no presence in Chandigarh\ Panchkula \ Mohali, bidder shall furnish an undertaking that an



- office shall be opened in Chandigarh\ Panchkula \ Mohali, with comprehensive support services including sufficient personnel within a month of selection as Successful Bidder.
- 18. The Successful bidder shall not cause any interference/hindrance to any activity of the Council or any government authority at the School Site in regards to the laying of pipe/conduit/cable etc. and it shall be the responsibility of the Successful bidder to pursue the matter regarding its repair with the concerned authority so that no inconvenience is caused to the Public.





Section 6: Specifications

The following Specifications are indicative and the bidder has to adhere to any changes made by CSCL during the project execution and maintenance phase.

6.1 Technical Specifications

The Specifications for the below listed equipment:

6.1.1 Green Board with Smart Interactive Multipurpose Touch Screen:

Technology	Infrared (IR) Technology
Diagonal Size	85"
(Inches)	
Aspect Ratio	4:3
Surface of the Board	Ceramic Steel scratch resistant surface The surface should have 100 percent erase ability when any specified writing medium is used. It should be possible to fully erase the marking of Dry-erase marker ink with a dry cloth
Hot keys	On both sides of the Boards with description of Icons
Input	Finger and stylus with battery –free operation
Scan Rate	125 dot/Second or better
Multi-Touch	Minimum 10 points touch
Software Features	software shall include minimum features like choose, pens, annotate, erase,
	color, shapes, sizes, text, Edit, fonts, stamp, move, capture, picture, video,
	save, Rotate, undo, image gallery, print, floating key- board and Background
	etc.
Mounting	Wall mounted with steel back surface
Accessories	USB interface cable, 3 nos of Stylus & Intelligent pen Tray Holder, Software /
	Driver for integration with computer, Wall Mounting Kit & Operating manual
Green Board/White	4*4 Green Board/White Board/ Chalk board for more emphasized learning
Board/ Chalk board	
External Frame	To aesthetically fix interactive board with Green Board/White Board/ Chalk board

DLP Projector

Туре	Short Throw Projector.
	Bluelight Shield, Display mode, wall-Color compensation
Brightness	3500 Lumens
Resolution	10 ² 4*768 XGA
Contrast Ratio	20000:1
Aspect Ratio	DLP with 4:3 with support for 16:9
Throw ratio	Short-throw 0.617:1
Lamp life	10,000 Hours (Eco Mode)
Inbuilt Speaker	16 w
Connectors	Analog RGB/Component Video (D-sub) x 1
	HDMI (Video, Audio, HDCP) x 1
	PC Audio (Stereo mini jack) x 1
	Composite Video (RCA) x 1
	PC Audio (Stereo mini jack) x 1
	DC Out (5V/1A, USB Type A) x 1
	Analog RGB (D-sub) x 1
Accessories	wall mount arm kit



Wireless Lavaliere Microphone

Polar pattern	Super - Cardioid
Audio sampling	24 bit/48 kHz
Encryption	AES 256 bit
RF frequency ranges	1,880 to 1,900 MHz
RF output power	100 mW or more
Channels	19 or more
Network	RJ-45
Connectivity	
Battery Rechargeable	From the same make of microphone
Charging	USB and docking station from the same microphone make
Charging capacity	2000 mAH or more
Battery backup	14hr or more
Dante Enable	Yes
Automatic frequency	Yes
and interference	A
management	
Battery type	Li-Ion
Remote controllable	Network / Ethernet
Microphone should	Yes
comes with required	
charging accessories	

Loudspeaker Set

Туре	2-way or better, 2 X 30 RMS or more active pair or passive pair with external amplifier from same OEM with required connectivity of Aux , 1no. Or more
	Line input required as per site condition.
Frequency response	50Hz - 20KHz or better
THD	<0.07% or lower
S/N Ratio	> 89 dB or better
Power Handling	2 X 30 or more
LF Size	4.25" or bigger
HF Size	1" or bigger
Input	Balanced line level input, 3.5" Stereo jack
Sensitivity(SPL / 1W @ 1m)	85 dB SPL or better
Max.SPL @ 1m	100 dB SPL or better
Nominal Dispersion	150° H X 150° V or wider
Tone Control Bass	Yes
Tone Control Treble	Yes
Oprating	(-)10° to 40° C
temperature	
Power Supply	230 VAC / 80 VA max
Mounting system	U-bracket supplied with speaker

