

TAMIL NADU TEXTBOOK AND EDUCATIONAL SERVICES CORPORATION

Supply, Installation, Integration, Testing, Commissioning, Maintenance and Project Management (SIITCM&PM) of Hi-Tech Labs in Government Schools and Command & Control Centre in Tamil Nadu State

Response to Pre-bid queries

Technical Queries: Sl. 1 to 242; Non-Technical Queries: Sl. 243 to 342

Date:30-01-2023

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
1.	3	1, I	General	Supply, Installation, Integration, Testing, Commissioning, Maintenance and Project Management (SIITCM&PM) of Hi Tech Labs in Government Schools and Command & Control Centre in Tamil Nadu State.	Is the Hi-Tech lab used only for student assessments or also for any continuous training/ skilling needs? Request clarity.	No change.
2.	3	1, II	General	Solution architecture	Need clarity on the following 1. Can CoSE elaborate on the decision to have DC on private cloud while DR on public cloud 2. Can DC private cloud be on shared cloud infra or this needs to be dedicated 3. Is there any geographic restriction for public cloud hosting	No change.
3.	4	1, III, a	General	To setup new Hi-tech computer labs along with associated infrastructure at Government schools in the state of Tamil Nadu as per technical specifications mentioned in Chapter 8. Also, to enhance the facility of existing Hi-tech labs at Government Schools.	To facilitate and integrate the existing Hi-tech lab requesting to following to provide 1.Total Number of existing Hitech Lab 2.Make and model of existing Hitech Lab equipment 3.Elaborate the existing facilities in details 4.When Hitech Lab was installed? 5. How many years of warranty and AMC/CAMC is available 6.Do bidder need to cater the O&M of the existing Hitech Lab	No change.
4.	4	1, III, a	General	a) This project has two parts • To setup new Hi-tech computer labs along with associated infrastructure at Government schools in the state of Tamil Nadu as per technical specifications mentioned in Chapter 8. Also, to enhance the facility of existing Hi-tech labs at Government Schools.	Kindly confirm that enhancing the facility of existing Hi-Tech labs at Government schools is excluded from the scope of this RFP. If this component to be taken in scope, please share the number of existing Hi-Tech labs to be covered, and also elaborate on the scope of work relevant to existing Hi-Tech labs.	No change.
5.	4	1, IV, c	Internet	c) The internet connectivity shall be provided by the CoSE. The Connection will be landed at identified site. Further distribution of internet connectivity in the Hi-tech lab and the proper utilization of bandwidth is to be ensured by the Tenderer	Kindly confirm that any MPLS link, Internet Leased Line, Wired/Wireless Broadband link shall be provided to the MSI as a WAN link that can be terminated in SD-WAN Edge Device.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
6.	4	1, III, d	General	At the end of the Project Duration, the Tenderer must identify the Hi-Tech Lab devices which are worn out and/ or in irreparable damaged condition and responsibly dispose the mutually agreed inventory of equipment. The Tenderer shall ensure that the devices are maintained well until the end of the contract and specifically in the last 2 years of the contract. Failure to do so will result in penalties as may be prescribed at the sole discretion of the CoSE.	a) If the Project is extended then will the identified worn out devices be replaced by the department or it is to be done by the Tenderer? B) At the end of the project should the Tenderer replace the worn-out devices with new one?	No change.
7.	4	1, III, c	Warranty	The Tenderer(s) should setup the Hi-Tech Labs& CCC and maintain the same for the Project Duration as per Service Level Agreement Terms. The initial Project Duration shall be five years. The Project Duration may be extended by an additional Two years (after the completion of five years) based on the performance of the Tenderers and the needs of the department	We would request department to specify the warranty period as 3 years.	No change.
8.	4	1, III, a	General	To setup new Hi-tech computer labs along with associated infrastructure at Government schools in the state of Tamil Nadu as per technical specifications mentioned in Chapter 8. Also, to enhance the facility of existing Hi-tech labs at Government Schools.	A blueprint/model setup of the hitech lab will be approved/cleared by the department, before scaling up of the set up in all 5792 schools.	No change.
9.	4	1, III, d	Warranty	"The Tenderer shall ensure that the devices are maintained well until the end of the contract and specifically in the last 2 years of the contract. Failure to do so will result in penalties as may be prescribed at the sole discretion of the CoSE"	In case the original tender period of 5 years is extended by 2 years as mentioned in the key deliverables of the project, will the last 2 years refer to the 6th and 7th years or 4th and 5th years.	No change.
10.	5	1, V, a	OEM-MAF	The Tenderer shall furnish Manufacturer's Authorization Form (MAF) from the Principal Manufacturer/ OEM with Make & Model for the items 1 to 7 and 12 & 13 in Chapter 7 as per the format in Annexure - II and provide support during the Warranty & Extended Warranty Periods#. If the Tenderer itself is the OEM, then MAF is not required. #Warranty period shall be the same as the Project Duration and Extended Warranty Period shall be the same as the Extended project Duration.	1) Does the items 1 to 7 and 12&13 in first clause and items 1 to 13 mentioned in second clause applicable only for table 1# or both the tables (Table 1 and Table 2*) given in the Chapter 7? #Table 1:Phase I: Minimum BOQ for Identified Government Schools *Table 2:Minimum BOQ for Command Control Centre Please confirm.	No change.
11.	5	1, VI	General	a) Tenderer should impart one day training to five identified staff at every school on admin and user related activities after completing Installation, Integration, Testing and Commissioning. The School Headmaster will depute the relevant teachers on stipulated time. b) Pre-scheduled refresher trainings must be organized on annual basis (one day duration) to	No separate line item is mentioned there in the Price Bid format for Training. Please elaborate about inclusion of Trainings in the Price Bid and its payment terms.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				ensure identified staff at every school are trained on admin and user related activities and requirements of user maintenance.		
12.	5	1, VI, a	General	Tenderer should impart one day training to five identified staff at every school on admin and user related activities after completing Installation, Integration, Testing and Commissioning. The School Headmaster will depute the relevant teachers on stipulated time.	Please confirm the training has to be conducted at the District Head Quarters level as school level training would prove expensive without any benefit to the government initiative.	No change.
13.	5	1, IV, g	IT Infra Solutions	g) The requirement of Desktop PCs for each school is as per Section.7. The quantity is tentative and may vary from school to school. Accordingly, the Tenderer should enhance the requirement of UPS / LAN / Electrical and Table & Furniture.	Kindly confirm it is envisaged that each Hi-Tech lab shall be implemented within single room in each school, extending Hi-Tech lab to nearby / adjacent rooms if required shall be handled on a case-to-case basis.	No change.
14.	5	1, VI, a	General	Tenderer should impart one day training to five identified staff at every school on admin and user related activities after completing Installation, Integration, Testing and Commissioning. The School Headmaster will depute the relevant teachers on stipulated time.	a) How many total staffs need to be trained ? Admin, (Teaching, Non Teaching staff etc) B) Will one day training for school staffs be enough ? C) Will the infrastructure be provided by the department ? D) Will there be retraining required ?	No change.
15.	5	1, VI, b	General	Pre-scheduled refresher trainings must be organized on annual basis (one day duration) to ensure identified staff at every school are trained on admin and user related activities and requirements of user maintenance.	Can refresher training be provided online?	No change.
16.	5	1, IV, f	IT Infra Solutions	All system software or any other application licenses procured by the Successful Tenderer under this project will be in the name of the CoSE on a perpetual basis and should be genuine. The original copy of the same shall be deposited by the successful Tenderer at the CoSE's office after signing of the contract and before the installation of the software at any of the schools.	Licenses shall be supplied as per the OEM terms Perpetual licences will be a challenge for the bidder if the software OEM will not support under perpetual conditions.	No change.
17.	5	1, IV, b	IT Infra Solutions	Open-source Linux Operating system is preferred for Desktop Systems. Tenderer must maintain uniformity in the product of Linux OS for all the systems. Preferably OS should be compatible for Education related activities	If possible, please share the list of activities planned to operate in LINUX OS to confirm the compatibility Also, 1. Can we have the current OS information, that is used 2. Why Linux OS is preferred for desktops	No change.
18.	5	1, IV, c	Internet	The internet connectivity shall be provided by the CoSE. The Connection will be landed at identified site. Further distribution of internet connectivity in the Hi-tech lab and the proper utilization of bandwidth is to be ensured by the Tenderer.	The internet connection should be landed at the hi-tec lab by the department. Kindly share who is/are the internet service provider/s and what is the	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					dedicated bandwidth available at school level?	
19.	5	1, IV, d	IT Infra Solutions	To procure and install the required amount of furniture and LAN connectivity & electrical works activities along with earthing at the site as per the tender specifications	Can CoSE share each school and CCC wise working area layout with dimension size details, and we also need number of LAN points and desk requirement.	No change.
20.	5	1, IV, f	IT Infra Solutions	All system software or any other application licenses procured by the Successful Tenderer under this project will be in the name of the CoSE on a perpetual basis and should be genuine. The original copy of the same shall be deposited by the successful Tenderer at the CoSE's office after signing of the contract and before the installation of the software at any of the schools.	Isn't the software license to be provided for the project duration (5+2 Years) and not for perpetuity?	No change.
21.	5	1, VII, a	Integrating the Hardware, & Other Infrastructure to the Command Control Center	Each Hi-tech lab will be considered to be commissioned only after completion of integration with the Command Control Center environment equipment.	N/A	Telecom Service Provider identified by CoSE shall provide internet connectivity for Schools and Command Control Centre. Appropriate network solution and required devices will be provided by the TSP. The System integrator should work closely with TSP to connect with Hi-tech Labs proposed at Schools from the central locations and provision to handle the components at schools such as Desktop Computers and other items. The integration of school and CCC alone shall be treated as commissioning of Hi-tech lab.
22.	5	1, VI, a	General	Tenderer should impart one day training to five identified staff at every school on admin and user related activities after completing Installation, Integration, Testing and Commissioning. The School Headmaster will depute the relevant teachers on stipulated time.	Please confirm the mode and timeframe for the training of School Staff. Can trainings be aggregated at block level?	No change.
23.	6	1, VII, d	Integrating the Hardware, & Other Infrastructure to the Command Control Center	d) Helpdesk environment to be setup at the CCC to address all queries related with Operation & Maintenance.	Kindly confirm the number of concurrent users for Helpdesk tool.	Please refer to response to Sl. No. 38
24.	6	1, VIII, b, d	SD-WAN	d. Any up-gradation of Software solutions for SD-WAN Device in future with respect to ensure safety measure at CCC & Schools shall be carried out no additional cost.	Kindly confirm understanding that this clause refers to no additional cost for device software upgrades, whereas extra licences for additional software features shall be procured by the customer separately as and when required.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
25.	6	1, VIII, b, b	CCC Applications	The ability to push learning material having video/ audio/ any other acceptable format to the Hi-tech labs within a stipulated time specified by the CoSE.	Since the operation of the lab will be in an online mode, the learning material is to be updated at the DC/CCC level. Kindly clarify if this assumption is right.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
26.	7	1, VIII, b, g	CCC Applications	The proposed datacenter should be designed in such a way that it is capable of hosting the following applications and should provide an integrated dashboard: (i) Enterprise Management System, (ii) Helpdesk Management System, (iii) Content Management System, and (iv) Learning Management System and Online Exams.	Kindly confirm that (iv) Learning Management System and Online Exams shall be the scope of the Purchaser, Bidder's scope shall be to provide the infra for delivering Learning Management System and Online Exams from CCC to schools.	No change.
27.	7	1, VIII, b, e, iii	General	The infra should have all safety and security systems like fire detection and suppression, CCTV, access control etc.	The term 'all' & 'etc.' can mean many things request you to kindly specify or else remove the words.	No change.
28.	7	1, VIII, b, f	CCC Infrastructure	<ul style="list-style-type: none"> i. CCC Infrastructure design should be implemented for 15-seater operations considering the scalability of solutions. ii. Design, supply, installation, testing, commissioning, and maintenance of helpdesk environment equipment like workstations, civil works, furniture required, cooling solutions required, electrical works required, video-wall solutions with audio video data controller, monitoring system and wall management software; hardware along with necessary accessories. iii. The Tenderer should provide Videowall of 3X255" (Diagonally) Ultra-Thin Bezel Gap with smart Calibration or Higher Model. iv. The full HD Video Wall to be designed for 24x7 operation and should be of the most recent generation. v. Video wall should have the video wall processor and engine which can have the flexibility to show or display from different sources with layout flexibility, drag drop facility and desktop sharing features etc. vi. The large full HD video wall display shall be usable for presentations, HD Video, satellite TV displays etc. Video wall should have the flexibility for viewing many images or should have an edge to enlarge few images as required. vii. The video wall engine cum software should have a user friendly layout and should permit the user to watch videos from different sources on the video wall at the highest available resolutions. viii. The Tenderer has to supply and install the necessary licenses, software and to meet the specifications of the RFP. The cost of such licenses should be included in Video wall system cost and even after completion of contract period, the CoSE will not pay any additional cost/ charges for the same for utilization. 		<p>It has been decided to delete the Video Wall and Workstations from the procurement (applicable to the entire document). The Workstations shall be provided by the CoSE, but shall be maintained by the vendor. In light of the above, the following modification is made:</p> <ul style="list-style-type: none"> i. CCC Infrastructure design should be implemented for 15-seater operations considering the scalability of solutions. ii. Design, supply, installation, testing, commissioning, and maintenance of helpdesk environment equipment like civil works, furniture required, cooling solutions required, electrical works required, monitoring system; hardware along with necessary accessories. iii. The Tenderer has to supply and install the necessary licenses, software and to meet the specifications of the RFP. The cost of such licenses should be included and even after completion of contract period, the CoSE will not pay any additional cost/ charges for the same for utilization. <p>Note: Relevant changes as a consequence of the above shall also be made in the Service Level Agreement to be signed with the finalized bidder.</p>

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				ix. Audio & video when played on the video wall should be equally intelligible on all parts.		
29.	7	1, VIII, g	CCC Applications	The proposed datacenter should be designed in such a way that it is capable of hosting the following applications and should provide an integrated dashboard: (i) Enterprise Management System, (ii) Helpdesk Management System, (iii) Content Management System, and (iv) Learning Management System and Online Exams.	Is the expectation of data sync from schools with the DC real-time or near real-time?	No change.
30.	8	1, VIII, g, (i), e, ii	CCC Applications	ii. In cases of departments that have an existing Enterprise Resource Planning (ERP) system (complete or partial), the service provider must facilitate integration with those systems using APIs etc.	Kindly confirm that integration with existing ERP systems refers the integration of proposed Content Management Platform with Education-MIS of Department?	No change.
31.	8	1, VIII, g, (i), e, iii	CCC Applications	iii. In cases of departments / sources without an ERP system but with databases, the service provider must source data by connecting to the respective databases.	Kindly confirm this refers the integration of proposed Content Management Platform with Education-MIS of Department? Kindly provide more details on the existing Databases, for Bidder to plan the efforts accordingly.	No change.
32.	8	1, VIII, g, i, e, i	CCC Applications	Departments will contribute the data in multiple ways and the service provider should be able to collate the base data for generating the reports in each of the cases mentioned below.	Please share additional details as sought below to ensure the dashboard solution is sized appropriately : Details about the Application to be integrated. - Details about the number Dashboard / Reports to be created. - Understanding of the Data Refresh rate in Dashboard (Daily / Weekly, etc.) - Consideration of the cloud for the data ingestion, data modelling, storage, data security, etc. - Number of users who will create the report and number of users to consume the report.	No change.
33.	8	1, VIII, g, i, a	CCC Applications	Enterprise Management System to be provided for ITSM, Network Management, Asset Management, Knowledge Base, SLA monitoring on all IT equipment, Security Management of all school firewalls and reporting system	Please confirm what all the process of ITSM is required? Can current Enterprise Management System details be shared with us for better understanding?	No change.
34.	8	1, VIII, g, i, b	CCC Applications	Proposed control center should be able to manage all the IP enabled IT components from the central locations such as SD-Wan device, Switches and Desktop systems.	Suggest replacing the clause with the following The IP version will be aligned to the latest Government of India / Tamil Nadu standards relevant to the same	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
35.	8	1, VIII, g, i, c	CCC Applications	Solution should be designed to monitor, manage, facilitate IT equipment of all Schools and should be scalable to handle 10,000 schools without upgrading hardware (Network, Firewall) components	We request to relook into this requirement as growth of IT equipment will mean tech/capacity upgrade.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
36.	8	1, VIII, g, i, e, i	CCC Applications	Departments will contribute the data in multiple ways and the service provider should be able to collate the base data for generating the reports in each of the cases mentioned below	1. What are the various ways (examples) in which the departments will provide the data? 2. Is the format of the data the same across different department sources? 3. How is the collation being managed currently? 4. What is the purpose of the stated reports, who are the users and can a sample report be provided for clarity in our understanding 5. What is the transaction volume sizes expected for these applications? 6. What is the average size and growth of the database.	No change.
37.	8	1, VIII, g, i, e, ii	CCC Applications	In cases of departments that have an existing Enterprise Resource Planning (ERP) system (complete or partial), the service provider must facilitate integration with those systems using APIs etc.	1. What are the various ERP systems being used in the departments? 2. How is the integration with such systems being done currently?	No change.
38.	8	1, VIII, g, i, e, iii	CCC Applications	In cases of departments / sources without an ERP system but with databases, the service provider must source data by connecting to the respective databases	1. What are the various database types being used in the departments? 2. How is the integration with such systems being done currently?	No change.
39.	8	1, VIII, g, ii, a	Helpdesk Management Systems	<p>i. The Tenderer shall provide help desk service which will serve as a single point of contact for all ICT related incidents and service requests. The service will provide a Single Point of Contact (SPOC) and resolution of incidents.</p> <p>ii. Help Desk facility for reporting issues / problems with the IT infrastructure.</p> <p>iii. The Help Desk shall undertake the following activities:</p> <ul style="list-style-type: none"> • Log issues / complaints related to I.T. at the school under the scope of work and • issue an ID number against each issue / complaint. • Assign severity level to each issue / complaint. • Track each issue / complaint to resolution. • Escalate the issues / complaints, to the CoSE, if necessary, as per the escalation matrix defined in discussion with 'CoSE'. • Provide feedback to 'CoSE' periodically. • Analyze the issue / complaint statistics periodically. 		<p>The following clauses replace the existing clause:</p> <p>a. Proposed control center should provide helpdesk functionality to log the calls, monitor the network, resolve the issues, manage OEM and report to CoSE on Utilizations, Availabilities, Issues and complete MIS information. It should reflect on the Dashboard of CCC.</p> <p>b. The Helpdesk Management System shall operate through Ticketing Software, to be procured and provided by the CoSE.</p> <p>c. The vendor will map the Device IDs across schools to the Ticketing Software for easy logging of complaints and resolution.</p> <p>d. All schools will call the assigned toll-free number as identified by CoSE only. Based on ticket raised, the respective vendor will resolve issue as per SLAs. The individuals that log their complaints should be able to track their complaint resolution status, and real-time complaint resolution</p>