6.1.2 Fire Alarm System

Fire Alarm Panel	2 loop addressable fire alarm control panel, Controller shall be 5.7 inch color	
	touch screen display (320*240 pixels), inbuilt networking port (both	
	RS232&Ethernet), Serial port for printer, two supervisory inputs, two position	
	key switch and USB port for programming. The Panel shall handle 254	
	elements, 10,000 history events, menu driven user interface with smart	



	search. The events shall be displayed in different colors- red for alarm events & yellow for trouble etc. for easy identification. The Panel shall be EN 54approved.
Multi-criteria Sensor	Addressable multi sensor detector with a combination of Optical and Thermal including mounting base, auto addressing feature as required. Detector should have 2 inbuilt isolators as per NFPA 72 style 7 wiring requirements (one for incoming and one for outgoing line) for maintaining operational availability of all elements in the loop in the event of a short circuit and to meet style 7 requirements. Shall be with EN54 certification. (Detectors without Inbuilt Isolators may be considered with an additional Isolator Module per detector)
Manual Call Point	Addressable manual break glass unit (Double action) with inbuilt isolators as per NFPA 72 style 7 wiring requirements, with flexible network structures & necessary fixing arrangements with key complete as required. Shall be EN 54 Certified
Hooter	Stand alone Loop Powered Addressable sounder with inbuilt isolators & with 32 different tone variants selection options & adjustable sound pressure by 5 levels, the sound pressure 101.3dB, it should be programmed from the panel. Shall be EN54 Certified

6.1.3 Perimeter Surveillance System

0.1.3 Fermineter 3u	,
Bullet Camera	2 MP bullet camera with 1/3-inch CMOS, Active pixels 1920x1080; 2 MP at
	25/30fps, Sensitivity Color 0.6 lx, Mono 0.008 lux, With IR 0.0 lx, 84dB or better
	Wide Dynamic Range , Stream 1 and Stream 2 Should be Configurable at
	1080p 30 fps, H.265; M- JPEG, Multiple configurable streams in H.264 or
	H.265 and M-JPEG, White Balance, Day/Night, Automatic Electronic Shutter
	(AES); Dynamic Noise Reduction, Video Analytics line crossing, loitering,
	counter, object left in field, fence jumping should all be included in the
	camera, Privacy Masking Eight independent areas, fully programmable,
	Memory card slot, IR Range upto 60 metres, Automatic Varifocal 3 to 10 mm,
	ONVIF Profile S; ONVIF Profile G; IP66 & IK10. Housing, Mounting, Lens, IR
	Illuminator Should be of Same Make / OEM as of Camera.
NVR	Network recorder to a maximum of 32 IP cameras, The recorders can be
	installed with a maximum of 4 internal HDDs for video storage. Max. capacity
	per HDD: 6 TB. 1 no. E-SATA supported. 16 alarm i/p & 6 relay o/p.
	Simultaneous 1/4/9/16 channels playback. H.265/H.264/MJPEG supported.
	iPhone/Android support. Maximum incoming bandwidth of 320 Mbps.
	Maximum recording bandwidth of 320 Mbps. 1 I/O for audio. 1 VGA & 2
	HDMI outputs. CE, UL & FCC certified.
32" LED TV	Screen Size: 32", Resolution: 1920x1080, Brightness(Typ.): 350 cd/m²,
	Interface: HDMI(2)/ DVI-D/ RGB/ USB/ RS232C/ RJ45/Audio/ IR, Speaker: 20
	W(10 W x 2), LED TV should support minimum(16x7 hrs.) runtime

6.1.4 PA System Wall Mount Speaker

Woofer	5.25"
Tweeter	1 inch silk dome tweeter
100 Volt power taps	30W, 15W, 6W, 3W
Music power RMS	80 W / 16 Ohm
Frequency response	70 Hz to 20 kHz
SPL 1W / 1m	90dB
SPL 1m / max rated power	109dB



Dispersion at 1kHz, 4kHz, 8kHz	180°, 90°, 70°
Cabinet construction	ABS with bass reflex
Grille material	Steel
IP rating	40
Program Power@8ohm	80watt

Digital Amplifier

Technology	Class-D
RMS output power 4 ohms	4 X 240watt
RMS output power 8 ohm	4 x 120
Output power RMS bridged 8 ohms	2 x 480
Output power RMS bridged 100 volts	2 x 480
Minimum impedance load bridged per	8
channel in ohms	
Output voltage tappings	100 - 70 - 50 - 35 volts - 4 ohms
Line input balanced	4
Channel separation	> 68 dB @ 1 kHz
Frequency response (in Hz)	50 - 20 k
Power supply technology	2 x switching mode power supply
Cooling	Convectional and temperature controlled fan
Protection circuits	Over current, over temperature

Audio Control Matrix

Different sound sources in different zones at various volume levels Do selective paging and on top of that control other devices as well Total harmonic distortion TBH < 0.005 or better
other devices as well
Total harmonic distortion TBH <0.005 or better
Signal to noise level SNR (dB) >100 or better
crosstalk (dB) >95 or better
MIC inputs unbalanced 6 or more
S/PDIF input 1 stereo or more
RS232 (serial communication port) Available
Music level control
Frequency response (in Hz): 20 - 30 k
Power supply 115-230VAC
configurable zone output 8 or more
Signal to noise level >100db or better
Mic level control, source selection per zone
6MIC input unbalanced, 1 sterio line input SPDIF, RS232
Power consumption 75watt
THD <0.005
Music control level, VCA level control, noise gate on MIC
maximum paging mic 120 qty

Paging Station

Programmable digital paging station with
the possibility to communicate with different
zones



Can be used	12 different zones
The unit has universal configuration of push	
buttons	
12 selection buttons and status LED's and a	Yes
push-to-talk button and multicolour paging	
status LED's	
Expandable up to	64 zones or presets or more
Buttons	12 programmable + Call + All Call
Power type-	Phantom or external power supply
Mic - polar pattern	Uni-directional or better
1 per button + multi-colour status	
Lo-cut	220 Hz, 6 dB/oct or better
Frequency range	220 Hz - 20 kHz or better

Professional Media Player

· · · · · · · · · · · · · · · · · · ·	
DAB Tuner / DAB +	Yes
USB	32 GB up to 9999 songs
Supported file format	MP3, WMA
Supported bluetooth profiles	A2DP, AVRCP and SPP
Other/digital outputs	1 x optical + 1 x coaxial
RS232 control	Yes
FM tuner	Yes
CD	Yes
SD Card	32 GB
unbalanced outputs	2 x RCA + COMBI RCA
IR remote included	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Applicable low impedance	
Applicable in 100V	

6.1.5 Digital Notice Board LED Screen

Screen Size	43-inch
Aspect Ratio	16 :9
Backlight Scanning	100Hz
Resolution	1920 x 1080 pixels
Viewing Angle	178°/178°
Brightness	400nits
VIDEO IN	RCA X 1
AUDIO IN (L/R)	RCA Pin Type X 2
HDMI IN	HDMI 1.4 X 2
USB Input	USB 2.0 X 1
RS232C	Yes
HDMI CEC	Yes
VGA IN	Yes

Media Player

CPU	Quad-core RK3229 ARM Cortex A7 processor @ 1.5 GHz RK3229
GPU/ Graphics	Mali-400MP2 OpenGL ES 2.0
OS	Android 6.0.1
Memory	2GB DDR3
Storage	16 GB
Wi Fi	802.11/b/g/m with 2dB antena



Ethernet	10/100 Mbps
O/P Ports	HDMI
USB	4 USB 2.0 ports
SD	SD card slot, support up to 32 GB
Resolution	1920 x 1080
Video Formats	MPEG-1, MPEG-2, MPEG-4, H.263, H.264
Audio Formats	MP3, WAV, MID
Image Formats	JPG, JPEG, BMP, PNG, TIFF, TIF

Server Signage Software

Network Based RemoteControl your signage network via browser without installing a software from central locationMulti Regions/ZonesDivide the screen the way you want in to as many regions as required	,		
	181		
I Divide the screen the way you want in to as many regions as required	ואר		
	Divide the screen the way you want in to as many regions as required&		
	populate images, videos, flash, etc in these regions using drag-and-drop		
interface			
Content Scheduling Easy and intuitive interface for scheduling content on as per time, da	te,		
display, layout, etc			
Content Support Video Formats: wmv, avi, mpg, mpeg, flv, mov, mp4, mkv, vob, 3gp			
Image Formats: jpg, bmp, png, gif, tiff, tif			
Flash Format: swf			
Text: Show static as well as scrolling text (Tickers)			
Adobe: pdf			
Stretch to Fit videos and Stretch/Skew any video or image to occupy entire display regi	on		
images without leaving bands at the sides, top or bottom	without leaving bands at the sides, top or bottom		
Emergency/Instant Override scheduled data ¤t content on the screen(S) w	ith		
Messages emergency messages			
Pre-Crafted Templates			
Content Push & Pull Support content push from server & well as pull from the media play	er.		
Content push can be done by button click or at a pre defined interval	or		
when content changes. Content pull can happen at predefined perior	oik		
interval. Both these feature support sync scheduling to avoid netwo	ork		
usage during working hours			
Multi-screen support Rlay/control multiple screens from one hardware			
User Access & Multi Level user access, Administrator will have all the rights and he of	an		
Management create users/user groups and assign rights, user access can be provided	ed		
for a player, group of players or each module like playlist creation	on,		
layout management, reports etc. Forgot password option available	for		
users			