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				<ul style="list-style-type: none"> Creation of knowledge based on frequently asked questions (FAQs) to aid the users of the I.T. infrastructure iv. Proposed control center should provide helpdesk functionality to log the calls, monitor the network, resolve the issues, manage OEM equipment and report to CoSE on equipment/ system utilization, availability, issues and complete MIS information. v. Helpdesk should be reachable through Mobile based contact center solutions, E-Mail, Web based applications, and social media. SMS based ticketing and status update solutions should be available. Individuals logging complaints should be able to track their complaint resolution status, and real-time complaint resolution dashboard shall be made available to the CoSE.		<p>dashboard shall be made available to the CoSE.</p> <p>e. Severity level of issue will be marked in the ticket against which the vendor can update a separate field for vendor assigned severity level.</p> <p>f. The vendor's MIS shall track each issue/ complaint until resolution and update the status of resolution as per SLA.</p> <p>g. The vendor shall escalate the issues/ complaints to the CoSE, as per the escalation matrix defined in discussion with 'CoSE' and provide feedback periodically with an analysis of complaints.</p> <p>h. The vendor shall create a knowledge base based on FAQs to aid the users of the IT infrastructure at the schools.</p> <p>i. The Ticketing Software will allow tickets to be raised through Mobile, E-Mail, Web based applications, and social media. SMS based ticketing and status update solutions would also be available.</p> <p>j. Vendor must provide the manpower for the Help Desk.</p>
40.	8	1, VIII, g, ii, a	Helpdesk Management Systems	The Tenderer shall provide help desk service which will serve as a single point of contact for all ICT related incidents and service requests. The service will provide a Single Point of Contact (SPOC) and resolution of incidents.	Please confirm if helpdesk support is required only in English or in English and Tamil?	<p>English & Tamil.</p> <p>Please refer to response to Sl. No. 38</p>
41.	9	1, VIII, g, i, e, iv	CCC Applications	in cases of departments using a file-based MIS reporting system like sharing over excel/text files, the service provider must source the data uploaded by the department users	We would like to detail understanding of given requirement	No change.
42.	9	1, VIII, g	IT Infra Solutions	125 KVA - Generator - DG set	As we understand for (N+N) redundancy of power supply minimum 2 DG sets need to be provided to meet the compliance. Kindly confirm	No change.
43.	9	1, VIII, g, iii	CCC Applications	Potential to push a learning material having Video/Audio or in any other Digital acceptable format to the Hi-tech labs schools within a stipulated time specified by the CoSE.	We believe that all content related to CMS, LMS & online exam will be provided by COSE and bidder scope is only to push content from CCC to schools. Kindly confirm.	No change.
44.	9	1, IX	Internet	General	How many WAN links are required at School level? Please clarify the scope of WAN links at remote sites to be provided by the Bidder or the purchaser?	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
45.	9	1, VIII, g, i, e, iv	CCC Applications	iv. In cases of departments using a file-based MIS reporting system like sharing over excel/text files, the service provider must source the data uploaded by the department users.	Kindly provide more details on the existing MIS tools, for Bidder to plan the efforts accordingly.	No change.
46.	9	1, VIII, g, ii, e	CCC Applications	Helpdesk should be reachable through Mobile based contact center solutions, E-Mail, Web based applications, and social media.	Request you to confirm that the Mobile contact center solutions refers to Whatsapp chatbot based solution	Please refer to response to Sl. No. 38
47.	9	1, VIII, g, v	IT Infra Solutions	Any upgradation requirement related to CCC Enterprise Solutions Software in future should be carried out with no additional cost.	Request you to confirm that th upgradation refers to the patch upgrades of CCC Enterprise Management System.	No change.
48.	9	1, VIII, g, ii, e	CCC Applications	e) Helpdesk should be reachable through Mobile based contact center solutions, E-Mail, Web based applications, and social media. SMS based ticketing and status update solutions should be available. Individuals logging complaints should be able to track their complaint resolution status, and real-time complaint resolution dashboard shall be made available to the CoSE.	Kindly confirm that the SMS solution to be designed and customised to trigger automated SMS alerting to Authorities for the following scenarios: 1. New Ticket 2. Unattended Ticket 3. Closure of Ticket 4. Alert of approaching SLA breach 5. Alert on SLA breach Please confirm the no. of Authorities to be alerted for each of the above scenarios.	Please refer to response to Sl. No. 38
49.	9	1, VIII, g, ii, e	CCC Applications	Helpdesk should be reachable through Mobile-based contact center solutions, E-Mail, Web based applications. SMS Based ticketing and status update solutions should be available. Individuals logging complaints should be able to track their complaint resolution status, and real-time complaint resolution dashboard shall be made available to the CoSE.	Is there a requirement for mobile apps for helpdesk?	Please refer to response to Sl. No. 38
50.	9	1, VIII, g, ii, c	Helpdesk Management Systems	Escalate the issues/ complaints, to the CoSE, if necessary, as per the escalation matrix defined in discussion with 'CoSE'.	How many levels of escalations are required?	Please refer to response to Sl. No. 38
51.	9	1, IX, b	IT Infra Solutions	Tenderer should size Compute, Memory, Storage, Network aspects based on all CCC Application requirements for Schools and should be scalable to 10,000 schools by upgrading existing hardware without disturbing services	We request to relook into this requirement as growth of IT equipment will mean tech/capacity upgrade. Request department to fulfill this on mutual agreed terms when the need arises.	No change.
52.	9	1, VIII, g, iv	CCC Applications	CCC infrastructure should be sized to host the LMS solution and conduct online exams at all 5792(or subsequently enhanced number) schools in parallel.	Please confirm the languages in which the online exams are to be conducted.	No change.
53.	9	1, VIII, g, iv	CCC Applications	CCC infrastructure should be sized to host the LMS solution and conduct online exams at all 5792(or subsequently enhanced number) schools in parallel.	1. The number of students in a class can be more than 10. Can we assume that, for example if the class has 30 students, they will take 3 different assessments at different times, which means need for 3 different question papers?	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					<p>2. Who will create the question bank, if any, needed? Who will update the question bank on to the assessment platform?</p> <p>3. Who will create & review the question papers?</p> <p>4. Can we assume that all exams are ONLY online, and hence internet availability in schools will be at 99%+ SLA?</p> <p>5. Will there be any overlap among the schools where Hi- Tech labs have already been set up in the past? Specifically, will a school have multiple hi-tech labs for middle, secondary and higher secondary?</p> <p>6. In such case, will internet availability be dedicated to each of these labs?</p>	
54.	9	1, VIII, g, v	CCC Applications	Any up-gradation requirement related to CCC Enterprise Solutions Software in future should be carried out with no additional cost.	We request to relook into this requirement as growth of IT equipment will mean tech/capacity upgrade. Request department to fulfill this on mutual agreed terms when the need arises.	No change.
55.	10	1, XII, b	OEM-MAF	The Tenderer shall furnish Manufacturer's Authorization Form (MAF) from the Principal Manufacturer/ OEM with Make & Model for the items 1 to 13 in Chapter 7 as per the format in Annexure-II and provide support during the Warranty & Extended Warranty Periods. If the Tenderer itself is the OEM, then MAF is not required.	<p>1) Does the items 1 to 7 and 12&13 in first clause and items 1 to 13 mentioned in second clause applicable only for table 1# or both the tables (Table 1 and Table 2*) given in the Chapter 7?</p> <p>#Table 1: Phase I: Minimum BOQ for Identified Government Schools</p> <p>*Table 2: Minimum BOQ for Command Control Centre</p> <p>Please confirm.</p>	Corrigendum updated - Please refer to the revised requirements as provided in Annexure XVII – Minimum Bill of Quantities.
56.	10	1, IX, j	Internet	The Tenderer shall have to make provision for internet leased line connectivity of at least 5000 Mbps at CCC via Fiber along with redundant connectivity. 5000 Mbps is minimum bandwidth, however tenderer should size the bandwidth based on their solution and quote for the same.	<p>We understand that the internet connectivity shall be provided by the CoSE. Only the distribution of internet connectivity in the Hi-Tech Labs and the proper utilization of bandwidth is to be ensured by the tenderer.</p> <p>Please confirm</p>	Yes provided by COSE
57.	10	1, IX, j	Internet	The Tenderer shall have to make provision for internet leased line connectivity of at least 5000 Mbps at CCC via Fiber along with redundant connectivity. 5000 Mbps is minimum bandwidth, however tenderer should size the bandwidth based on their solution and quote for the same.	We request you to kindly remove this scope as this can be provided by telecom service provider only. The bidder for the said RFP can not deliver the same without executing the tripartite agreement. Hence to streamline the project delivery and reduce complexity	Yes provided by COSE

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					we request to kindly take Internet BW separately.	
58.	10	1, XI	SD-WAN		Please specify the specification for SDWAN device cum FW for DR/Cloud location ?	No change.
59.	10	1, IX, j	Internet	j) The Tenderer shall have to make provision for internet leased line connectivity of at least 5,000 Mbps at CCC via Fiber along with redundant connectivity. 5,000 Mbps is minimum bandwidth, however Tenderer should size the bandwidth based on their solution and quote for the same.	Kindly confirm whether the 5 Gbps leased line connectivity at CCC refers Symmetric 1:1 connectivity	Yes provided by COSE
60.	10	1, X	Security Solutions	b) The Tenderer must carry out resolutions/remediate issues from Vulnerability Assessment, PT Compliance, Application Audit, Penetration testing etc. on a periodic basis.	Request you to confirm the scope of VAPT test and the frequency for conducting VAPT test	No change.
61.	10	1.X	Security Solutions	Unauthorized access to application, database, servers, and network should be prevented.	What is the current access management system through which student activities can be tracked – active directory etc.? Are you expecting vendor to provision a new IAM (Identity and Access Management) solution or integrate with existing one through SSO (Single Sign On)?	No change.
62.	10	1, IX, g	IT Infra Solutions	Tenderer should ensure the smooth and reliable function of Control center and if in case of any additional hardware required same should be supplied at free of cost to the CoSE. Tenderer should furnish the solution and sizing sheet.	Request to link this with the defined SLAs	No change.
63.	10	1, IX, h	IT Infra Solutions	Back-to-Back OEM support should be available for the maintenance, support, replacement, upgradation, vulnerabilities assessment based on periodic patches issued by the OEM during the Project period.	Please confirm if this is referring to replacement arrangement to be done in each of the sites by the OEM	No change.
64.	10	1, XIII, b	Operations and Maintenance Services	The scope of hardware and network support services will include preventive and corrective comprehensive maintenance and cover installation, on-site diagnosis and resolution of hardware faults in response to the reported problems. The Tenderer will also resolve all the hardware problems detected during routine operational support activities and will ensure that the problems are resolved within the defined SLAs including appropriate replacement and /or replenishment of systems and networking equipment as and when required.	We are assuming that the department will ensure 1. The hi-tech lab rooms in schools are leak proof (rains) and have doors and windows to protect from moisture . 2. The lab infrastructure is protected from pests/rodents. 3. Protection of supplied items after delivery as per the OEMs warranty/ AMC policy i.e. (theft/breakage/damage) will be school's responsibility. 4. Shifting of labs to any other location post commissioning will be at the department's cost.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
65.	11	1, XIII, i	Warranty	All hardware warranty shall start only after Integration and commissioning in the ICT Hi-tech lab & CCC has been completed.	As few of the BOQ components (such as Desktop PCs, projector, printer etc.) doesn't come with more than 3 years warranty, it will be quite difficult for tenderers to offer warranty of all the items for the entire project period. Request you to limit the warranty to be offered up to 3 years only which is standard warranty terms sought in other similar projects / tenders.	No change.
66.	11	1, XIII, c	CCC Applications	c) The Tenderer shall provide & maintain software updates, security patches & any other patches directly from the OEM / Principal manufacturer for software like operating system, database, antivirus security, productivity suite software etc. for the entire project maintenance period of contract from time to time at no additional cost to the Government to meet the requirements of security and quality of system software.	Please confirm that any video conferencing software solution is excluded from Bidder's scope.	No change.
67.	11	1, XIII, d	Operations and Maintenance Services	Tenderer must have fixed monthly schedules of digital and physical infrastructure maintenance visit as per schedule approved by the CoSE to ensure efficient functioning of all installed infrastructure. During these visits, technical and operational issues identified must be resolved immediately. Issues identified during such visits must be recorded under Operations and Maintenance Reporting.	Can we replace 'fixed monthly schedules' with 'fixed schedules'?	No change.
68.	12	1, XVI	General	Chapter 8 provides the minimum hardware & technical specifications for the IT infrastructure requirements of Hi-tech lab at Schools and for CCC technical specifications. In case the Tenderer feels that higher specifications / additional hardware is required to meet the complete project requirements from the viewpoint of the software applications, functions to be carried out, services to be delivered, connectivity, future growth, operations and maintenance, desired service levels as mentioned in this Tender Document, the same shall have to be proposed at the bidding stage. In case after winning the contract, the Tenderer is not able to maintain the mentioned agreement due to improper judgment of IT infrastructure requirements on its part, the Tenderer shall have to provide the additional hardware / same specification hardware as mentioned in tender at no additional cost to CoSE.	To understand and provide the exact / suitable hardware & technical specifications for the IT infrastructure requirements of Hi-tech lab at Schools and for CCC, bidder should be allowed to choose and visit the sites randomly. Request you to please share contact details of concerned authorities who can facilitate tenderers for the pre-bid survey.	No change.
69.	12	1, XV	SLA	Electricity failure will be excluded, necessary document to be submitted for the justifications.	We request you to consider Theft, vandalism, deliberate damage, accidents, as exclusions from system uptime	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					calculation as the bidder has no control on such factors. Kindly confirm.	
70.	12	1, XIV, c, SI 2 in Table	Helpdesk Management Systems	2 Helpdesk Engineers at CCC 2 Graduate/ Diploma	Where will the helpdesk be located ?	No change.
71.	12	1, XV, b, 2	SLA	Critical bugs/ issues - Bugs/ issues affecting more than one smart class or more than one user in a smart class. Non-critical bugs/ issues – Bugs/ issues affecting at most one user in a smart class.	It is understood that no enhancements would be taken up during the tenure .	No change.
72.	13	1, XVI	Supply and Delivery Schedule	Supply and Delivery Schedule a) The Supply, Installation, Integration, Testing, Commissioning, Maintenance and Strengthening Project Management of Hi-Tech Labs & CCC shall be completed as per mutually agreed Delivery Schedule. b) The Successful Tenderer must submit Delivery Schedule within 15 days of issue of Work Order (which will include the School List Priority order by CoSE). c) The Successful Tenderer shall supply, install, integrate, test and commission all the Computers, Accessories and network infrastructure as per the technical specifications in the Tender Document to the Corporation within 120 days from the approval of Delivery Schedule.	The clause is quite confusing. The first clause states that SIITCM&PM of Hi-Tech Labs & CCC shall be completed as per mutually agreed Delivery Schedule whereas another clause says - The period of contract is 120 days for supply & installation of Hi-Tech Labs, and 90 days for CCC (or as mutually agreed upon) Please elaborate and confirm the exact delivery schedule.	No change.
73.	13	1, XVI, Supply and Delivery Schedule,	Supply and Delivery Schedule	The Successful Tenderer shall supply, install, integrate, test and commission all the Computers, Accessories and network infrastructure as per the technical specifications in the Tender Document to the Corporation within 120 days from the approval of Delivery Schedule	Due to ongoing chip-shortage crisis, OEMs have increased their lead time to upto 7-8 months from date of Purchase Order Placement. Hence, we request you to amend the clause as below: - The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with Schools as per the technical specifications in the Tender Document to the CoSE within 120 360 days and 100% of work related with CCC as per the technical specifications in the Tender Document to the CoSE within 90 240 days from the approval of Delivery Schedule.	No change.
74.	14	1, XX, a	Warranty	The warranty of the Computers, Accessories and Network assets supplied by the Successful Tenderer shall be for a period of 5 years from the date of installation of the same at the schools in Tamil Nadu. The Successful Tenderer shall replace the defective Computers and Accessories supplied by him with new ones at his cost at the designated points during the period of Warranty. Also, the	As few of the BOQ components (such as Desktop PCs, projector, printer etc.) doesn't come with more than 3 years warranty, it will be quite difficult for tenderers to offer warranty of all the items for the entire project period. Request you to limit the warranty to be offered up to 3 years only which is standard warranty	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				same procedure must be adapted for the further extended warranty of the extended project period.	terms sought in other similar projects / tenders.	
75.	15	1, XXII, k	Operations and Maintenance Services	The Tenderer will not be allowed to move, remove and change any of the equipment installed under this Tender without prior written permission of the CoSE.	This will take additional time to seek CoSE approval every time. Hence, alternatively school administrative office i.e., HM/AHM can authorize the movement and same can be recorded in school register.	No change.
76.	17	3, d	General	Tenderer should produce the originals of the performance/ client certificates for verification whenever required, and the copies of those certificates should be enclosed along with the bid.	As few customers now use to issue only soft copies of such certificates, we understand copy of duly signed performance/ client certificates self attested by Tenderer will suffice the purpose. However, the tender evaluation committed has rights to cross verify the authenticity of certificate with the client. Please confirm.	No change.
77.	22	4, V	Change in Quantity	The rate discovered in this RFP is for each device, and therefore the order can be placed on the vendors for quantities as required annually.	AS you would be aware, OEMs change the prices of their equipment and it becomes End of Life and End of Sale. Hence, it is difficult for Bidder to maintain the prices for the entire duration of the contract. Hence, we request you to amend the clause as follows : - The rate discovered in this RFP is for each device, and therefore the order can be placed on the vendors for quantities as required annually till the Go-Live of the Project.	No change.
78.	32	5, V, b	General	The Delivery and Acceptance certificates will be issued by the Head Master & Chief Educational Officers if the Successful Tenderer supplies and delivers the ordered quantity of Computers and Accessories intact in time in full at the designated destinations.	Kindly clarify on below points: - Who will conduct this inspection and sign the Acceptance certificate, at each school, on completion of delivery and installation ? - Maximum timelines (from completion of delivery and installation) within which Customer will complete inspection/testing and sign acceptance certificate, at each school.	No change.
79.	33	6, X, e	Warranty	All hardware warranty shall start only after commissioning in the ICT Hi-tech lab& CCC has been completed and after Go-Live.	As few of the BOQ components (such as Desktop PCs, projector, printer etc.) doesn't come with more than 3 years warranty, it will be quite difficult for tenderers to offer warranty of all the items for the entire project period. Request you to limit the warranty to be offered up to 3 years only which is standard warranty terms sought in other similar projects / tenders.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
80.	33	5, VIII	Warranty	The warranty of the Computers and Accessories supplied by the Successful Tenderer shall be for the Project Period (or extended Project Period, as the case may be) from the date of integration with CCC. The Successful Tenderer shall replace the defective Computers and Accessories supplied by him with new ones at his cost at the designated points during the period of Warranty.	We understand that the warranty of computer and accessories of the school shall start from the day each individual school is integrated with the CCC. Kindly confirm.	No change.
81.	34	5, XII, a, b, c	Payment Terms	<p>a) No advance payment shall be made.</p> <p>b) Payment to the Tenderer shall be made strictly as per the terms of the agreement on a per school basis within 30 days after the receipt of valid request for payment with the certificate on satisfactory performance by the concerned School Head Master and third-party agency appointed by the CoSE.</p> <p>The Tenderer would make available the ICT infrastructure for the period specified based on a Service Level Agreement and assurance of the periodical payments subject to satisfactory maintenance based on EMIS Reports. The following pattern of payment shall be made</p> <ol style="list-style-type: none"> 1. After completion of Installation and commissioning: 60% of Total cost 2. At the end of the II – Year: 10% of Total cost 3. At the end of the III – Year: 10% of Total cost 4. At the end of the IV – Year: 10% of Total cost 5. At the end of the V – Year: 10% of Total cost 	<p>As you would be aware, smooth cashflow is critical to the execution of the project as it affects both the Bidders and the Suppliers of the Bidder. These projects being supply intensive, require significant Capital expenditures to be incurred by the Bidder. Hence, to ensure a smooth cashflow, we request you to amend the payment terms</p> <p>a) No advance payment shall be made. 10% of Total Cost shall be made as interest free advance after acceptance of P.O.</p> <p>b) Payment to the Tenderer shall be made strictly as per the terms of the agreement on a per school basis within 30 days after the receipt of valid request for payment with the certificate on satisfactory performance by the concerned School Head Master and third-party agency appointed by the CoSE.</p> <ol style="list-style-type: none"> 1. After completion of Installation and commissioning Supply : 60% 70% of Total cost on prorated basis/per school basis 2. After completion of installation and commissioning: 10% of Total Cost on prorated basis/per school basis 3. At the end of the II – Year: 10 2.5% of Total cost 4. At the end of the III – Year: 10 2.5% of Total cost 5. At the end of the IV – Year: 10 2.5% of Total cost 6. At the end of the V – Year: 10 2.5% of Total cost 	No change.
82.	34	5, XII, c	Payment Terms	<ol style="list-style-type: none"> 1. After completion of Installation and commissioning (i.e., Proper integration to be established between Schools and CCC):60% of total cost 2. At the end of the II – Year:10% of Total cost 3. At the end of the III – Year:10% of Total cost 4. At the end of the IV – Year:10% of Total cost 5. At the end of the V – Year:10% of Total cost 	<ol style="list-style-type: none"> 1. After completion of Installation and commissioning (i.e. Proper integration to be established between Schools and CCC):80% of total cost 2. At the end of the II – Year:5% of Total cost 3. At the end of the III – Year:5% of Total cost 	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					4. At the end of the IV – Year:5% of Total cost 5. At the end of the V – Year:5% of Total cost	
83.	35	5, XII, c	Payment Terms	<p>The Tenderer would make available the ICT infrastructure for the period specified based on a Service Level Agreement and assurance of the periodical payments subject to satisfactory maintenance based on EMIS Reports. The following pattern of payment shall be made.</p> <ol style="list-style-type: none"> 1. After completion of Installation and commissioning (i.e., Proper integration to be established between Schools and CCC):60% of total cost 2. At the end of the II – Year:10% of Total cost 3. At the end of the III – Year:10% of Total cost 4. At the end of the IV – Year:10% of Total cost 5. At the end of the V – Year:10% of Total cost 	<p>All Major items associated with this Projects such as desktop PC, Projector etc. are COTS items. 100% cost associated with these items are CAPEX cost. As per the scope of RFP, the maintenance cost includes spare support and manpower support for 5 years extended to 7 years will be approx 10% of total contract value.</p> <p>During CAMC, bidder has to pay monthly to Bandwidth provider and manpower resources.</p> <p>As per the RFP payment terms only 60% of the Contract value will be released after project Go-live and also bidder has to submit 5% SD during entire contract period. This will leads a negative cashflow till 4 years of the contract period which is not at all available for any bidder. In view of this it proposed to consider the following payment terms for better cashflow:</p> <ol style="list-style-type: none"> 1. After completion of Installation and commissioning (i.e. Proper integration to be established between Schools and CCC):80% of total cost 2. Balance 20% equally at the beginning of each quarter. <p>Note: All payments shall be school based on pro-rata basis.</p>	No change.
84.	35	5, XII, c,1	Payment Terms	After completion of Installation and commissioning (i.e., Proper integration to be established between Schools and CCC):60% of total cost	<p>a) Request to increase the 60% payment to 80% as we would be paying the OEMs upfront.</p> <p>B) Need to pay for all the hardware delivered to the OEM upfront and not after installation.</p>	No change.
85.	35	5, XII, c,1	Payment Terms	<ol style="list-style-type: none"> 1. After completion of Installation and commissioning (i.e., Proper integration to be established between Schools and CCC):60% of total cost 2. At the end of the II – Year:10% of Total cost 3. At the end of the III – Year:10% of Total cost 4. At the end of the IV – Year:10% of Total cost 5. At the end of the V – Year:10% of Total cost 	<p>Request to reframe the clause as</p> <ol style="list-style-type: none"> 1. After delivery of material at desired locations: 50% of total cost on pro rata basis. 2. After completion of Installation and commissioning (i.e. Proper integration to be established between Schools and CCC): 40% of total cost on pro rata basis. 2. At the end of the II – Year: 2.5% of Total cost on pro rata basis 3. At the end of the III – Year: 2.5% of 	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					Total cost on pro rata basis 4. At the end of the IV – Year: 2.5% of Total cost on pro rata basis 5. At the end of the V – Year: 2.5% of Total cost on pro rata basis	
86.	35	5, XIII	Penalty	If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs.2,000 (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 30 days. Further, Rs.5,000/- (Rupees Five Thousand only) per calendar week will be charged beyond 30 days up to 80 days. After 80 days penalty shall be Rs. 10,000 (Rupees Ten thousand only) per calendar week per school subject to the condition that contractor has completed 50% work in earlier 80 days.	Request to reframe the clause as PENALTY FOR DELAY IN EXECUTION OF PROJECT: If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs.500 (Rupees Five Hundred only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 30 days. Further, Rs. 1,000/- (Rupees One Thousand only) per calendar week will be charged beyond 30 days up to 80 days. After 80 days penalty shall be Rs. 5,000 (Rupees Five thousand only) per calendar week per school subject to the condition that contractor has completed 50% work in earlier 80 days.	No change.
87.	36	5, XIV, 2	Penalty	Response: Maximum* One working Day Resolution: Maximum of 3 days working Days up to 5% of such issues raised per month	In case the call is logged after 12pm of the day then that day to be considered as day 0 and next day to be considered as day 1 for the complaint logging. Also, since implementations are going to be spread across the state, Minimum resolution time for addressing Critical incident can be for 7-10 working days considering the proximity	No change.
88.	36	5, XIV, 3	Penalty	Response: Maximum Two working Days Resolution: Maximum Seven working Days up to 5% of such issues raised per month	In case the call is logged after 12pm of the day then that day to be considered as day 0 and next day to be considered as day 1 for the complaint logging. Also, since implementations are going to be spread across the state, Minimum resolution time for addressing Critical incident can be for 7-10 working days considering the proximity	No change.
89.	37	5, XVI, b	General	CoSE/ School will provide electricity for Hi tech lab. And will facilitate FANs and Lighting for the classrooms.	We understand that the Electricity bills for the Hi-Tech Labs shall be paid by CoSE/School. Kindly confirm	No change.
90.	38	5, XVI, k	Warranty	The Tenderer should ensure that hardware warranty starts from installation date.	Hardware warranty starts from the date of delivery.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
91.	43	7, Table II, 9	Internet	Internet Bandwidth – 5 Gbps (can be decided based on content push mechanisms) Qty: 60 UOM: Mths	We understand that the internet connectivity shall be provided by the CoSE. Only the distribution of internet connectivity in the Hi-Tech Labs and the proper utilization of bandwidth is to be ensured by the tenderer. Please confirm	Yes provided by COSE
92.	43	7, Table II, 4	DR Replication	4) DR – Replication content on Cloud (Activation on demand)	Kindly confirm whether bidder has to consider 50% or 100% DC at DR. Also, please confirm whether bidder has to quote for 60 months cost of DR	Corrigendum updated - 100% in DR
93.	43	7, Table II, 3	CCC Applications	CCC Applications consists of EMS, Helpdesk Management, Content Management System and Learning Management as per functional requirement	Kindly confirm whether Content Management System and Learning Management applications will be provided by customer or not. If bidder has to consider these applications then please provide the specifications/requirements of these applications.	No change.
94.	43	7, Table II, 7 & 8	Switches	7) Layer 3 48 Port 1/10G Switch with HA --- 1 No's 8) Layer 2 48 port 1G POE Switch -- 1 No's	Please confirm the exact requirement of switches in CC along with DC area, considering redundancy.	No change.
95.	43	7, Table II, 3	CCC Applications	CCC Applications consists of EMS, Helpdesk Management, Content Management System and Learning Management as per functional requirement	Request to amend this line item as "3. CCC Applications consists of EMS, Helpdesk Management, and Content Management System as per functional requirement" as we understand Learning Management System shall be provided by the Purchaser.	No change.
96.	43	7, Table II, 3	CCC Applications	CCC Applications consists of EMS, Helpdesk Management, Content Management System and Learning Management as per functional requirement	Please elaborate on functional requirement of Learning Management System under Bidder's scope, only detail available is "CCC infrastructure should be sized to host the LMS solution and conduct online exams at all 5792(or subsequently enhanced number) schools in parallel."	No change.
97.	43	7, Table II, 3	CCC Applications	CCC Applications consists of EMS, Helpdesk Management, Content Management System and Learning Management as per functional requirement	Request to amend as "CCC Applications consists of EMS, Helpdesk Management along with Contact Center, Content Management System and Learning Management as per functional requirement" as mobile contact center solutions are asked along with Helpdesk.	No change.
98.	43	7, Table I, 12	Phase I: Minimum BOQ for Identified Government Schools	1 TB – External Hard disk and 1 TB External SSD	Kindly confirm whether bidder has to quote for both 1TB HDD and SSD external. Also sufficeint internal memory is	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					provided along with Desktop PC, it is requested to consider 1TB HDD or 256GB SSD drive as external hard disk	
99.	43	7, Table II, 4	DR Replication	DR – Replication content on Cloud (Activation on demand)	Kindly confirm whether bidder has to consider 50% or 100% DC at DR. Also, please confirm whether bidder has to quote for 60 months cost of DR	Corrigendum updated - 100% in DR
100.	43	7, Table II, 3	CCC Applications	CCC Applications consists of EMS, Helpdesk Management, Content Management System and Learning Management as per functional requirement	Kindly confirm whether Content Management System and Learning Management applications will be provided by customer or not. If bidder has to consider these applications then please provide the specifications/requirements of these applications.	No change.
101.	43	7, Table II	CCC Applications	Minimum BOQ for Command Control Centre	BoQ (Bill of Quantity) does not mention any ITSM tool / platform. Is it correct to assume that the tenderer has to provide the same or will CoSE acquire it? Is it also safe to assume that the assessment platform be provided by the tenderer?	No change.
102.	44	7, Table II, 13	IT Infra Solutions	13) 125 KVA - Generator – DG Set	Kindly confirm whether diesel during O&M period (60 months) will be provided by customer or not. If bidder has to consider the diesel then please provide the avg running hours per month to calculate the diesel requirement.	No change.
103.	44	7, Table II, 13	IT Infra Solutions	125 KVA - Generator – DG Set	Kindly confirm whether diesel during O&M period (60 months) will be provided by customer or not. If bidder has to consider the diesel then please provide the avg running hours per month to calculate the diesel requirement.	No change.
104.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	We would like to request the dept. to incorporate vendor neutral & generic specification to promote open and fair competition. The mentioned processor specification is skewed towards a single processor vendor, i.e., Intel and encouraging monopoly, which is violating the MeitY Guidelines, GFR Rules & CVC Notifications too. We are hereby requesting the dept. to update the processor specification as 12th Generation Intel® Core™ i5 12600 (3.30 GHz Base Frequency, 6-Cores, 18MB Smart Cache) / 5000 Series AMD Ryzen™ 5 5600G (3.90 GHz Base Frequency, 6-Cores, 19MB Cache) or	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above , 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					Higher. Proposed Processor Specification has been tabulated below for your reference.	
105.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	i5 processor is generally used for heavy applications. As there is not heavy applications are running on the school level Desktop PC, i5 processor requirement is not there in this Project. Also, apart from Intel, AMD also a leading processor manufacturer. In view of this it is requested to consider the following specification against this clause: Intel Core i3/equivalent AMD processor or above (2.20 GHz upto 4.30GHz, 12MB L3 cache,4 core) or Higher	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above , 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
106.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Hard Disk Drive: Min 1TB SATA HDD, 5400 RPM or higher	Already 1TB External Hard drive is there in the Bill of Quantity. In view of this it requested to consider 500GB HDD SATA drive as internal memory	No change.
107.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Annexure 1 – (For School)	It is recommended to include one server at each school to monitor and send logs of all the client machines to the CCC. The server shall act as content management server, log management server and exam management server. Minimum recommended specs as below: Processor - Intel E series or equivalent processor with Min 4C, 3 GHz speed or higher Memory - 16 GB DDR4 Expandable to 64GB Motherboard - Compatible Chipset or Higher, SATA Raid Controller with Support for RAID 0/1/5 with 512MB Cache Monitor - 19.5 inch or higher with TCO Certified Monitor Hard Disk Drive - 2 x 1TB 7200 RPM HDD, Scalable to another two drives DVD RW USB 104 Keys OEM Keyboard USB Optical Mouse Ports and Adaptors - Front I/O ports, 2 x USB 3.1 Gen1, 2 x USB 2.0, Rear I/O ports 2 x RJ45 Ethernet LAN ports, 1 x RJ45 Dedicated IPMI LAN port 1 x USB 3.1 Type A, 2 x USB 3.1 Gen1, 2 x USB 2.0, 1 x VGA port Operating System - Certified for Microsoft	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					Server 2019, 2016 and Redhat Enterprise Linux Server 8.0-8.x. Remote Management - GUI management console for System Health Monitoring, Firmware Rollback, OS Deployment, Error alerts using Email TRAPS , Security features such as BIOS Protection, secure boot 5 years Onsite Comprehensive	
108.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	Request to amend as " Intel Core i5-10400U / equivalent processor or above"	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above , 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
109.	45	8, Annexure 1, Table 1	Specification for Desktop PC	OS: Pre-loaded Linux	Additional Point: Remote management of OS from NOC	No change.
110.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	Intel Core i5-11400 / 12400 processor or above Base Frequency 2.50 GHz up to 4.4 GHz 18 MB L3 cache, 6 core) or Higher	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above , 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
111.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Memory: 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 16 GB with atleast one free slot.	8 GB DDR4 SD RAM @ 2666 MHz OR HIGHER EXPANDABLE UPTO 64 GB WITH atleast one free slot	Corrigendum updated - 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with atleast one free slot
112.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Mother Board (Intel/Gigabyte/ASUS/MSI/OEM): 1.Min 2 PCI/PCI Express Slots. 2. Integrated Graphics Controller 3.10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4.VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	1. 3x PCI / PCI Express slot 2. Intel® UHD Graphics 3.10/100/1000 Mbps Network Card; Min 4 USB Ports with at least two with 3.0, 4 Additional USB Ports, 4.VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	No change.
113.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Monitor: 19" TFT (± 0.5 inch) TFT/ Wide LED Color Monitor. Resolution 1366 X 768 or higher.	19" TFT (± 0.5 inch) TFT/ Wide LED Color Monitor. Resolution 1600 x 900 or higher. With Speakers [Monitor should be same make as Desktop]	No change.
114.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Hard Disk Drive: Min 1TB SATA HDD, 5400 RPM or higher	1 TB SATA HDD with 7200 RPM	No change.
115.	45	8, Annexure 1, Table 1	Specification for Desktop PC	OS Compliance Windows & Linux compliance by OEM.	WINDOWS & LINUX COMPLIANCE BY OEM ISO 27001, ISO 14000, ISO 9000, SA 8000,ROHS	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
116.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	Intel Core i5-11400/ 12400 processor or above Base Frequency 2.50 GHz up to 4.4 GHz 18 MB L3 cache, 6 core) or Higher	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
117.	45	8, Annexure 1, Table 1	Specification for Desktop PC	8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 16 GB with atleast one free slot.	8 GB DDR4 SD RAM @ 2666 MHz OR HIGHER EXPANDA8LE UPTO 64 GB WITH atleast one free slot	Corrigendum updated - 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with atleast one free slot
118.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Mother Board (Intel/Gigabyte/ASUS/MSI/OEM): 1.Min 2 PCI/PCI Express Slots. 2. Integrated Graphics Controller 3.10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4.VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	1. 3x PCI / PCI Express slot 2. Intels UHD Graphics 3.10/100/1000 Mbps Network Card; Min 4 USB Ports with at least two with 3.0, 4 Additional USB Ports, 4.VGA / Display port, H DMI, 5.RJ 45 6. Audio 3.5mm. Inte mal speakers and support to Ext speakers of min 2 watts.	No change.
119.	45	8, Annexure 1, Table 1	Specification for Desktop PC	19" TFT (+ 0.5 inch) TFT/ Wide LED Color Monitor. Resolution 1366 X 768 or higher.	19" TFT (+ 0.5 inch) TFT/ Wide LED Color Monitor. Resolution 1600 x 000 or higher. With Speakers [Monitor should be same make as Desktop]	No change.
120.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Min 1TB SATA HDD, 5400 RPM or higher	1 TB SATA HDD with 7200 RPM	No change.
121.	45	8, Annexure 1, Table 1	Specification for Desktop PC	OS Compliance Windows & Linux compliance by OEM.	WINDOWS & LINUX COMPLIANCE BY OEM SA 80L0,ROHS	No change.
122.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	i5 processor is generally used for heavy applications. As there is not heavy applications are running on the school level Desktop PC, i5 procesor requirement is not there in this Project. Also, apart from Intel, AMD also a leading processor manufacturer. In view of this it is requested to consider the following specification against this clause: Intel Core i3/equivalent AMD processor or above (2.20 GHz upto 4.30GHz, 12MB L3 cache,4 core) or Higher	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above , 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
123.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Hard Disk Drive: Min 1TB SATA HDD, 5400 RPM or higher	Already 1TB External Hard drive is there in the Bill of Quantity. In view of this it requeste to consider 500GB HDD SATA drive as internal memory	No change.
124.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Intel Core i5-10400U processor or above (2.90 GHz upto 4.30 GHz, 12 MB L3 cache, 6 core) or Higher	Intel Core i5-11400/ 12400 processor or above Base Frequency 2.50 GHz up to	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) /