6.1.6 Visitor Management System

- Processor: 32 Bit high speed embedded processor
- Display: 3 inch TFT User Capacity: 2,200
- Transaction Storage: 50,000
- Communications: RS232/485, TCP/IP
- Provision to connect 3rd party Controller as well as Integrated Command & Control Centre of
- Support external On Touch & Push Button
- 6.1.7 wireless display and MCQ testing software and the tablets:
 - 1. Wireless display connectivity from any PC, Mac, Chromebook, or iOS & Android device, stream uninterrupted full-HD wireless video (up to 1080p60), images and documents in the room, User authentication,1024-bit data encryption, dynamic room code, Drag and



drop files to share instantly with other users, Give a participant optional control over a presenter's Mac or PC laptop to enable collective document editing, Customizable features i.e. Enable or disable features based on need, Offer custom e-Polling and MCQ tests to users and produce reports, Record an entire video and audio session to a local video file, Whiteboard feature with annotate, illustrate and edit shared documents.

2. Android/iOS based tablet with minimum quad core processor, 7 inch screen or more, inbuilt WiFi, 2GB RAM or more, 16GB internal memory or more, Android v7.0 or iOS9 or better

6.1.8 Intelligent Lighting System

Sr No.	Particulars	Specification
4	C	TI C : III I O D : II '
1 Central Hub		The Central Hub & Processing Unit
		Works on 2.4 GHz frequency
		16 GB internal memory expandable up to 32 GB
		700 MHz ARM processor
		Latency of 200 milliseconds for up to 25 switch modules
		LED Indicator for quick status & notification
		Security: WPA, WPA2 (Wi-Fi), RSA-256 & AES-128 Encryption
		Power Rating: 300mA (1.5W)
		Lightweight protocol to enable devices to be energy &
		bandwidth efficient.
2	Switch Control	For up to six appliances on a single switchboard
		Built-in 2.4GHz ISM band Radio
		ECC-256 and AES-128 Encryption
		Max. Power Rating (per channel): 650 W
		Max. Power Rating (device): 1800 W
3	Motion Detector	It senses and can be used to trigger motion based light control
	(Common Areas)	Angular range: 105 degree wide and 40 degree vertical
		Range: 6 to 8 meter
		Proximity detection: 15 cm
4	LED Light panel	Wattage : 36 to 45 Watt
		Size : 1 Ft by 4 Ft (1200XX300X65mm)
		Chip Lumen :4000 to 5400 Lumen
		Material : Aluminum casting + ABS (White Finish)
		Color: 6K Cool White
		Power factor > 0.9
		Voltage - 230 VCA
		LED Lumen > 120 lm/watt
		Type of LED : SMD
		LED Life Span: 50,000 Hours
		Beam Angle : 120 Degree
5	Switches	Swiches - 6 A to 32 A - 250 V AC
		Finger Proof terminals for IP 20 Protection against accidental
		contact Captive never ti loose screw
		Fully shrouded internal mechanism under the rocker preventing
		visibility of sparks
		Tunnel Terminals preventing screwdrivers from slipping
		Laser marking on mechanism
		IS 3854 : 1997
6	Dimmer For Fan	Fan Dimmer/ Smooth Dimmer: 100 to 120 Watt (48" and 56"
-		
3	Similar 101 Tull	fans)



7	Sockets	Indian Standard Socket: 6 A to 25 A Stripping templates on Sockets for stripping off exact length of insulation Socket are shuttered for child safety against electric			
		shock			
Dashboard	d				
Control	On/off, Dimming, Scheduling, Moods				
	Easy-to-understand UI for complete control of Lighting. On/off, dimming, set timers features to be included				
Analyze	Real time energy monitoring & analysis Study the real time energy consumption for each room and check for faulty consumption. Also, lets you study the daily usage pattern in terms of time and energy with graphs and analytics.				