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					4.4 GHz 18 MB L3 cache, 6 core) or Higher	Equivalent AMD 4000 Series - Ryzen™ 5 Processor
125.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5- 10400 U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	12th Generation processors are latest generation processors available from Intel. Mentioned 10th Gen processor is 2.5 yrs old processor. Request to amend as 12th generation processor with better performance. Mentioned processor 10400U 'U' is Ultra low power processor series used in laptop segment. Request to remove U from specification.	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
126.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Memory: 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable up to 16 GB with at least one free slot.	Latest 12th Gen processor is compatible with DDR4 3200 MHz or Higher. Mentioning 2666 MHz will entertain OEM's using lesser frequency Memory instead of better performing Memory compatible with Processor.	Corrigendum updated - 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with atleast one free slot
127.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Mother Board (Intel/Gigabyte/ASUS/MSI/OEM): 1.Min 2 PCI/PCI Express Slots. 2. Integrated Graphics Controller 3.10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4.VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	Internal speaker in a Desktop is provided generally to respond for actions and errors Ex: Boot of Hard Drive, Error in Memory (Alerts with beep sound) If the requirement is for AV applications, request to mention the option of External speakers or Headphone with Mic for Interactive sessions. The Removing of internal speaker feature will help to reduce the sizable commercial value in the Desktop cost.	No change.
128.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor: Intel Core i5-10400U processor or above (2.90 GHz up to 4.30GHz, 12MB L3 cache,6 core) or Higher.	Option-1 12th Generation Intel® Core™ i3 12100 (3.30 GHz Base Frequency, 4 High Performance Cores, 12MB Smart Cache) / 5000 Series AMD Ryzen™ 3 5300G (4.00 GHz Base Frequency, 4 High Performance Cores, 10MB Cache) or Higher. Option-2 12th Generation Intel® Core™ i5 12600 (3.30 GHz Base Frequency, 6 High Performance Cores, 18MB Smart Cache) / 5000 Series AMD Ryzen™ 5 5600G (3.90 GHz Base Frequency, 6 High Performance Cores, 19MB Cache) or Higher. Option-3 12th Generation Intel® Core™ i7 12700 (2.10 GHz Base Frequency, 8 High Performance Cores, 25MB Smart Cache) / 5000 Series AMD Ryzen™ 7 5700G (3.80 GHz Base Frequency, 8 High	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					Performance Cores, 20MB Cache) or Higher.	
129.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor Intel Core i5-10400U processor or above (2.90 GHz upto 4.30GHz, 12MB L3 cache,6 core) or Higher	Intel Core i5-12500 6C 3.0GHz 3200MHz 65W (3.0GHz, turbo up to 4.6GHz, 18MB cache, 6 cores)	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
130.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Memory 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 16 GB with atleast one free slot.	8 GB DDR4 SDRAM @ 2933 MHz Expandable upto 64 GB with atleast one free slot.	Corrigendum updated - 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with atleast one free slot
131.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Mother Board (Intel/Gigabyte/ASUS/MSI/OEM): 1.Min 2 PCI/PCI Express Slots. 2. Integrated Graphics Controller 3. 10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4.VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	1. 3 PCI/PCIe expansion slots 2. Intel® UHD Graphics 770 3.Integrated 10/100/1000 Ethernet, 8 USB Ports with 6 USB 3.0 & 2 USB 2.0 4. VGA, HDMI 5 RJ 45 6. Combo jack, Headphone/ Microphone, Internal speaker of 2 W & 1 Audio Line out for external speaker	No change.
132.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Processor Intel Core i5-10400U processor or above (2.90 GHz up to 4.30GHz, 12MB L3 cache,6 core) or Higher	Intel Core i5-12400 processor or above (2.50 GHz up to 4.40GHz, 18 MB L3 cache,6 core) or Higher	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
133.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Memory 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable up to 16 GB with at least one free slot.	8 GB DDR4 SDRAM @ 3200 MHz or higher Expandable up to 64 GB with at least one free slot.	Corrigendum updated - 8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with atleast one free slot
134.	45	8, Annexure 1, Table 1	Specification for Desktop PC	Mother Board (Intel/Gigabyte/ASUS/MSI/OEM): 1.Min 2 PCI/PCI Express Slots. 2. Integrated Graphics Controller 3. 10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4.VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	6. Audio 3.5mm. jack support to Ext speakers of min 2 watts / Headphone with Mic	No change.
135.	46	8, Annexure 1, Table 3	Multimedia Projector	Specification for Multimedia Projector Screen Size (Projection ance) Min 75" Screen size at less than or equal to 3 Mtr	We assume that purchaser is required projector without Screen. Kindly clarify	No change.
136.	46	8, Annexure 1, Table 2	Switches	Device should have Packet Forwarding Rate 82 Mbps or more	As it is a 24 port 1GbE RJ45 Switch, it is requested to change the forwarding rate as 40Mbps or better	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
137.	46	8, Annexure 1, Table 2	SD-WAN	The proposed Switch shall support Zero Touch Provisioning deployment with zero configuration from day 1	Zero Touch Provisioning deployment is a software driven functionality which will be used to configure all the switch from a central location without touching the edge level switch. However, the connectivity between school to CCC will be under customer scope. Also, as per the scope of RFP, bidder has to configure the High Tech Lab system at school level independently as a standalone system. In view of this it is requested to change this clause as "The proposed switch shall support configuration from CCC" .	No change.
138.	46	8, Annexure 1, Table 2	SD-WAN	Should be able to integrate with the SD-WAN central management and logging platform at the command Control Centre.	Switches can be managed and monitored centrally using EMS software. It is not required to integrated with SD-WAN Central Management. In view of this it is requested to change this clause as "Should be able to integrate at the command Control Centre."	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
139.	46	8, Annexure 1, Table 2	SD-WAN	Should be capable of displaying the device details connected on each switch port on the SD-WAN central management	Device details can be displayed centrally using EMS software. It is not required to integrated with SD-WAN Central Management. In view of this it is requested to change this clause as "Should be capable of displaying the device details connected on each switch port at the command Control Centre"	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
140.	46	8, Annexure 1, Table 2	IT Infra Solutions	Additional 50 Switches to be supplied and stored at CCC as spares for the Operation & Maintenance	Request to add this qty. to minimum BoQ.	No change.
141.	46	8, Annexure 1, Table 3	Multimedia Projector	Brightness: 3000 ANSI-Lumens or higher	3,500 ANSI Lumens (Standard)	No change.
142.	46	8, Annexure 1, Table 3	Multimedia Projector	Lamp Life: Normal Mode - 3000 hrs or higher	5,000 Hours (Standard)	No change.
143.	46	8, Annexure 1, Table 3	Multimedia Projector	Speakers (Internal): Min 2.0 Watts	16W Speaker X 1	No change.
144.	46	8, Annexure 1, Table 3	Multimedia Projector	Brightness: 3000 ANSI-Lumens or higher	3,500 ANSI Lumens (Standard)	No change.
145.	46	8, Annexure 1, Table 3	Multimedia Projector	Lamp life: Normal Mode — 3000 hrs o r higher	5,000 Hours (Standard)	No change.
146.	46	8, Annexure 1, Table 3	Multimedia Projector	Speakers (Internal): Min 2.0 Watts	16W Speaker X 1	No change.
147.	46	8, Annexure 1, Table 1	SD-WAN	Device should have Packet Forwarding Rate 82 Mbps or more	As it is a 24 port 1GbE RJ45 Switch, it is requested to change the forwarding rate as 40Mbps or better	No change.
148.	46	8, Annexure 1, Table 1	SD-WAN	The proposed Switch shall support Zero Touch Provisioning deployment with zero configuration from day 1	Zero Touch Provisioning deployment is a software driven functionality which will be used to configure all the switch from a central location without touching the edge	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					level switch. However, the connectivity between school to CCC will be under customer scope. Also, as per the scope of RFP, bidder has to configure the Hi Tech Lab system at school level independently as a standalone system. In view of this it is requested to change this clause as "The proposed switch shall support configuration from CCC".	
149.	46	8, Annexure 1, Table 2	SD-WAN	Should be able to integrate with the SD-WAN central management and logging platform at the command Control Centre.	Switches can be managed and monitored centrally using EMS software. It is not required to integrated with SD-WAN Central Management. In view of this it is requested to change this clause as "Should be able to integrate at the command Control Centre."	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
150.	46	8, Annexure 1, Table 2	SD-WAN	Should be capable of displaying the device details connected on each switch port on the SD-WAN central management	Device details can be displayed centrally using EMS software. It is not required to integrated with SD-WAN Central Management. In view of this it is requested to change this clause as "Should be capable of displaying the device details connected on each switch port at the command Control Centre"	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
151.	46	8, Annexure 1, Table 3	Multimedia Projector	Technology DLP Brightness 3000 ANSI-Lumens or higher Resolution XGA, 1024 x 768 or higher Screen Size (Projection ance) Min 75" Screen size at less than or equal to 3 Mtr Input / Output Sources HDMI,VGA, Audio In & Out Lamp Life Normal Mode - 3000 hrs or higher Important Features Facility for Zooming, Keystone Correction and Wall Color Correction Speakers (Internal) Min 2.0 Watts Accessories a) Remote Control along with battery b) Good Quality Carry Case c) VGA Cable – 1.5 meters d) AC Power Card e) Manual f) Wall mount kit g) Screen 5.5' tall x 10' wide h) Other Standard Accessories Certification BIS	kindly we request you to include 3 LCD Technology to participate in Tender	Corrigendum updated - DLP/LCD technology
152.	46	8, Annexure 1, Table 3	Multimedia Projector	Screen Size (Projection ance): Min 75" Screen size at less than or equal to 3 Mt.	For hi-tech labs tender we requested to go with 75inch interactive screens instead of projectors. Because it has more LIFE SPAN, Features, Etc. Easy To Maintain	No change.
153.	46	8, Annexure 1, Table 2	Switches	Device should have Packet Forwarding Rate 82 Mbps or more	Packet forwarding rate should be 41Mpps. [1Gbps== 1.488 Mpps] 56 Gbps Switching capacity	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
154.	46	8, Annexure 1, Table 2	SD-WAN	Should be able to integrate with the SD-WAN central management and logging platform at the command Control Centre.	Recommending to manage the switches over and above to the firewall cum router and switch and Firewall should be from same OEM.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
155.	46	8, Annexure 1, Table 2	SD-WAN	Should be capable of displaying the device details connected on each switch port on the SD-WAN central management	Recommending to manage the switches over and above to the firewall cum router and switch and Firewall should be from same OEM.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
156.	46	8, Annexure 1, Table 2	SD-WAN	Should be able to monitor the bandwidth performance of each application from the central management	Bandwidth performance feature for application would be visible on the routing solution and not switching solution	No change.
157.	46	8, Annexure 1, Table 2	SD-WAN	Device should have Packet Forwarding Rate 82 Mbps or more	Request to Change from 82mpps to 41mpps. Packet Forwarding rate would be calculate based on switch interface 1G port = 1.488Mpps. (24 1G+4X1G = 41Mpps. We would request to change it to 41Mpps.	No change.
158.	46	8, Annexure 1, Table 2	SD-WAN	Should be able to integrate with the SD-WAN central management and logging platform at the Command Control Centre.	We request you to remove this clause SDWAN Central Management is for managing SDWAN devices and Switches can't able to manage through the same. Switches can be managed through separate NMS	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
159.	46	8, Annexure 1, Table 2	SD-WAN	Should be capable of displaying the device details connected on each switch port on the SD-WAN central management	We request you to remove this clause SDWAN Central Management is for manaing SDWAN devices and Switches can't able to manage thoruhg the same. Swiches can be managed through separate NMS	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
160.	46	8, Annexure 1, Table 2	SD-WAN	Should be able to monitor the bandwidth performance of each application from the central management	We request you to remove this clause	No change.
161.	47	8, Annexure 1, Table 7	UPS	Back-up Time 60 minutes	We request you to provide minimum load to be consider for battery backup OR provide minimum VAH to consider for bid Kindly clarify	No change.
162.	47	8, Annexure 1, Table 7	UPS	Back-up Time 60 minutes	Standard Battery OEM provides maximum 2 to 3 years warranty so we request you to add clause that all supplied batteries should be replace after 3 Years of installation date. This will help us provide battery backup for required warranty tenure	No change.
163.	48	8, Annexure 1, Table 7	UPS	SNMP Card - Provisions should be available Diesel Generator – Compatible	DG is not providing at school level and there is no requirement of interconnectivity between DG set and 3KVA UPS. In view of this it is request to delete this clause.	No change.
164.	48	8, Annexure 1, Table 7	UPS	Other features: Diesel Generator – Compatible	DG is not providing at school level and there is no requirement of	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					interconnectivity between DG set and 3KVA UPS. In view of this it is request to delete this clause.	
165.	48	8, Annexure 1, Table 7	UPS	Ambient Temperature :0 – 50°C	As per industrial practice operating temperature for the UPS system is 0-40 Degree C hence we request you to kindly amend this clause	No change.
166.	48	8, Annexure 1, Table 7	UPS	Protections: (7) Lightening	Lighting protection is generally present in higher rated UPS, Low rated UPS has inbuilt fuse which protect UPS from small level surge. Hence we request you kindly remove this clause	No change.
167.	48	8, Annexure 1, Table 7	UPS	Controls: Manual By-pass Switch and static bypass switch to be provided with Indications	manual bypass is present in higher rated ups, Low rated UPS has only static bypass which is common in industrial practice hence we request you kindly amend this clause	No change.
168.	48	8, Annexure 1, Table 7	UPS	Power sockets: 1 No. 32 Amps. Capacity Terminal Block	Low rated ups has Indian sockets as per industrial practice, Terminal Blocks available in higher rated ups, hence we request you to kindly amend this clause	No change.
169.	48	8, Annexure 1, Table 7	UPS	Meters: AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current	These parameter comes in higher rated ups, low rated ups has limited metering options, hence we request you to kindly remove these parameters.	No change.
170.	49	8, Annexure 1, Table 10 & 11	General	10 & 11) Specifications for Furniture, Electrical Work Wooden Chairs without arm for students (Age between 10 to 14) to sit at a comfortable height to handle the system Wooden Chair with arm for in-charge of Lab Operations	As per Bills of material total 10 Chair need to provide at each school Kindly bifurcate how much chairs without ARM and how much chairs with ARM is required	No change.
171.	49	8, Annexure 1, Table 12	External HDD	1 TB – External Hard disk with USB 3.0 higher Support 1 TB – External SSD Disk with USB 3.0 higher support	Kindly confirm whether bidder has to quote for both 1TB HDD and SSD external. Also sufficient internal memory is provided along with Desktop PC, it is requested to consider 1TB HDD or 256GB SSD drive as external hard disk	No change.
172.	50	8, Annexure 1, Table 13	SD-WAN	Should be a Hardware Appliance with Firewall Functionalities Should support Static Routes. The device should act as a gateway router for internal network connections. Following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT,	Generally SDWAN routers will be used where multiple types of internet connectivity (MPLS, Broadband, TTL etc.) will be terminated. This device is used to manage multiple internet connectivity efficiently. This is a costly solution which is used in High Level Data Centre, Smart Cities etc. projects.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				<p>VPN, Application Visibility and Control (AVC), DHCP, QoS, Bandwidth reservation.</p> <p>SDWAN IPSec VPN Throughput of 500 mbps or above. Device should support Full tunnel mode based on IPSec. It should support 500 Mbps at tunnel mode.</p> <p>Should support 5 Nos. of 1GE RJ45 Ports and Should support Multiple WAN Ports. Also, Should have USB port support for mobile broadband dongles</p> <p>Should have NDPP/ Common Criteria Certifications and should support IPv4 & IPv6. Device Should support Mobile broadband, Ethernet based internet connection, PPBoE, etc.</p> <p>Build-in SDWAN must be able to do load balancing of various links based on source address, User group, protocol and/or applications.</p> <p>SLA for SDWAN must be defined based on packet loss or latency or jitter. Even combination of all 3 options must be possible</p>	<p>However, the requirement of SDWAN in this project is only to terminate the internet connectivity at school level. As per the Project scope, there will be only one internet connectivity mostly TTL/broadband will be terminated at school level.</p> <p>To achieve the above functionality, Internet Router is the best suited solution. Also, similar projects are implemented in various other states of India successfully and Internet Router is used to terminate internet connectivity at school level.</p> <p>In view of this , we request you to consider replace SDWAN solution with Internet Router for this Project. The specification of Internet Router is enclosed for your kind reference and consideration.</p>	
173.	50	8, Annexure 1, Table 13	SD-WAN	SDWAN Solution	<p>Generally SDWAN routers will be used where multiple types of internet connectivity (MPLS, Broadband, TTL etc.) will be terminated. This device is used to manage multiple internet connectivity efficiently. This is a costly solutions which used in High Level Data Centre, Smart Cities etc. projects. However, the requirement of SDWAN in this project is only to terminate the internet connectivity at school level. As per the Project scope, there will be only one internet connectivity mostly TTL/broadband will be terminated at school level.</p> <p>To achieve the above functionality, Internet Router is the best suited solution. Also, similar projects are implemented in various other states of India successfully and Internet Router is used to terminate internet connectivity at school level. In view of this , we request you to consider replace SDWAN solution with Internet Router for this Project. The</p>	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					specification of Internet Router is enclosed for your kind reference and consideration.	
174.	50	8, Annexure 1, Table 13	SD-WAN	SDWAN IPSec VPN Throughput of 500 mbps or above. Device should support Full tunnel mode based on IPSec. It should support 500 Mbps at tunnel mode.	Requirement of Each school having 500Mbps are higher side Request to confirm Bandwidth will be provided	No change.
175.	50	8, Annexure 1, Table 13	SD-WAN	SDWAN Device Should support 5 Nos. of 1GE RJ45 Ports and Should support Multiple WAN Ports. Also, should have USB port support for mobile broadband dongles	5x1GE RJ-45 , Please confirm how many WAN link will be terminated	No change.
176.	50	8, Annexure 1, Table 13	SD-WAN	Following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), DHCP, QoS, Bandwidth reservation.	Request to remove this feature. Switch will not do the BW/Application monitoring, it will forward the Packets. Since it's HUB and spoke we can manage and policy push everything can manage through HUB itself.	No change.
177.	50	8, Annexure 1, Table 13	SD-WAN	Should support 5 Nos. of 1GE RJ45 Ports and Should support Multiple WAN Ports. Also, should have USB port support for mobile broadband dongles	Should support 3 No's of 1GE RJ45 Ports and Should support 1 WAN Port. Also, Should have USB port support for mobile broadband dongles Since we are proposing separate switch for school, we can manage LAN port through the switch. SDWAN device to be consider only for WAN Bandwidth and throughput.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
178.	50	8, Annexure 1, Table 13	SD-WAN	Should have NDPP/ Common Criteria Certifications and should support IPv4 & IPv6. Device Should support Mobile broadband, Ethernet based internet connection, PPBoE, etc.	Should have or before go live NDPP/ Common Criteria Certifications and should support IPv4. Device Should support Mobile broadband, PPPoE. We are applied Common criteria certification, will get it Soon.	No change.
179.	50	8, Annexure 1, Table 13	SD-WAN	Build-in SDWAN must be able to do load balancing of various links based on source address, User group, protocol and/or applications	Build-in SDWAN must be able to do link failover of various links based on source address, User group. We understand School level one ISP is going to be deployed, I think load balance is not required.	No change.
180.	51	8, Annexure 2, Table 1	SD-WAN		As the SDWAN solution is not required for this project it is request to change this as "Core Router with firewall for CCC". The specification is enclosed at for your kind reference and considerations.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
181.	51	Annexure 2, Table 1	SD-WAN	A SD-WAN Orchestrator & Manager to be supplied with following specifications: - Should support management and Configuration of Switches and Access Points connected to the SD-WAN Devices. - The Manager should be able to Manage the	Request you to remove this clause as this specific to single OEM	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				Firewalls at Schools and 24 Port Switches upto the Port Level.		
182.	51	8, Annexure 2, Table 1	SD-WAN		Kindly confirm the period of storage of logs for compliance purposes, such as three months, six months or 1 year.	No change.
183.	51	8, Annexure 2, Table 1	SD-WAN		As the SDWAN solution is not required for this project (Refer Query No.14) it is request to change this as "Core Router with firewall for CCC". The specification is enclosed at for your kind reference and considerations.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
184.	51	8, Annexure 2, Table 1	SD-WAN	Should have the features/ Services to be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection/ Advance Malware protection, Web Security Essentials/ URL Filtering, SSL VPN 25,000 user license bundled.	Kindly to rephrase the Clause: An option for service chaining to have such inspections and security features at centralized locations for SASE or cloud security use cases	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
185.	51	8, Annexure 2, Table 1	SD-WAN	The SD-WAN Orchestrator & Manager at Command Control Center should be able to manage, monitor and configure all Firewall cum SD-WAN Routers, and 24 Port Switches at 5792 Hi-tech Labs. The Solution proposed should also be capable of managing all these devices in 5792 Hi-tech Labs from day one and upgradable to additional 10,000 Hi-Tech Labs for future upgrade.	Kindly Change the clause:- require separate orchestration or controller for SDWAN and 2nd controller/orchestration for Routers,Firewall & 24 Port Switch	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
186.	51	8, Annexure 2, Table 1	SD-WAN	Should support SDWAN IPSec Throughput of 50 Gbps and NGFW Throughput of 18 Gbps	Kindly change to rephrase the Clause: NGFW can be offer as seprate solution & through supoorted standard 10G	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
187.	51	8, Annexure 2, Table 1	CCC Server	A Logging management platform to be provided with following capacity: Should have dual Power supply and 25G SFP28 Ports	Request to rephrase the Clause: An option for service chaining to have such inspections and security features at centralized locations for SASE or cloud security use cases	No change.
188.	51	8, Annexure 2, Table 1	SD-WAN	The command control centre should be equipped with SD-WAN Orchestrator and Manager, Head End Router with Data Centre Firewall functionalities and Log Analyser	Recommending same OEM Solution considering Router CUM Firewall Log analyser,SD-WAN Switch from Same OEM	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
189.	51	8, Annexure 2, Table 1	SD-WAN	Should support SDWAN IPSec Throughput of 50 Gbps and NGFW Throughput of 18 Gbps. Should support 20 million Concurrent Sessions and 1 Million new Sessions.	The features like concurrent sessions and concurrent connections are more of Firewall oriented, and Solutions recommend asking for a dedicated Firewall for DC and DR would be justified.	No change.
190.	51	8, Annexure 2, Table 1	SD-WAN	NA	Solutions should segregate the Firewall and Routing features, since performance degradation can happen if detailed FW features are asked on the Routing device. Also, this would enable multiple leading	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					OEMs to participate, else this seems to be oriented to a single OEM.	
191.	51	8, Annexure 2, Table 1	SD-WAN	Firewall Should have the features/Services to be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering, SSL VPN 25,000 user license bundled	DLP - a dedicated solution is recommended - Firewall can't classify all above therefore dedicated solution DLP solution is required IPS, Zero Day attack this involves multiple solution components like sandboxing etc., which is a security solution ask and not a routing solution ask - should segregate this also AMP, URL filtering etc. - again a security ask - and can be delivered through cloud. Should be segregated. SSL VPN 25,000 user license bundled is specific to Single OEM	No change.
192.	51	8, Annexure 2, Table 1	SD-WAN	The SD-WAN Orchestrator & Manager at Command Control Center should be able to manage, monitor and configure all Firewall cum SD-WAN Routers, and 24 Port Switches at 5792 Hi-tech Labs. The Solution proposed should also be capable of managing all these devices in 5792 Hi-tech Labs from day one and upgradable to additional 10,000 Hi-Tech Labs for future upgrade.	The SD-WAN Orchestrator & Manager at can be cloud managed or On-prem should be able to manage, monitor and configure all SD-WAN Routers, and Switches at (Hitech and Smart class RFP). The Solution proposed should also be capable of managing all these devices in 5792 Hi-tech Labs from day one and upgradable to additional 10,000 Hi-Tech Labs for future upgrade. Our recommendation is to manage all the SDWAN and Switches and school devices from cloud itself with single dashborad. Which will be reduce the cost for client.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
193.	51	8, Annexure 2, Table 1	SD-WAN	The command control centre should be equipped with SD-WAN Orchestrator and Manager, Head End Router with Data Centre Firewall functionalities and Log Analyser	Request you to remove this clause Single OEM Specific. Orchestrator features differ from OEM to OEM	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
194.	51	8, Annexure 2, Table 1	SD-WAN	Should have the features/ Services to be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering, SSL VPN 25,000 user license bundled.	Request to remove the URL and filter Since It's a DC environment we recommend to have separate perimeter Firewall to manage the traffic. Otherwise no redundancy for outage. SDWAN device will do major Routing and traffic segment and Jitter and all but it will do only NGFW traffic inspection. but Dedicated FW will do Traffic inspection.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
195.	51	8, Annexure 2, Table 1	SD-WAN	A SD-WAN Head End Router cum NGFW to be installed at CCC with the following performance parameters - The Router has to be in High Availability with active-active Configuration - Should support SDWAN IPSec Throughput of 50 Gbps and NGFW Throughput of 18 Gbps - Should support 20 million Concurrent Sessions	Request to remove the clause and ask for separate FW requirement. Since It's a DC environment we recommend to have separate perimeter Firewall to manage the traffic. Otherwise no redundancy for outage. SDWAN device will do major Routing and traffic segment and Jitter and all but it will do	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				and 1 Million new Sessions - Should Support 20,000 IPSec Site to Site VPN Tunnels	only NGFW traffic inspection. but Dedicated FW will do Traffic inspection.	
196.	51	8, Annexure 2, Table 1	SD-WAN	A SD-WAN Orchestrator & Manager to be supplied with following specifications: - The Manager should support 7000 SD-WAN devices from day one and upgradable to SD-WAN 10,000 devices. - Should support management and Configuration of Switches and Access Points connected to the SD-WAN Devices. - Should have 2 Nos. of 10G Ports and Dual Redundant Hot Swappable Power Supplies. - The Manager should be able to Manage the Firewalls at Schools and 24 Port Switches upto the Port Level. - The Manager should have Workflow Audit feature for Hierarchical approval.	Request to remove and consider the points for cloud managed orchestrator with on-Prem head end Gateway. Request to remove the Hot swappable to Field replcement of powersupply On-prem is not recommend to maintain all the devices, our recommend to go with cloud dashborad which will help to reduce the ROI.	Corrigendum updated - SD-WAN Solutions is removed for CCC & School. Shall be provided through TSP
197.	54	8, Annexure 2, Table 3	CCC Applications		Additional Point : Bidder should have historic information for minimum 180 days for SLA, MIS	No change.
198.	54	8, Annexure 2, Table 6	Work Stations	Intel Xeon W-1250 3.3GHz or higher 6C 12MB Cache	Intel Core i9 12th Generation 12900 30 MB Cache, 16 Cores	No change.
199.	54	8, Annexure 2, Table 6	Work Stations	Processor: Intel Xeon W-1250 3.3GHz or higher 6C 12MB Cache	IntelCore i9 12th Generadon 12900 30 MB Cache, 16 Cores	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
200.	54	8, Annexure 2, Table 4	DR Replication	Provision to made in Public Cloud to have complete the content and it should be activated in the event of failure at CCC.	We notice that the DR has to be set up on the cloud. We notice that there are no additional specifications/criteria specified for selecting the Cloud Service Provider. Since the data of all the schools along with critical applications would reside on the cloud, we urge the department to consider including some more details as criteria so that all major Public Cloud service providers can cater. Since all major cloud service providers has stringent security apparatus in place as stipulated by Government of India , this would ensure solution providers who offer the highest level of service availability with utmost security would qualify. · The CSP shall be MeitY empaneled & STQC audited as per Ministry of Electronics and Information Technology (MeitY) as on bid submission date for both virtual private cloud and government community cloud · The CSP must be operating at least two	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					<p>(2) Data Centre / Disaster Recovery Centre Facilities in India at time of submission of the bid. Proposed DC & DR site should be in different seismic zone. CSP should be able to provide both DC & DR services together without any limitations as per MeitY guidelines.</p> <ul style="list-style-type: none"> · The CSP should provide all variants of cloud service · Infrastructure as a Service (IaaS), · Platform as a Service (PaaS) · Software as a Service (SaaS) · The CSP should have following ISO Certifications · ISO 9001:2015 · ISO 27001:2013 certification · ISO/IEC 27701:2019 · Cloud service should support a policy validator to automatically examine non-compliant access control policies. 	
201.	54	8, Annexure 2, Table 4	General		<ul style="list-style-type: none"> · Cloud Service should also provide native Database Activity Monitoring (DAM) and alternate processes for continuity in monitoring of processes in case of failure of DAM. · Certified for all 3- SOC1, SOC2, and SOC3 · Auto-scaling to 10X of compute resources in real time without human intervention: Evaluate on ability to auto-scale; ease of configuring the auto-scaling rules, breadth of parameters for configuring auto-scaling (e.g., min/max/parameters on which threshold levels can be set/wait time), availability of multiple auto-scaling scenarios (e.g., based on threshold levels, scheduled, recurring). 	No change.
202.	54	8, Annexure 2, Table 6	Work Stations	Processor: Intel Xeon W-1250 3.3GHz or higher 6C 12MB Cache	Intel Core i5-12500 6 3.0GHz 3200M 65W (3.0GHz, turbo up to 4.6GHz, 18MB cache, cores)	Corrigendum updated – Item deleted.
203.	54	8, Annexure 2, Table 6	Work Stations	Memory: 16GB DDR4 2666MHz or higher DIMM ECC. Upgradable up to 128 GB with atleast two free slot.	8 GB DDR4 SDRAM @ 2933 MHz Expandable upto 64 GB with atleast one free slot.	Corrigendum updated – Item deleted.
204.	54	8, Annexure 2, Table 6	Work Stations	Mother Board (Intel/Gigabyte/ ASUS/MSI/ OEM) 1. Min 4 PCI / PCIe express slots and at least one of them should be PCIe x16, 2. Integrated Graphics Controller, 10/100/1000 Mbps Network Card	1. 3 PCI/PCIe expansion slots 2. Intel® UHD Graphics 770 3. Integrated 10/100/1000 Ethernet, 8 USB	Corrigendum updated – Item deleted.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				3. Min 6 USB Ports with at least two with 3.0, 2 2 Additional USB Ports, 4. 1 serial port, 5. VGA / Display port, 6. HDMI, 7. RJ45, 8. Audio 3.5mm. Support external speakers - Min 2 Watts	Ports With 6 USB 3.0 & ± USB 2.0 4. VGA, HI)MI 5 RJ 45 6. Combo jack, Headphone/ Microphone, Internal speaker of 2 w & 1 Audio Line out for external speaker	
205.	54	8, Annexure 2, Table 6	Specification for Desktop PC	Processor Intel Xeon W-1250 3.3GHz or higher 6C 12MB Cache	Intel® Core™ i5-12600K Processor 10 Core 3.7Ghz 20MB Cache (W1250 is End Of Life and as per intel rollover CPU is i5-12600K)	Corrigendum updated - 10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor
206.	55	7, Table II, 7 & 8	Switches	a) Layer 3 48 Port 1/10G Switch with HA --- 1 No's b) Layer 2 48 port 1G POE Switch -- 1 No's	Please provide the specification of the L3 Switches. For 1/10G port Switch -Number of transceivers (Fiber/Copper) and if Fiber modules kindly clarify whether Multi-mode or Single mode modules	No change.
207.	55	8, Annexure 2, Table 6	Specification for Desktop PC	Bays Min 2 x Internal and Min 3 x External bays	2 x Internal bay & 1 x External bay, 1 x Slim ODD External bay	No change.
208.	56	8, Annexure 2, Table 12	UPS	Back-Up Time 120 minutes	We request you to provide minimum load to be consider for battery backup OR provide minimum VAH to consider for bid Kindly clarify	No change.
209.	56	8, Annexure 2, Table 12	UPS	Back-Up Time 120 minutes	Standard Battery OEM provides maximum 2 to 3 years warranty so we request you to add clause that all supplied batteries should be replace after 3 Years of installation date This will help us provide battery backup for required warranty tenure	No change.
210.	56	8, Annexure 2, Table 12	UPS	Backup time: 120 minutes	As there is already DG is installed for CCC, UPS can be automatically switchover to DG immediately. In view of this it request to consider backup time as 30 minutes.	No change.
211.	56	8, Annexure 2, Table 12	UPS	Backup time: 120 minutes	As there is already DG is installed for CCC, UPS can be automatically switchover to DG immediately. In view of this it request to consider backup time as 30 minutes.	No change.
212.	56	8, Annexure 2, Table 12	UPS	Capacity: 40KVA -Parallel- online ups	Please clarify whether the requirement is for standalone tower type ups or modular type. If the requirement is for modular type, 40KVA modules in N+1 configuration or we can supply	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					20+20KVA power modules in parallel configuration	
213.	56	8, Annexure 2, Table 11	CCTV and Access Security System	1- CCTV facilitation to be provided with IP Camera's & NVR having backup of minimum for 90 working days - Access Card System to be placed to restrict the access	Pls clarify if the CCTV backup data to be stored centrally CCC or at every school?	CCTV for CCC
214.	57	8, Annexure 2, Table 12	UPS	Ambient Temperature :0 – 50°C	As per industrial practice operating temperature for the UPS system is 0-40 Degree C hence we request you to kindly amend this clause	No change.
215.	57	8, Annexure 2, Table 12	UPS	Other Features:2) Major components such as power modules and replacement of the hot swappable batteries without disrupting power to target equipment	kindly clarify requirement is for Modular Type UPS required or standalone tower Type	No change.
216.	81	Annexure X, IV, c	General	Retain–In the eventuality that no such alternate arrangements are in place for managing the Project at the end of the Contract period, the selected Supplier will be required to continue delivering services as required under this Project, at the same terms and conditions, even beyond the Contract period (such period not exceeding 1 year) till alternate arrangement is done by the Purchaser to manage the operations.	After completion of contract bidder system doesn't allow to provide services. Hence please remove this clause.	No change.
217.	89	ANNEXURE X, 7, II, c	Payment Terms	The Tenderer would make available the ICT infrastructure for years on the basis of a Service Level Agreement and assurance of the periodical payments subject to satisfactory maintenance based on EMIS Reports. The following pattern of payment shall be made. a. After completion of Installation and commissioning: 60% of Total cost b. At the end of the II – Year:10% of Total cost c. At the end of the III – Year:10% of Total cost d. At the end of the IV – Year:10% of Total cost e. At the end of the V – Year:10% of Total cost	Given this is a large project, suggest the payment terms for the bought outs to be · 30% on delivery · 60 % on commissioning subject to maximum 1 month from the date of delivery. · 10% at the end of year 1 For the services part the payment should be made on a quarterly basis.	No change.
218.	93	ANNEXURE X: 9, I	Warranty	The warranty of the Computers and Accessories supplied by the Successful Tenderer shall be for a period of Five years from the date of installation of the same to the schools in Tamil Nadu.	Kindly request modification for the warranty period to start from the date of supply of the goods.	No change.
219.	93	ANNEXURE X: 9, I	Warranty	I. Warranty: The warranty of the Computers and Accessories supplied by the Successful Tenderer shall be for a period of Five years from the date of installation of the same to the schools in Tamil Nadu. The Successful Tenderer shall replace the defective Computers and Accessories supplied by him with new ones at his cost at the designated points during the period of Warranty.	Can we change 'replace' with 'replace/repair' and remove 'new ones'. Kindly add the below to the warranty terms. Protection of supplied items after delivery as per the OEMs warranty/ AMC policy i.e. (theft/breakage/damage) will be school's responsibility.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
220.	104	ANNEXURE – X: 9, I	Warranty	Solution should be designed to monitor, manage, facilitate IT equipment of all Schools and should be scalable to handle 10,000 schools and this scalability should not be vendor specific.	This RFP is for 5792 middle schools. Request clarity on model for awarding the remaining schools (10000 minus 5792).	No change.
221.	104	ANNEXURE – X: 9, I	Warranty	Solution should be designed to monitor, manage, facilitate IT equipment of all Schools and should be scalable to handle 10,000 schools and this scalability should not be vendor specific.	This RFP is for 5792 middle schools. Request clarity on support model for the remaining schools (10000 minus 5792). Will the same bidder selected for this RFP required to maintain the DC set up for the remaining schools? If so, what's the time frame and support model?	No change.
222.	116	10. PRICE BID -TO BE FURNISHED IN PART – B COVER	DR Replication	DR on Cloud	Kindly add DR on Cloud as a separate line item along with required minimum cores, Memory and storage for required tenure / years in price bid in case it requires to consider as a part of requirement and solution	No change.
223.	116	10(A)	Price Bid		No separate line item is mentioned there in the Price Bid format for Training. Please elaborate about inclusion of Trainings in the Price Bid and its payment terms.	No change.
224.	37 & 11	5, XVI, j & 1, XIII, c	General	c) The Tenderer shall provide & maintain software updates, security patches & any other patches directly from the OEM / Principal manufacturer for software like operating system, database, antivirus security, productivity suite software etc. for the entire project maintenance period of contract from time to time at no additional cost to the Government to meet the requirements of security and quality of system software.	Kndly confirm the scope and requirement of Antivirus scope. If yes request you to include in BoQ	No change.
225.	7 & 44	1, VIII, f, i & 7, II, 6	IT Infra Solutions	CCC Infrastructure design should be implemented for 15-seater operations considering the scalability of solutions. & Workstation along with display, keyboard, mouse & OS- 4 no.	As we understand from clause nos 1(Viii)(B)(f) & 7(ii)(6) that the bidder have to provide CCC infra for 15 Nos seating arrangements but the supply of workstation qty as per BOQ is 4 Nos for CCC. Kindly confirm	Please refer to Response against Sl. No. 27 Please refer to the revised requirements of CCC as provided in Annexure XVII – Minimum Bill of Quantities, table II – BOQ for CCC in the Corrigendum. The requirement of workstations and video wall is dispensed with.
226.	8, 9	1, VIII, g	CCC Applications	CCC Applications Enterprise Management Systems	As EMS system would be licensed based so Kindly clarify that how much numbers of devices are to be monitored from Day1 Kindly clarify	No change.
227.	8, 9	1, VIII, g	CCC Applications	g. CCC Applications Enterprise Management Systems	As EMS system would be licensed based so kindly clarify that how much numbers of devices are to be monitored from Day1 Kindly clarify	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
228.	NA	NA	General	Specifications for Antivirus device (for School)	Request to add the below clause: Additional 50 SD-WAN devices to be supplied and stored at CCC as spares for the Operation & Maintenance, also to be added to minimum BoQ.	No change.
229.	NA	NA	General	NA	Request you to clarify, strategy for DATA Backup and Retention Policies	No change.
230.	NA	NA	General	Application Architecture	Need details of the application Architecture	No change.
231.	NA	NA	General	Deployment Architecture	Need the specification of Deployment Architecture	No change.
232.	NA	NA	General	No of Concurrent Users	How many concurrent users are there	No change.
233.	NA	NA	General	Max Transaction per Day	What is the number of transactions per day	No change.
234.	NA	NA	General	Max Size of Write /Transaction year	Need the maximum size of write transaction per year	No change.
235.	NA	NA	General	Max Size of File in MB	What is the file Upload size in MB	No change.
236.	NA	NA	General	Max Files per User	What is the file upload per user required	No change.
237.	NA	NA	General	Database Backup Policy	What is the database back policy	No change.
238.	NA	NA	General	Database Retention Policy	What is database retention policy	No change.
239.	NA	NA	General	DC - DR Policy	What is Data recovery policy	No change.
240.	NA	NA	General	RPO -- Recovery Point of Object	What is the required recovery Point of Object	No change.
241.	NA	NA	General	RTO -- Recovery Time of Object	What is the Recovery Time of Object	No change.
242.	NA	NA	General	Data Archival Policy	What is the Data Archival Policy	No change.
NON-TECHNICAL QUERIES						
243.	1	1		Cost of Tender document (hard copy) (Download is free): ₹ 1,000 + 18% GST = ₹ 1,180/- Bid Processing Fee: ₹ 10,000 + 18% GST = ₹ 11,800/-	As the complete tender document is available on given website / e-tender portal, we understand it is not mandatory for bidder to purchase or submit the cost of tender document (Rs 1,180/-). However, Submission of Bid processing fee of Rs 11,800/- along with the Technical Bid is mandatory. Please confirm if our understanding is correct.	Your understanding is correct.
244.	1	1		Bid Processing Fee ₹ 10,000 + 18% GST = ₹ 11,800/-	Please confirm the mean /the way by which Bid processing fee need to be submitted. We understand that it can be paid by way of Demand Draft in favour of 'Tamil Nadu Text Book and Educational Services Corporation, Chennai -6' payable at	Can be paid by Demand Draft.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					Chennai. Please confirm	
245.	14	1, XXII, h	Other Requirements	Tenderer should produce a satisfactory installation certificate issued by the CoSE or through third-party agency identified by TNTB&ESC , verified by Headmaster of the school and verified & counter signed by the Chief Educational Officer of each district to the CoSE, Chennai, Tamil Nadu. TNTB&ESC will consider for payments only after receipt of satisfactory report and Acceptance Test report.	Request to have one SPOC.	No change.
246.	15	1, XXII, i	Other Requirements	The CoSE shall have the right to change /modify the school location and to replace a school location with other school with same terms and conditions. Tenderer shall not be eligible for any increase in contract amount due to this change on what so ever reason. CoSE shall have right to increase/decrease the number of schools and contract amount shall be increased or reduced accordingly.	In case the shifting or replacement of location is done post implementation at a school, the shifting charges shall be paid by CoSE. Kindly confirm.	Cost to shift location post date of commissioning will be borne by School Education department.
247.	15	1, XXII, i	Other Requirements	The CoSE shall have the right to change /modify the school location and to replace a school location with other school with same terms and conditions. Tenderer shall not be eligible for any increase in contract amount due to this change on what so ever reason. CoSE shall have right to increase/decrease the number of schools and contract amount shall be increased or reduced accordingly.	Please clear the point the change of school location before will happen before implementation of lab or after implementation of lab. If the change of location will happen after implementation of lab would be tough to utilize the same electrical wiring and networking cables and connectors, and shifting of IT hardware to other location will attracts the additional cost to the bidder	The location shall be provided prior to start of work.
248.	16	2, II, 3	2. NOTICE INVITING TENDER	Tender Documents Available at https:// textbookcorp.tn.gov.in/ and at http://www.tenders.tn.gov.in	As the complete tender document is available on given website / e-tender portal, we understand it is not mandatory for bidder to purchase or submit the cost of tender document (Rs 1,180/-). However, Submission of Bid processing fee of Rs 11,800/- along with the Technical Bid is mandatory. Please confirm if our understanding is correct.	Your understanding is correct.
249.	17	3, e	SPECIAL INSTRUCTIONS FOR SUBMISSION OF BIDS & CHECK LIST	The downloaded documents along with Tenderer's response to the RFP in the form of Technical and Price bids along with necessary supporting documents, shall be properly page numbered and spiral bound. Any bids submitted as loose sheets or with incorrect referencing may be rejected.	As this is a Turnkey Project, the tenderer/SI will have to arrange the documentation and Quotations from multiple OEMs. Due to strategic decisions sometime tenderer need to replace or modify the documents at the last moments. Hence we request you to please allow tenderers to submit their	No change. It is reiterated that ANY bids submitted as loose sheets or with incorrect numbering may be rejected at the sole discretion of the Authority.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					properly page numbered bid in spiral bound, stappled or properly clipped Files.	
250.	17	3, f	SPECIAL INSTRUCTIONS FOR SUBMISSION OF BIDS & CHECK LIST	Consortium bidding is permitted for maximum of two members. One shall be considered as 'Lead Bidder' and another one shall be considered as 'Operational Bidder'. Demarcation of roles and responsibilities of both partners is should be clearly stated by the bidders in the Consortium agreement. The 'Operational bidder' shall be considered as 'System Integrator' of this Project.	Request the Department to consider three partners as consortium as these are very large projects where two consortium partners may not be able to fulfill all the criteria. Kindly do the needful.	No change.
251.	18	3, l, 2	CHECK LIST OF DOCUMENTS TO BE SUBMITTED IN THE TECHNICAL AND PRICE BIDS	Copy of Consortium agreement among the tenderers. Demarcation of roles and responsibilities of both partners is to be included in the agreement.	Please change Please remove consortium and ask bidder or OEM individually meet all eligibility and pre-qualification as per Tender document	No change.
252.	23	4, XV, a and b	Earnest Money Deposit (EMD)	Earnest Money Deposit (EMD): a) An Earnest Money Deposit (amount as mentioned in Chapter 2) as specified shall be paid along with the Technical Bid by way of Demand Draft obtained from a Nationalized / Scheduled Bank drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai -6 payable at Chennai. The Earnest Money Deposit amount of the unsuccessful Tenderers will be returned after the award of the Contract pursuant to the selection of the successful tenderer and on written request from the unsuccessful tenderer. The Earnest Money Deposit amount held by the Corporation will not fetch any interest till it is refunded to the unsuccessful tenderers. The Earnest Money Deposit amount of the successful tenderer may be adjusted against the Security Deposit (SD) payable for successful execution of the Contract. b) Any tender not accompanied by Demand Draft towards Earnest Money Deposit shall be rejected summarily by the Corporation.	1) As the amount of EMD is a big amount, we request you to please allow bidders to submit the EMD in form of Bank Guarantee also. 2) Please also provide complete bank details of TNTB&ESC.	No change.
253.	23	4, XV, a	Earnest Money Deposit (EMD)	Earnest Money Deposit (amount as mentioned in Chapter 2) shall be paid along with the Technical Bid by way of NEFT/ Demand Draft obtained from a Nationalized/ Scheduled Bank drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai -6 payable at Chennai.	Gol, ministry of Finance has published an OFFICE MEMORANDUM (No.F.9/4/2020-PPD Dated 12th November 2020) stating that no provisions regarding Bid Security should be kept in the Bid Documents in future and only provision for Bid Security Declaration should be kept in the Bid Documents. We request you to accept Bid Security Declaration in place of EMD.	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					or Request for EMD in the form of Bank Gurantee from a Nationalized Bank, format of BG to be provided and BG validity to be mentioned.	
254.	23	4, XV	Earnest Money Deposit (EMD)	An Earnest Money Deposit(amount as mentioned in Chapter 2)as specified shall be paid along with the Technical Bid by way of Demand Draft obtained from a Nationalized / Scheduled Bank drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai -6 payable at Chennai.	We request you to kindly consider Earnest Money Deposit to be submitted in the form of Bank Guarantee as well and amend the clause as : - An Earnest Money Deposit(amount as mentioned in Chapter 2)as specified shall be paid along with the Technical Bid by way of Demand Draft/ Bank Guarantee obtained from a Nationalized / Scheduled Bank drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai -6 payable at Chennai.	No change.
255.	23	4, XV	Earnest Money Deposit (EMD)	NA	ITI being a Central PSU may be exempted from submission of EMD. Instead, submission of Bid security declaration may be allowed.	No change.
256.	23	4, XV	Earnest Money Deposit (EMD)	NA	EMD may be allowed to submitted in the form of Bank Guarantee	No change.
257.	23	4, XV	Earnest Money Deposit"	An Earnest Money Deposit (amount as mentioned in Chapter 2) as specified shall be paid along with the Technical Bid by way of Demand Draft obtained from a Nationalized/ Scheduled Bank drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai -6 payable at Chennai	Earnest Money Deposit (amount as mentioned in Chapter 2) as specified shall be paid along with the Technical Bid by way of NEFT/ Demand Draft/BG obtained from a Nationalized/ Scheduled Bank drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai -6 payable at Chennai	No Change.
258.	23	4, XVII, a and b	Signing of Tender	Tenderer to the contract. All pages of the tender shall be signed by the Tenderer or person(s) authorized to sign the Tender with the seal. b. Any alterations, corrections or overwriting in the Tender document shall be treated valid only if they are authenticated by full signature of the person authorized to sign the tender.	Request to confirm whether digital signature of the authorized signatory (on last page) is acceptable.	Scanned signature on each page is acceptable with original signature on last page.
259.	24	4, XVI, a	IT Infra Solutions	Submission of Tender: a. Tender shall be submitted in two parts in original i.e. Part-A and Part-B. The Part- A cover shall contain the EMD, the response to the pre-qualification and the Technical Bid and superscripted on the envelope as Part-A Technical Bid- Tender for Establishment of "Hi-Tech Labs in Government Schools and Command & Control Centre in Tamilnadu State". On the Part-A cover, the Name and Address of the tenderer shall be	We understand that - a) Bid need to be submitted in hard copy / Physical form only. b) Only single copy of Technical and Price Bid (in separate envelopes) need to be submitted. C) No soft copy of bid is required to be submitted by Bidder. Please confirm.	a. Bid must be submitted in hard copy only. b. Yes. C. The bidders are requested to submit the editable of their technical documents (CL, Word) for quicker evaluation by the Tender Committee. The same shall be submitted in a pen drive (which is to be included within the Technical Envelope).

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				written and sealed. The tender document shall compulsorily be spiral bound & indexed with page numbers.		
260.	24	4, XVI, d	Earnest Money Deposit (EMD)	Further the Corporation will blacklist the successful Tenderer without prejudice to any action that may be taken against the successful Tenderer.	Request you to remove this clause	No Change.
261.	25	4, XVII	Period of Contract:	<p>Period of Contract: The period of contract is 120 days for supply & installation of Hi-Tech Labs, and 90 days for CCC (or as mutually agreed upon). In addition, Operation and Maintenance of Hi-Tech Labs on SIITCM&PM model is to be carried out by the Tenderer till the end of Project Duration/ Extend Project Duration.</p>	<p>The clause is quite confusing. The first clause states that SIITCM&PM of Hi-Tech Labs & CCC shall be completed as per mutually agreed Delivery Schedule whereas another clause says - The period of contract is 120 days for supply & installation of Hi-Tech Labs, and 90 days for CCC (or as mutually agreed upon)</p> <p>Please elaborate and confirm the exact delivery schedule.</p>	<p>a) The Supply, Installation, Integration, Testing, Commissioning, Maintenance and Strengthening Project Management of Hi-Tech Labs shall be completed as per Delivery Schedule, further elaborated below:</p> <p>a1) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with Schools as per the technical specifications in the Tender Document to the CoSE within 180 days.</p> <p>a2) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with CCC as per the technical specifications in the Tender Document to the CoSE within 120 days.</p>
262.	25	4, XX, e	Opening of Tenders	Part- A cover containing Technical Bid shall be opened first. The supporting documents shall be cross-checked wherever required.	<p>As few customers now use to issue only soft copies of such certificates, we understand copy of duly signed performance/ client certificates self attested by Tenderer will suffice the purpose. However, the tender evaluation committed has rights to cross verify the authenticity of certificate with the client.</p> <p>Please confirm.</p>	Accepted. Further, if it is found that any of the certificates are false, the Authority may blacklist the vendor.
263.	25	4, XVII	XVIII. Period of Contract:	The period of contract is 120 days for supply & installation of Hi-Tech Labs, and 90 days for CCC (or as mutually agreed upon). In addition, Operation and Maintenance of Hi-Tech Labs on SIITCM&PM model is to be carried out by the Tenderer till the end of Project Duration/ Extend Project Duration.	<p>Due to ongoing chip-shortage crisis, OEMs have increased their lead time to upto 7-8 months from date of Purchase Order Placement. Hence, we request you to amend the clause as below: -</p> <p>The period of contract is 120 360 days for supply & installation at Schools and 90 240 days for supply & installation at CCC (or as mutually agreed upon). In addition, Operation and Maintenance of Smart Classes in Government Schools on SIITCM&PM model is to be carried out by the Tenderer till the end of Project Duration/ Extend Project Duration.</p>	<p>a) The Supply, Installation, Integration, Testing, Commissioning, Maintenance and Strengthening Project Management of Hi-Tech Labs shall be completed as per Delivery Schedule, further elaborated below:</p> <p>a1) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with Schools as per the technical specifications in the Tender Document to the CoSE within 180 days.</p> <p>a2) The Successful Tenderer shall supply, install, integrate, test and</p>