6.1.9 PC's in Computer Lab

Sr No.	Particulars	Specification
1	PC	Processor i5 Latest generation, RAM 8GB, HDD 1TB, 2GB. Dedicated Graphics card, 21" monitor, USB Keyboard & Mouse with UPS for 30min Backup.



Section 7: Annexures

7.1 Form of Agreement
This Agreement mutually agreed and entered into on thisday of, Two Thousand
Nineteen at,
BETWEEN
Chandigarh Smart City Limited, a company incorporated under provisions of the Companies Act, 2013, having its registered office at (hereinafter referred to as "CSCL" which expression shall, unless repugnant to the context include its successor and assigns) of the FIRST PART
AND
M/s ******, a company incorporated under provisions of the Companies Act, 1956/ 2013, having its registered office at, hereinafter referred to as "Concessionaire" which expression shall, unless repugnant to the context include its successors and permitted assigns, OF THE OTHER PART.
WHEREAS the CSCL has invited tender for the Implementation of Smart School in Government Schools
in ABD Area and Operation & Maintenance of the Complete system for a period of Five Years Under
Smart City Mission, from the eligible firms /agencies /companies (Brief
description of Goods and Services) and has accepted a bid by the Successful bidder for the supply,
installation, commissioning of hardware and integration of Educational Digital Contents in the sum of
(Contract Price in Words and Figure) (hereinafter called "the Contract Price").
NOW THEREFORE, IT IS HEREBY AGREED BY AND BETWEEN THE CSCL AND THE SUCCESSFUL BIDDER
AS FOLLOWS:

- 1. In this agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
- 2. Support services from the selected agency/firm/company would be required to Smart classrooms items on regular basis to CSCL on all working days between 09:00 Hrs to 17:30 Hrs. No separate charges for delivery of goods would be paid by the office.
- 3. That the Hardware and software of Smart Classrooms shall be delivered and installed strictly within the implementation schedule specified in Section VI of the tender document.
- 4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - a. the Bid Form and the Price Schedule submitted by the Bidders;
 - b. Instructions to bidders;
 - c. That the services/equipment shall be confirming with the quality and specification given in the Scope of Work;
 - d. General Conditions
 - e. Notification of Award
- 5. The Successful bidder shall be bound by the details furnished by him/her to the CSCL while submitting the tender or at subsequent stage. Upon selection of the successful bidder, if at any stage, the document furnished by him/her is found to be false or the quality of the equipments and services or rate are found of poor quality or different specifications, it would be deemed to be a breach of terms of contract, the contract shall be cancelled and Performance Security shall be stand forfeited.
- 6. The rate quoted by the selected Successful bidder, and as approved by the CSCL, shall remain valid throughout the period of contract and the request to increase the rates for any or all items, during the period of contract, shall not be entertained at any stage.



- 7. The rate submitted by the Successful bidder should not be higher than the Govt. approved/DGS&D rates at which the Smart classrooms equipments are being supplied & installed by its to other Govt. institutes/Ministries/Departments. If subsequently, it is found that the firm has supplied equipments at higher rates to the CSCL, the excess amount shall not recovered from the Performance Security and/or from the pending bills of the firm along with a penalty of Rs. ______ on the firm on such occasion and shall be doubled on subsequent occasion.
- 8. In considerations of the payments to be made by the CSCL to the Successful bidder as hereinafter mentioned, the Successful bidder hereby covenants with the CSCL to provide the goods and services and to remedy defects there in conformity in all respects with the provisions of the contract.
- 9. The CSCL hereby covenants to pay the Successful bidder in consideration of the provision of the goods and services and the remedying of defects therein, the contract price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.
- 10. That in the event of any dispute arising between the parties, the same shall be adjudicated as per Clause 15 Section 5: Conditions of Contract
- 11. Brief particulars of the goods and services which will be supplied/provided by the Successful bidder are as under:

S.	Brief descr	iption o	of Hardware,	Quantity	to Be	Rate	Total	Delivery
No.	Educational D	Digital		supplied			price	Terms
	Content and							
	services							
						1		

Total Value:

Delivery Schedule:

THIS AGREEMENT will take effect fromday ofTwo Thousand Nineteen and shall be valid for sixty months.

IN WITNESS WHEREOF, both the parties CSCL and the SUCCESSFUL BIDDER have entered, their respective common seals to be here unto affixed/ (or have unto set their respective hands and seals) into this Agreement as of {the} day of {month} 2019 here at Chandigarh.