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
						commission 100% of work related with CCC as per the technical specifications in the Tender Document to the CoSE within 120 days.
264.	25	4, XVII, a	Signing of Tender	The tender shall be typed or written legibly in indelible ink and shall be signed by the Tenderer or a person duly authorized to bind the Tenderer to the contract.	As the no. of pages of the bid document would be huge physical signature on each page would be difficult.	Scanned signature on each page is acceptable with original signature on last page
265.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	<p>Average Annual turnover from the Tenderer over the last three individual financial years.</p> <ul style="list-style-type: none"> • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5,000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2,000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1,000 Cr. to but less than or equal to 2000 Cr. = 5 marks 	<p>Looking at the criticality of the project, it is understand that TNTB&ESC wants only financially sound/ strong tenderer to submit their proposal but to allow few more tenderers to participate and have a fair competition, we request you to please dilute this clause a little bit as follows -</p> <p>Average Annual turnover from the Tenderer over the last three financial years -</p> <ul style="list-style-type: none"> • More than Rs. 8,500 Cr.= 20 marks • More than Rs. 4,000 Cr. but less than or equal to 8,500 Cr. = 15 marks • More than Rs. 2,000 Cr. but less than or equal to 4,000 Cr. = 10 marks • More than Rs. 1,000 Cr. but less than or equal to 2,000 Cr. = 5 marks 	No change.
266.	26	4, XXI, c, 3	Evaluation Criteria details: Work experience	<p>The Tenderer (Lead Tenderer) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last five years:</p> <ul style="list-style-type: none"> • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks 	<p>As large EPC turnkey projects also include IT / Hardware / Network / ICT Infra etc. as its major components, we request, this clause should be modified as suggested below -</p> <p>The Tenderer (Lead Tenderer) must have the experience in IT Hardware/ Network/EPC/ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last Seven years:</p> <ul style="list-style-type: none"> • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks 	No change.
267.	26	4, XXI, c, 1 & 2	Criteria for Evaluation of Technical Bid:	<p>Turnover:</p> <p>Average Annual turnover from the Tenderer over the last three individual financial years.</p> <ul style="list-style-type: none"> • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 	We, Telecommunications Consultants India Limited(TCIL), a Govt of India Enterprise under Ministry of Communications is one of India's premier multi-disciplinary Telecommunications and IT organization, a reputed System Integrator; undertake execution of turnkey projects and also offer Consultancy	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				<p>5000 Cr. = 10 marks</p> <p>• More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks</p> <p>Positive net worth: Average Positive net worth and should be profit making company for the past three years audited financial year ending 31.03.2022 More than Rs 500 Cr to 700 Cr = 10 marks More than Rs 200 Cr to 500 Cr = 7 marks More than Rs 100 Cr to 200 Cr = 5 marks</p>	<p>Services.</p> <p>TCIL specializes in providing total Telecom/Satcom/IT/Security Surveillance and Infra solutions from concept to completion and has been active and implemented projects in more than 70 countries around the world, especially in Asia, Middle East & Africa. TCIL has emerged as one of the leading Telecom/Satcom/IT/Security Surveillance provider in the world, with its broad spectrum of services that covers nearly all the areas of IT-enabled Services, e-Governance and communications including Feasibility/Pre-investment studies, Design of IT Network, Supply of equipment, Installation-Commissioning, Testing and its Operation & Maintenance. TCIL is very keen to participate in this Tender and we assure you that we will submit you a competitive Techno commercial bid for the same. However it is felt that the Criteria No. 1 & 2 for Evaluation of Technical Bid are too stringent and provisioning of such criteria is not justifiable for the works whose estimated value is around 370 Cr. We request you to modify these criteria's as below:</p> <p>Turnover Average Annual Turnover from the tenderer over the last three individual financial years More than Rs 1000 Cr but less than or equal to 2000 Cr = 20 Marks More than Rs 500 Cr but less than or equal to 1000 Cr = 15 Marks More than Rs 200 Cr but less than or equal to 500 Cr = 10 Marks More than Rs 100 Cr but less than or equal to 200 Cr = 5 Marks Positive Net worth</p> <p>Average Positive net worth and should be profit making company for the past three years audited financial year ending 31.03.2022 More than Rs 500 Cr to 700 Cr = 10 marks More than Rs 200 Cr to 500 Cr = 7 marks</p>	