For and on behalf of the 'Agency/firm/ company'	For and on behalf of the "CEO, CSCL"		
Signature of the authorized officer	Signature of the authorized officer		
Name of the Officer	Name of the Officer		
By the Said	By the Said		
Names on behalf of the	Names on behalf of the "CEO,		
"Authorized Signatory, of the firm / company "	CSCL"		
In the presence of	In the presence of		
Witness:	Witness:		
Name:	Name:		
Address:	Address:		



7.2 Format for Performance Bank Guarantee

(On Rs. 100/- non- judicial stamp paper)

1.	In consideration of the Chandigarh Smart City Limited, Building No. 1, 2nd & 3rd Floor, Adjoining
	SCO 17-18-19, Over New Bridge, Sector 17-A, Chandigarh – 160017 (INDIA) (hereinafter called 'the
	CSCL') having agreed to M/s Firm name with address (hereinafter called the said 'Successful
	bidder(s)') from the demand, under the terms and conditions of work order NoDated
	made between Chandigarh Smart City Limited and M/s Firm name for the Name of
	work (hereinafter called 'the said Agreement') of security deposit for the due fulfilment by the said
	Successful bidder(s) of the terms and conditions in the said Agreement on production of Bank
	Guarantee for Rs (Rupees Only) we, Bank name with address,
	(Indicate the name of Bank) (hereinafter referred to as 'the bank') at the request of M/s Firm name,
	Successful bidder(s) do hereby undertake to pay to the CSCL an amount not exceeding of Rs.
	(Rupees Only) on demand by CSCL.
2.	We, Bank name, do hereby undertake to pay the amount due and payable under this guarantee
	without any demur, merely on a demand from the CSCL stating that the amount claimed is required
	to meet the recoveries due or likely to be due from the said Successful bidder(s). Any such demand
	made on the bank shall be conclusive as regards the amount due and payable by the bank under
	this guarantee. However, our liability under this guarantee shall be restricted to an amount not
	exceeding Rs (Rupees Only).
3.	We undertake to pay to the CSCL any money so demanded notwithstanding any dispute or disputes
٥.	raised by the Successful bidder(s) in any suit or proceedings pending before any court or Tribunal
	relating thereto, our liability under this present being, absolute and unequivocal. The payment so
	made by us under this bond shall be valid discharge of our liability for payment hereunder and the
	Successful bidder(s) shall have no claim against us for making such payment.
4.	We, Bank name with address, further agree that the quarantee herein contained shall remain in full
⊣.	force and effect during the period that would be taken for the performance of the said agreement
	and that it shall continue to be enforceable till all the dues of the CSCL under or by virtue of the
	said Agreement have been fully paid and its claims satisfied or discharged or till person-in-charge
	on behalf of the CSCL certifies that the terms and conditions of the said Agreement have been fully
	and properly carried out by the said Successful bidder(s) and accordingly discharges this guarantee,
	or till 5 year & 6 months from the date of submission of bid whichever is earlier.
5.	We, Bank name with address, further agree with the CSCL that the CSCL shall have the fullest liberty
٦.	without our consent and without affecting in any manner our obligations hereunder to vary any of
	the terms and conditions of the said Agreement or to extend time of performance by the said
	Agreement or the extend time of performance by the said Successful bidder(s) from time to time or
	to postpone for any time or from time to time ant of the powers exercisable by the CSCL against
	the said Successful bidder(s) / Suppliers and to forebear or enforce any of terms and conditions
	relating to the said agreement and we shall not be relieved from our liability by reason of any such
	variation, or extension being granted to the said Successful bidder(s) / Suppliers or for any
	forbearance, act or omission on the part of the CSCL or any indulgence be the CSCL to the said
	Successful bidder(s) / Suppliers or by any such matter or thing whatsoever which under the law
_	relating to sureties would, but for this provision, have effect of so relieving us.
6.	This guarantee will not be discharged due to change in the constitution of the bank or the Successful
7	bidder(s).
7.	We, Bank name with address, lastly undertake not to revoke this guarantee except with the previous
_	consent of the CSCL in writing.
8.	This Guarantee shall be valid up tounless extended on demand to be made by the
	CSCL. Notwithstanding anything mentioned above, our liability against this guarantee is restricted
	to Rs (Rupees Only) and unless a claim in writing is lodged
	with us within six months of the date of expiry or the extended date of expiry of this guarantee, all
	our liabilities under this guarantee, shall stand discharged.



Dated the	day of	200
For		
(Indicate name of Bank)		