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					More than Rs 100 Cr to 200 Cr = 5 marks	
268.	26	4, XXI, c, 2	Positive Net Worth Criteria 2 Positive Net Worth (Supporting documents)	Copy of Annual report/ Certificate from the CA on Net-worth details over the last three (3) financial years. If Tenderer is a Consortium, this applies to Lead Bidder.	As per our understanding it is submission of Audited Annual Report or CA certificate wrt Turnover and net-worth to be submitted, is it correct pl clarify. Else, it is requested to change for the following: submission of Audited PL & BS or CA certificate wrt Turnover and net-worth to be submitted.	1) Copy of Annual report with audited financials (i.e. P&L, BS) over the last 3 FY. AND 2) Certificate from the CA on Net-worth details over the last three (3) FY.
269.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 2,000 Cr.= 20 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 15 marks • More than Rs. 500 Cr. but less than or equal to 1000 Cr. = 10 marks • More than Rs. 250 Cr. but less than or equal to 500 Cr. = 5 marks	No change.
270.	26	4, XXI, c, 2	Evaluation Criteria details: Positive Net Worth	Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. • More than Rs. 1000 Cr.= 10 marks. • More than Rs. 700 Cr. to 1000 Cr. = 7 marks. • More than Rs. 500 Cr. to 700 Cr. = 4 marks.	Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. • More than Rs. 200 Cr.= 10 marks. • More than Rs. 140 Cr. to 200 Cr. = 7 marks. • More than Rs. 100 Cr. to 140 Cr. = 4 marks.	No change.
271.	26	4, XXI, c, 3	Evaluation Criteria details: Work experience	The Tenderer (Lead Tenderer) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last five years: • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 100 Cr cumulatively during the last five years • More than Rs. 300 Cr.= 10 marks • More than Rs. 200 Cr. to 300 Cr. = 7 marks • More than Rs. 100 Cr. to 200 Cr. = 5 marks	No change.
272.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	The clause may be modified as "Cumulative Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 8,000 Cr.= 20 marks • More than Rs. 5,000 Cr. but less than or equal to 8000 Cr. = 15 marks • More than Rs. 2,000 Cr. but less than or equal to 5000 Cr. = 10 marks	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					• More than Rs. 1,000 Cr. to but less than or equal to 2000 Cr. = 5 marks"	
273.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5,000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2,000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1,000 Cr. to but less than or equal to 2000 Cr. = 5 marks	The cumulative turnover may be allowed to be met as a consortium	No change.
274.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	Kindly amend as under: • More than Rs. 500 Cr.= 20 marks • More than Rs. 400 Cr. but less than or equal to 500 Cr. = 15 marks • More than Rs. 300 Cr. but less than or equal to 400 Cr. = 10 marks • More than Rs. 200 Cr. but less than or equal to 300 Cr. = 5 marks	No change.
275.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	Average Annual Turnover from the tenderer over the last three individual financial years More than Rs 1000 Cr but less than or equal to 2000 Cr = 20 Marks More than Rs 500 Cr but less than or equal to 1000 Cr = 15 Marks More than Rs 200 Cr but less than or equal to 500 Cr = 10 Marks More than Rs 100 Cr but less than or equal to 200 Cr = 5 Marks	No change.
276.	26	4, XXI, c, 2	Positive Net Worth	Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. • More than Rs. 1000 Cr.= 10 marks. • More than Rs. 700 Cr. to 1000 Cr. = 7 marks. • More than Rs. 500 Cr. to 700 Cr. = 4 marks.	Average Positive net worth and should be profit making company for the past three years audited financial year ending 31.03.2022 More than Rs 500 Cr to 700 Cr = 10 marks More than Rs 200 Cr to 500 Cr = 7 marks More than Rs 100 Cr to 200 Cr = 5 marks	No change.
277.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years More than Rs. 10,000 Cr.= 20 marks More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	Please change Please consider Average Annual turnover from the Tenderer over the last three financial years of Rs. 200 Crores or more or ask for the OEM experience of more than 10000 Smart classroom	No change.
278.	26	4, XXI, c, 2	Evaluation Criteria details: Positive Net Worth	Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. More than Rs. 1000 Cr.= 10 marks	Please change Please consider Average Positive net worth and should be a profit-making company for the past three years audited	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				More than Rs. 700 Cr. to 1000 Cr. = 7 marks. More than Rs. 500 Cr. to 700 Cr. = 4 marks.	financial year ending 31.03.2022. More than Rs. 100 Cr.= 10 marks or ask for the OEM experience of more than 10000 Smart classroom	
279.	26	4, XXI, c, 3	Evaluation Criteria details: Work experience	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last five years: • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks	Please change Please consider Project value of over Rs. 50 Crores for 10 Marks cumulatively during the last five years or ask for the OEM experience of more than 10000 Smart classroom	No change.
280.	26	4, XXI, c, 1	Evaluation Criteria details: Turnover	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	We would request to consider following amendment Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 500 Cr.= 20 marks • More than Rs. 400 Cr. but less than or equal to Rs. 300 Cr. = 15 marks • More than Rs. 300 Cr. but less than or equal to Rs. 200 Cr. = 10 marks • More than Rs. 200 Cr. but less than or equal to 100 Cr. = 5 marks	No change.
281.	26	4, XXI, c, 2	Evaluation Criteria details: Positive net worth	Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. • More than Rs. 1000 Cr.= 10 marks. • More than Rs. 700 Cr. to 1000 Cr. = 7 marks. • More than Rs. 500 Cr. to 700 Cr. = 4 marks.	We would request to consider following amendment Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. • More than Rs. 500 Cr.= 10 marks. • More than Rs. 400 Cr. to 300 Cr. = 7 marks. • More than Rs. 300 Cr. to 200 Cr. = 4 marks	No change.
282.	26	4, XXI, c, 3	Evaluation Criteria details: Work Experience	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last five years: • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks	We would request to consider following amendment. The Tenderer (Lead Bidder) / Any member of consortium must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 450 Cr cumulatively during the last five years. • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks	No change.
283.	27	4, XXI, c, 4	Evaluation Criteria details: Number of Projects - System	The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned during last five years projects	As large EPC turnkey projects also include IT / Hardware / Network / ICT Infra etc. as its major components, we request, this clause should be modified	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
			Integrator Experience	of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	as suggested below - The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / EPC / ICT Infrastructure Business and should have commissioned during last Seven years projects of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	
284.	27	4, XXI, Criteria 5 in Table, Sl. 2 under Scoring method for Technical Proposal Solution (50 Marks)	Criteria for Evaluation of Technical Bid: 5. Technical Proposal Solution; Sl. 2a	Project management Solution being proposed for Operations and Maintenance (Maximum Marks 10) Existing network of Service centre/ Franchise setup in at least in 7 Districts in the State of Tamilnadu – Documentary Proof to be submitted for the existence (3 Marks).	It is requested to consider bidder undertaking that presently if bidder don't have the service centre then bidder will open the service centre in 7 districts in the State of Tamilnadu within one month from the date of issue of work order.	No change.
285.	27	4, XXI, c, 4	Evaluation Criteria details: Number of Projects - System Integrator Experience	The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 25 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	No change.
286.	27	4, XXI, c, 4	Evaluation Criteria details: Number of Projects - System Integrator Experience	The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	Please consider 2 Projects value of over Rs. 30 Crores each for 10 Marks.	No change.
287.	27	4, XXI, c, 4	Evaluation Criteria details: Number of Projects - System Integrator Experience	The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	We would request to consider following amendment. The Tenderer (Operational Bidder) / Any member of consortium must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
288.	30	4, XXVIII, a	Payment of Security Deposit (SD)	The Successful Tenderers shall be required to furnish Security Deposit equivalent to 5% (Five percent) of the value of the work order as a guarantee for the performance of the Contract.	As per Office memorandum no. F.9/4/2020-PPD dated 12th November 2020 and dated 30.12.2021 by Govt of India Clause No.3, it is decided to reduce the Performance Security from existing 5 to 10% to 3 % of the value of the contract for all existing contracts. Please clarify/mention the percentage of PBG.	No change.
289.	30	4, XXVIII, a	Payment of Security Deposit (SD)	The Successful Tenderers shall be required to furnish Security Deposit equivalent to 5% (Five percent) of the value of the work order as a guarantee for the performance of the Contract. The EMD may be adjusted against the Security Deposit. After adjusting the EMD, the Successful Tenderer shall pay the balance amount through Demand Draft within 15 days from the date of issue of Letter of Acceptance. The Demand Draft shall be obtained from any one of the Nationalized Banks/ Scheduled banks drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai-600 006 payable at Chennai or it may be in the form of unconditional irrevocable Bank Guarantee valid for 84 months.	The Successful Tenderers shall be required to furnish Security Deposit equivalent to 5% (Five percent) of the value of the work order as a guarantee for the performance of the Contract. The EMD may be adjusted against the Security Deposit. After adjusting the EMD, the Successful Tenderer shall pay the balance amount through Demand Draft/ Bank Guarantee within 15 30 days from the date of issue of Letter of Acceptance. The Demand Draft/ Bank Guarantee shall be obtained from any one of the Nationalized Banks/ Scheduled banks drawn in favour of Tamil Nadu Text Book and Educational Services Corporation, Chennai-600 006 payable at Chennai or it may be in the form of unconditional irrevocable Bank Guarantee valid for 84 months.	No change.
290.	30	4, XXVIII, a	Payment of Security Deposit (SD)	The successful tenderers shall be required to furnish Security Deposit equivalent to 5% (Five percent) of the value of the work order as a guarantee for the performance of the Contract.	Request to reduce the PBG up to 3%. As per govt guideline no. F.9/4/2020-PPD Dated 30.12.2021, PBG should not be exceed from 3%. In recent all tenders, PBG is being asked as 2-3% only. Holding such a huge amount of bidder will add recurring interest in total project cost ultimately cost of the project is getting increased	No change.
291.	31	4, XXXI	Corrupt or Fraudulent practices	Will declare a firm ineligible either indefinitely or for a stated period of time to be awarded a contract if it any time determines that the firm has engaged in corrupt and fraudulent practices in competing for or in executing the contract.	Request you to amend the clause as- Will declare a firm ineligible either indefinitely or for a stated period of time to be awarded a contract if it any time determines that the firm has engaged in corrupt and fraudulent practices in competing for or in executing the contract.	No change.
292.	32	5, III	SPECIAL TERMS AND CONDITIONS OF THE CONTRACT: Supply	The Supply, Installation, Integration, Testing, Commissioning of Hi-Tech Labs with the CCC shall be completed within 120 days for Schools & 90 Days for CCC from the date of issue of the Work Order.	As the major components of this projects are Desktop PC and the lead time for this items is minimum 2 to 3 months. Due to high lead time of Desktop PC it is requested to consider the following delivery period.	a) The Supply, Installation, Integration, Testing, Commissioning, Maintenance and Strengthening Project Management of Hi-Tech Labs shall be completed as per Delivery Schedule, further elaborated below:

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					1. 50% of Schools along with CCC shall be completed within 120 days from the date of issue of the work order. Balance 50% of Schools shall be completed within 240 days from the date of issue of the work order.	a1) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with Schools as per the technical specifications in the Tender Document to the CoSE within 180 days. a2) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with CCC as per the technical specifications in the Tender Document to the CoSE within 120 days.
293.	34	5, XI, d)	XI. Other Requirements	The Tenderers shall have to submit the Manufacturing Authorization Forms (MAF) for all the Hardware and Software items that are proposed in the bid response. It must be noted by the Tenderers that only the make and models mentioned in the MAF shall be accepted during the delivery and installation of hardware and software.	We understand Bidder is allowed to quote more than one make and model (limited to max. 3) submitting MAF from the respective OEMs. Please confirm.	d) The Tenderers shall have to submit the Manufacturing Authorization Forms (MAF) for all the Hardware and Software items (maximum of 3 make and model) that are proposed in the bid response.
294.	34	5, XII, b	Payment Terms	Payment to the Tenderer shall be made strictly as per the terms of the agreement on a per school basis within 30 days after the receipt of valid request for payment with the certificate on satisfactory performance by the concerned School Head Master and third party agency appointed by TNTB&ESC/CoSE.	We propose that the Customer will sign the certificate of acceptance and satisfactory performance, within a maximum period of 15 days from completion of delivery and installation. - If certificate of satisfactory performance for any site is not signed by Customer within 30 days of completion of delivery and installation, and no issues are raised by Customer during this period, the materials will be deemed to be accepted. - We understand the certificate will be signed by Head Master of each school. Kindly clarify if any 3rd party agency or any other authority, will also need to inspect and sign the certificate for each school, before bill submission.	No change.
295.	34	5, XI, e	Other Requirements	The Tenderers shall have to submit the Manufacturing Authorization Forms (MAF) for all the Hardware and Software items that are proposed in the bid response.	We understand that Bidder can quote multiple make and model (with MAF from all the proposed OEMs) for the components being proposed. Kindly confirm.	d) The Tenderers shall have to submit the Manufacturing Authorization Forms (MAF) for all the Hardware and Software items (maximum of 3 make and model) that are proposed in the bid response.
296.	35	5, XII, c	Payment Terms	The Tenderer would make available the infrastructure for the project period based on a Service Level Agreement and assurance of the periodical payments subject to satisfactory maintenance based on EMIS Reports. The following pattern of payment shall be made. 1. After completion of Installation and commissioning: 60% of Total cost 2. At the end of the II – Year: 10% of Total cost	Maintaining the cash flow of the project is very critical for such large scale project. Request you to kindly amend the payment terms as following : 1. On Material Supply on Pro rata Basis - 40% 2. After completion of Installation and commissioning on Pro rata Basis : 40% of Total cost	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				3. At the end of the III – Year: 10% of Total cost 4. At the end of the IV – Year: 10% of Total cost 5. At the end of the V – Year: 10% of Total cost	2. At the end of the II – Year: 5% of Total cost 3. At the end of the III – Year: 5% of Total cost 4. At the end of the IV – Year: 5% of Total cost 5. At the end of the V – Year: 5% of Total cost	
297.	35	5, XIII	Penalty and Termination Due to Non-Fulfilment of Contract	PENALTY FOR DELAY IN EXECUTION OF PROJECT: If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs.2000/- (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 30 days. Further, Rs. 5,000/- (Rupees Five Thousand only) per calendar week will be charged beyond 30 days up to 80 days. After 80 days penalty shall be Rs. 10,000/- (Rupees Ten thousand only) per calendar week per school subject to the condition that contractor has completed 50% work in earlier 80 days. If the installation and commissioning is not completed even within 120 days from the date of order then contract will be liable for termination in part or whole at the discretion of the CoSE, Tamil Nadu State, Chennai at the risk and cost of the contractor.	PENALTY FOR DELAY IN EXECUTION OF PROJECT: If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs.2000 1000/- (Rupees Two One Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 30 days. Further, Rs. 5,000 2500/- (Rupees Five Thousand Two Thousand Five Hundred only) per calendar week will be charged beyond 30 days up to 90 days. After 90 days penalty shall be Rs. 10,000 5,000/- (Rupees Ten Five thousand only) per calendar week per school subject to the condition that contractor has completed 75% work in earlier 90 240 days. If the installation and commissioning is not completed even within 240 540 days from the date of order then contract will be liable for termination in part or whole at the discretion of the CoSE, Tamil Nadu State, Chennai at the risk and cost of the contractor.	a. PENALTY FOR DELAY IN EXECUTION OF PROJECT: If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs. 2,000 (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 90 days. Further, Rs. 5,000/- (Rupees Five Thousand only) per calendar week will be charged beyond 90 days up to 180 days. After 180 days penalty shall be Rs. 10,000 (Rupees Ten thousand only) per calendar week per school. If the installation and commissioning is not completed even within 240 days (for both Schools and CCC) from the date of order then contract will be liable for termination in part or whole at the discretion of the CoSE, Tamil Nadu State, Chennai at the risk and cost of the contractor. The overall penalty will be restricted to 10% of the total contract value.
298.	35	5, XIII, a	Penalty and Termination Due to Non-Fulfilment of Contract	PENALTY FOR DELAY IN EXECUTION OF PROJECT: If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs.2,000 (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 30 days.	We understand that, there is no maximum ceiling upto which the penalty for delay in execution of the project is applicable. This puts an indefinite risk on the Bidders. Hence, we request you to limit the maximum penalty applicable to 10% of the Total Contract Value and modify as below : - "The maximum penalty that shall be applicable on the Bidder shall be limited to 10% of the Total Contract Value"	The overall penalty will be restricted to 10% of the total contract value.
299.	38	Not provided	Not provided	Not sure	Kindly introduce upper cap for all penalty clause. It is request to consider the	a. PENALTY FOR DELAY IN EXECUTION OF PROJECT:

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					maximum penalty will not be more than 5% of the total contract value.	<p>If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs. 2,000 (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 90 days.</p> <p>Further, Rs. 5,000/- (Rupees Five Thousand only) per calendar week will be charged beyond 90 days up to 180 days.</p> <p>After 180 days penalty shall be Rs. 10,000 (Rupees Ten thousand only) per calendar week per school.</p> <p>If the installation and commissioning is not completed even within 240 days (for both Schools and CCC) from the date of order then contract will be liable for termination in part or whole at the discretion of the CoSE, Tamil Nadu State, Chennai at the risk and cost of the contractor.</p> <p>The overall penalty will be restricted to 10% of the total contract value.</p>
300.	39	5, XVII, 3	Termination for Convenience	<p>3. Termination for Convenience:</p> <p>a. The Corporation may terminate the Contract in whole or in part at any time during the validity period of the Contract for its convenience by giving 15days' written notice and without compensation to the Successful Tenderer. The notice of termination shall specify that termination is for the Corporation's convenience, the extent to which the Contract is terminated, and the date upon which such termination becomes effective. The termination of the contract is without prejudice to the penal consequences and damages for which the Successful Tenderer shall be liable for violation of the Contractual obligations.</p>	Request you to kindly delete the clause.	Clause deleted.
301.	39	5, XVII, 3	Termination for Convenience	<p>The Corporation may terminate the Contract in whole or in part at any time during the validity period of the Contract for its convenience by giving 15days' written notice and without compensation to the Successful Tenderer. The notice of termination shall specify that termination is for the Corporation's convenience, the extent to which the Contract is terminated, and the date upon which such</p>	Need the time before termination of Convenience to be 90 days	Clause deleted.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				termination becomes effective. The termination of the contract is without prejudice to the penal consequences and damages for which the Successful Tenderer shall be liable for violation of the Contractual obligations.		
302.	40	5, XX	2. Arbitration:	In case of any dispute or difference arising between the Corporation / CoSE and the Successful Tenderer relating to any matter arising out of or connected with the Contract which remains unsettled even after Conciliation, such dispute or difference shall be referred to the Arbitrator nominated by the CoSE.	We request you to accept appointment of Arbitrator based on mutual consent of both parties. Kindly confirm.	No change.
303.	43	7, Tables(I & II)	MINIMUM BILL OF QUANTITIES		1) Does the items 1 to 7 and 12&13 in first clause and items 1 to 13 mentioned in second clause applicable only for table 1# or both the tables (Table 1 and Table 2*) given in the Chapter 7? #Table 1:Phase I: Minimum BOQ for Identified Government Schools *Table 2:Minimum BOQ for Command Control Centre Please confirm.	No change.
304.	59	9, Form A, 4	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Tenderer (in case of a consortium) must have an average minimum positive net worth of Rs. 500 Cr. in the FY 18-19, 19-20 and 20-21	Request to please amend as Positive networth of Rs.200 Cr.	No change.
305.	59	9, Form A, 7	Form A: Compliance to Pre-Qualification Criteria	The tenderer/Operational Tenderer should have minimum 500 full time employees across the country, working in the IT Hardware/ Network/ ICT Infrastructure business of the tenderer as on date of issue of this tender	The tenderer/ Operational Tenderer should have minimum 200 full time employees across the country, working in the IT Hardware/ Network/ ICT Infrastructure business of the tenderer as on date of issue of this tender	No change.
306.	59	9, Form A, 3	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Bidder must have an average minimum annual audited turnover Rs 1,000 Cr in the FY 18-19, 19-20 and 20-21.	1. Request the department to change this turnover relevant to smart class projects. 2. Request the department to amend the average turnover to total turnover which shall allow a greater number of bidders to participate. 3. Request to reduce this turnover to total turnover of 250 cr in last 3 FY	No change.
307.	59	9, Form A, 4	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Bidder must have an average positive net worth Rs 500 Cr. in the FY 18-19, 19-20 and 20-21.	As these are education related projects, the organizations dealing with education doesn't have huge net worth. Request the department to change it as total minimum net worth of Rs. 100 cr	No change.
308.	59	9, Form A, 3	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Bidder must have an average minimum annual audited turnover Rs 1,000 Cr in the FY 18-19, 19-20 and 20-21	We would request to consider following amendment- "The Tenderer/ Lead Bidder must have an average minimum annual audited turnover Rs 500 Cr in the FY 18-19, 19-20 and 20-21."	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
309.	59	9, Form A, 5	Form A: Compliance to Pre-Qualification Criteria	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 450 Cr cumulatively during the last five years	We would request to consider following amendment- "The Tenderer (Lead Bidder) / Any member of consortium must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 450 Cr cumulatively during the last five years"	No change.
310.	59	9, Form A, 5	Form A: Compliance to Pre-Qualification Criteria	<p>The Tenderer/ Lead Tenderer must have experience in IT Hardware / Network/ ICT Infrastructure Business and should have commissioned and completed during last five years projects of the following nature: Should have carried out projects worth at least Rs. 450 Crore.</p> <p>Work orders/ Purchase Order/ Contract Agreement to be attached clearly showing highlighted with a highlighter pen, the following: - Order Value: - Year of Commencement and - Year of Completion - Scope of Work. and Completion/ Go-Live Certificate issued by End User. Only projects commenced after June 2017 and completed in the last 5 years will be considered.</p>	<p>Considering the volumn of the project, request to reframe the clause as: The Tenderer/ Lead Tenderer must have experience in IT Hardware / Network/ ICT Infrastructure Business and should have commissioned and completed during last five years projects of the following nature: Should have carried out projects worth at least Rs. 250 Crore.</p> <p>Work orders/ Purchase Order/ Contract Agreement /Completion/ Go-Live Certificate issued by End User to be attached clearly showing highlighted with a highlighter pen, the following: - Order Value: - Year of Commencement and - Year of Completion - Scope of Work. and Only projects commenced after June 2017 and completed in the last 5 years will be considered.</p>	No change.
311.	59	9, Form A, 7	FORM A: COMPLIANCE TO PRE-QUALIFICATION CRITERIA	<p>The Tenderer/ Operational Tenderer should have minimum 500 full time employees across the country , working in the IT Hardware/ Network/ ICT Infrastructure business of the tenderer as on the date of issue of this tender.</p> <p>EPF deposit proof in the past 3 months for 500 employees. Tenderer is required to submit this proof as per template provided in Annexure XI to this document</p>	<p>Request to reduce the min manpower requirement up to 100. OR Request to consider experience of deployment of 500 full time manpower for the project in IT Hardware/ Network/ ICT Infrastructure business.</p> <p>It is general practice to outsource the manpower requirement to third party agency as per project need. All big organizations folllow the same practise. Hence requirrest to consider those manpower as well for fulfilling this PQ criterion.</p>	No change.
312.	59	9, Form A, 3	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Bidder must have an average minimum annual audited turnover Rs 1,000 Cr in the FY 18-19, 19-20-and 20-21.	We request you to change the average minimum annunal audited turn overof	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					Rs.100 Cr Cr.in the FY 18-19, 19-20 and 20-21.	
313.	59	9, Form A, 4	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Bidder must have an average positive net worth Rs 500 Cr. in the FY 18-19, 19-20 and 20-21.	We request you to change the average minimum annual audited turn over of Rs.10 Cr Cr.in the FY 18-19, 19-20 and 20-21.	No change.
314.	59	9, Form A, 5	Form A: Compliance to Pre-Qualification Criteria	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 450 Cr cumulatively during the last five years	We request you to amend The Tenderer/ Lead Tenderer must have experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed during last five years project? of the following nature: Should have carried out projects worth at least Rs 100 Crore.	No change.
315.	59	9, Form A, 6	Form A: Compliance to Pre-Qualification Criteria	The Tenderer (Operational Bidder) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned minimum 3 projects during last five years projects of value more than INR 50 Crores for each project	We request you to amend the Tenderer (Operational Tenderer) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned minimum 3 projects during last five years projects of value more than INR 10 Crores for each project.	No change.
316.	59	9, Form A, 3	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Tenderer (in case of a consortium) must have an average minimum annual audited turnover of Rs. 1,000 Cr. in the FY 18-19, 19-20 and 20-21.	We request you to change the average minimum annual audited turnover of Rs. 100 Cr.in the FY 18-19, 19-20 and 20-21.	No change.
317.	59	9, Form A, 4	Form A: Compliance to Pre-Qualification Criteria	The Tenderer/ Lead Tenderer (in case of a consortium) must have an average minimum positive net worth of Rs. 500 Cr. in the FY 18- 19, 19-20 and 20-21.	We request you to change an average minimum positive net worth of Rs. 10 Cr. in the FY 18- 19, 19-20 and 20-21	No change.
318.	59	9, Form A, 5	Form A: Compliance to Pre-Qualification Criteria	The Tenderer (Lead Bidder) must have the experience in IT Hardware / Network / ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 450 Cr cumulatively during the last five years	We request you to amend The Tenderer/ Lead Tenderer must have experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed during last five years projects of the following nature: Should have carried out projects worth at least Rs. 100 Crore.	No change.
319.	59	9, Form A, 6	Form A: Compliance to Pre-Qualification Criteria	The Tenderer (Operational Tenderer) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned minimum 3 projects during last five years projects of value more than INR 50 Crores for each project	We request you to amend the Tenderer (Operational Tenderer) must have the System Integration experience in IT Hardware/ Network / ICT Infrastructure Business and should have commissioned minimum 3 projects during last five years projects of value more than INR 10 Crores for each project	No change.
320.	60	9, Form A, 8	NA	The Tenderer/ Lead Tenderer (in case of a consortium) shall have a minimum cash credit facility of Rs. _____ exclusively for this work duly certified by the Banker.	The value of cash credit facility is not mentioned in the clause	Refer to Corrigendum.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
321.	60	9, Form A, 11	Form A: Compliance to Pre-Qualification Criteria	Blacklisting: The tenderer/ all members of the consortium and OEM should not have been blacklisted by the Central/ any other States/ Union Territories Government/ Quasi Government/ Govt. undertaking or its agencies for indulging in corrupt or fraudulent practices or for indulging in unfair trade or for any other reasons as on date of issue of this tender.	Request to replace the clause with the following An affidavit to the effect that the firm or any of its Partners, Directors and Board Members of the firm has not been blacklisted by AICTE/MHRD or by any other government agency. If any firm has been blacklisted by a government agency in India, a detailed report should be submitted describing reasons for blacklisting and solutions created to overcome it.	No change.
322.	61	9, Form B, 1	FORM B: COMPLIANCE TO EVALUATION CRITERIA	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	Request to consider total turnover instead of Average turnover, as most of the edtech companies may not have this much high turnover. These kinds of turnovers are available only with large infrastructure companies or large telecom PSU's. Request the department to keep the upper cap as 1000 cr which will help larger participation in the tender and help the state government to get competitive bidders.	No change.
323.	61	9, Form B, 2	FORM B: COMPLIANCE TO EVALUATION CRITERIA	Average Positive net worth and should be a profitmaking company for the past three years audited financial year ending 31.03.2022. • More than Rs. 1000 Cr.= 10 marks. • More than Rs. 700 Cr. to 1000 Cr. = 7 marks. • More than Rs. 500 Cr. to 700 Cr. = 4 marks.	Request the department to consider total net worth instead of average net worth. Since most of the education companies may not have these kind of high net worth, request the department to keep the upper cap as 300 cr total net worth in last there FY.	No change.
324.	61	9, Form B, 1	FORM B: COMPLIANCE TO EVALUATION CRITERIA	Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks	Considering the volume of the project, it is against CVC guidelines to ask turnover of 10,000 Cr. Hence request to reframe the clause as below to get maximum bid participation. Average Annual turnover from the Tenderer over the last three individual financial years. • More than Rs. 4,000 Cr.= 20 marks • More than Rs. 3,000 Cr. but less than or equal to 4000 Cr. = 15 marks • More than Rs. 2,000 Cr. but less than or equal to 3000 Cr. = 10 marks • More than Rs. 1,000 Cr. to but less than or equal to 2000 Cr. = 5 marks	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
325.	61	9, Form B, 3	FORM B: COMPLIANCE TO EVALUATION CRITERIA	<p>The Tenderer (Lead Tenderer) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last five years:</p> <ul style="list-style-type: none"> • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks <p>Work order/ Purchase Order/ Contract Agreement and Completion/ Go-Live Certificate issued by End User. If Tenderer is a Consortium, this applies to Lead Tenderer.</p>	<p>Request to reframe the clause as</p> <p>The Tenderer (Lead Tenderer) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed project of over Rs. 450 Cr cumulatively during the last five years:</p> <ul style="list-style-type: none"> • More than Rs. 450 Cr.= 10 marks • More than Rs. 350 Cr. to 450 Cr. = 7 marks • More than Rs. 250 Cr. to 350 Cr. = 5 marks <p>Work order/ Purchase Order/ Contract Agreement / Completion/ Go-Live Certificate issued by End User. If Tenderer is a Consortium, this applies to Lead Tenderer.</p>	No change.
326.	61	9, Form B, 4	FORM B: COMPLIANCE TO EVALUATION CRITERIA	<p>The Tenderer (Operational Tenderer) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned during last five years with the project value of more than Rs. 50 Crores for each project:</p> <ul style="list-style-type: none"> • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks <p>Work order/ Purchase Order/ Contract Agreement and Completion/ Go-Live Certificate issued by End User .If Tenderer is a Consortium, this can apply to one of the firms who plays an operational role in Installation & commissioning or Operations & Maintenance Annexure XIV (B) to be mandatorily filled by tenderer for evaluation.</p>	<p>Request to reframe the clause as</p> <p>The Tenderer (Operational Tenderer) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned during last five years with the project value of more than Rs. 50 Crores for each project:</p> <ul style="list-style-type: none"> • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks <p>Work order/ Purchase Order/ Contract Agreement / Completion/ Go-Live Certificate issued by End User .If Tenderer is a Consortium, this can apply to one of the firms who plays an operational role in Installation & commissioning or Operations & Maintenance Annexure XIV (B) to be mandatorily filled by tenderer for evaluation.</p>	No change.
327.	62	9, Form B, 1	FORM B: COMPLIANCE TO EVALUATION CRITERIA	<p>Average Annual turnover from the Tenderer over the last three individual financial years.</p> <ul style="list-style-type: none"> • More than Rs. 10,000 Cr.= 20 marks • More than Rs. 5000 Cr. but less than or equal to 10000 Cr. = 15 marks • More than Rs. 2000 Cr. but less than or equal to 5000 Cr. = 10 marks • More than Rs. 1000 Cr. but less than or equal to 2000 Cr. = 5 marks 	<p>Avaaage Annual turnover from the Tenderer over the last three individual financial years.</p> <ul style="list-style-type: none"> • More than Rs. 200 Cr.= 20 marks • More than Rs. 175 Cr. but less than or equal to 200Cr. = 15 marks • More than Rs. 159 Cr. but less than or equal to 175Cr. 10 marks 	No change.

SI.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					• More than Rs. 1 25 Cr. but less than or equal to Cr. = 5	
328.	62	9, Form B, 2	FORM B: COMPLIANCE TO EVALUATION CRITERIA	Average Positive net worth and should be a profit-making company for the past three years audited financial year ending 31.03.2022. • More than Rs. 1000 Cr.= 10 marks. • More than Rs. 700 Cr. to 1000 Cr. = 7 marks. • More than Rs. 500 Cr. to 700 Cr. = 4 marks.	Average Positive net worth and should be a profitmaking company for the past three year audited financial year ending 31.03.2022. • More than Rs.25 Cr.— 10 marks. • More than Rs.20 Cr. to 25Cr. = 7 marks. • More than Rs. 15 Cr. to 20Cr. = 4 marks.	No change.
329.	62	9, Form B, 3	FORM B: COMPLIANCE TO EVALUATION CRITERIA	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 450 Cr cumulatively during the last five years: • More than Rs. 750 Cr.= 10 marks • More than Rs. 600 Cr. to 750 Cr. = 7 marks • More than Rs. 450 Cr. to 600 Cr. = 5 marks	The Tenderer (Lead Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned and completed projects of over Rs. 100 Cr cumulatively during the last five years: • More than Rs. 30 Cr.= 10 marks • More than Rs. 200cr. to 300Cr. = 7 marks • More than Rs. 100 Cr. to 200Cr. = 5 marks	No change.
330.	62	9, Form B, 4	COMPLIANCE TO EVALUATION CRITERIA	The Tenderer (Operational Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 50 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	The Tenderer (Operational Bidder) must have the experience in IT Hardware/ Network/ ICT Infrastructure Business and should have commissioned during last five years projects of value more than INR 10 Crores for each project: • 5 projects = 10 marks • 4 projects = 7 marks • 3 projects = 4 marks	No change.
331.	65	9, Annexure II	FORMAT FOR SUBMISSION OF OEM MANUFACTURER'S AUTHORIZATION		The MAF would be different for different OEMs	While the format may be different, the contours of the clauses provided in the Bid document shall need to be included. Minor modifications shall be discussed mutually.
332.	67	9, Annexure IV	ANNEXURE – IV	DECLARATION FOR NOT BEING BLACKLISTED	Request to replace the clause in accordance with serial no 36as above.	No change.
333.	79	ANNEXURE – X: MASTER SERVICE AGREEMENT, Section 3	Performance Bank Guarantee	The Successful Tenderers shall be required to furnish Security Deposit equivalent to 5% (Five percent) of the value of the work order as a guarantee for the performance of the Contract.	As per Ministry of Finance, Govt of India guidelines, PBG is allowed to be submitted with 3% of contract value. You are requested to reduce the PBG value to 3%	No change.
334.	82	VIII	Supplier's Team	Not specified,.	As the delivery timelines are very short, if any site is not ready for installation and if the readiness is delayed more than 2 weeks then kindly release the payment as per the RFP payment terms by accepting the material at site. Bidder will do the I&C once the site is ready.	No change.
335.	87	ANNEXURE X, VII	Change in Quantity	The Purchaser will have the option to increase (as per solution requirement) or decrease (to any	Kindly cap the maximum quantity variation to +/- 10% as this enables the SI to get the best prices from the OEM.	Shall be as per TN Tender Transparency Act.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
				extent) the quantities of equipment/ material to be supplied by the Supplier on this Project.		
336.	110	ANNEXURE XI	Format for submission of proof of full time employees on the payroll of the company in the last 3 months.		It is requested to change for the following:- HR Certificate for full time employees on the Payroll of the company in the last 3 months in the IT Hardware/ICT/IT Infrastructure business of the company. and Undertaking from the bidder to submit the details as per Annexure XI , at the time of contract signing.	No change.
337.	116-117	10, Table C	Total Price for Project Duration and Extended Project Duration (A+B)	Sl. 3 will be used as the price for calculating the financial score of the technically qualified tenderers. Sl.3 is the total contract price including 7 years of CAMC.	It is request to evaluate the financial score of the technically qualified tenderers by considering only A) Price for Project Duration (SIITCM&PM) which includes CAPEX and 60 months of CAMC support. It is also request to consider B) Price for Extended Project Duration for 6th and 7th year shall be considered as optional (mandatory to quote) which will no be considered for financial score evaluation.	No change.
338.	38 & 43	1, VII, b & 7(ii)(6)	Termination of Contract	The CoSE may, without prejudice to any other remedy for breach of Contract by the Successful Tenderer, terminate the Contract in whole or part, by a 15 days' written notice of breach of Contract to the Successful Tenderer. • If the Successful Tenderer fails to deliver any or all the goods within the time schedule specified in the Work Order, or within any extension thereof granted by the CoSE, • If the Successful Tenderer fails to perform any of the obligation(s) under the Contract. • If the Successful Tenderer is found to have involved in fraudulent, corrupt, and unfair practices in competing for or in executing the Contract.	We request you to amend the clause as follows: - The CoSE may, without prejudice to any other remedy for breach of Contract by the Successful Tenderer, terminate the Contract in whole or part, by a 15 30 days' written notice of breach of Contract to the Successful Tenderer. • If the Successful Tenderer fails to deliver any or all the goods within the time schedule specified in the Work Order, or within any extension thereof granted by the CoSE, • If the Successful Tenderer fails to perform any of the obligation(s) under the Contract. • If the Successful Tenderer is found to have involved in fraudulent, corrupt, and unfair practices in competing for or in executing the Contract.	No change.
339.	NA	NA	NA	NA	The Bidder is permitted to use the credentials of its ultimate parent, parent or its associate company/s of Indian origin for pre-qualification, technical qualification and any other qualification criteria purpose. In such case, the following additional documents are required to be submitted: a. For meeting the technical / financial /	No change.

Sl.	Pg. No.	Clause	Sub heading	Existing Clause	Bidder's query	Response
					any other qualification criteria of this Tender document, the bidder should submit a letter of consent duly signed and stamped by the authorized signatory of concerned entity whose credentials its submitting. The Indian bidding entity to this project shall submit a self-declaration certificate on a non-judicial stamp paper, stating of using the technical capability of ultimate parent company or associate company.	
340.		Additional data request		Data input required	Request you to kindly share the list of schools along with their addresses / locations.	To be shared with successful bidder.
341.				Any Document Upload Permitted	Is there any document upload required	No.
342.				What is Project Budget ?	What is the Project Budget?	No change.

TAMIL NADU TEXTBOOK AND EDUCATIONAL SERVICES CORPORATION

Supply, Installation, Integration, Testing, Commissioning, Maintenance and Project Management (SIITCM&PM) of Hi-Tech Labs in Government Schools and Command & Control Centre in Tamil Nadu State

Corrigendum No. 1: Addressing Technical Pre bid queries SI. No. 1 to 242

Date: 30-01-23

Sl.	Pg. No.	Clause No.	Existing clause in Tender document	Amendment to the clause
1.	5	1.V.(a)	Manufacturer's Authorization Form (MAF) - The Tenderer shall furnish Manufacturer's Authorization Form (MAF) from the Principal Manufacturer/ OEM with Make & Model for the items 1 to 7 and 12 & 13 in Chapter 7 as per the format in Annexure - II and provide support during the Warranty & Extended Warranty Periods. If the Tenderer itself is the OEM, then MAF is not required.	Manufacturer's Authorization Form (MAF) - The Tenderer shall furnish Manufacturer's Authorization Form (MAF) from the Principal Manufacturer/ OEM with Make & Model for the items 1 to 7 and 12 in Annexure-XVII (of this document) as per the format in Annexure - II and provide support during the Warranty & Extended Warranty Periods. If the Tenderer itself is the OEM, then MAF is not required.
2.	5	1.VII.(a)	Each Hi-tech lab will be considered to be commissioned only after completion of integration with the Command Control Center environment equipment	Telecom Service Provider identified by CoSE shall provide internet connectivity for Schools and Command Control Centre. Appropriate network solution and required devices will be provided by the TSP. The System integrator should work closely with TSP to connect with Hi-tech Labs proposed at Schools from the central locations and provision to handle the components at schools such as Desktop Computers and other items. The integration of school and CCC alone shall be treated as commissioning of Hi-tech lab.
3.	6	1.VIII(b)(a)	Network aggregation to Schools through SD-WAN technology. Should have Secure SD-WAN solution at CCC to connect with Hi-tech Labs proposed at Schools from the central locations and provision to handle the components at schools such as SD-WAN Device and Desktop Computers.	Should have Secure solution at CCC to connect with Hi-tech Labs proposed at Schools from the central locations and provision to handle the components at schools such as Network Device and Desktop Computers.
4.	6	1.VIII(b)(d)	Any up-gradation of Software solutions for SD-WAN Device in future with respect to ensure safety measure at CCC & Schools shall be carried out no additional cost.	Treated as Deleted (Requirement of SD-WAN Solution for School & SD-WAN & Firewall Solution for CCC has been removed)
5.	7	1, VIII, b, f	<ul style="list-style-type: none"> i. CCC Infrastructure design should be implemented for 15-seater operations considering the scalability of solutions. ii. Design, supply, installation, testing, commissioning, and maintenance of helpdesk environment equipment like workstations, civil works, furniture required, cooling solutions required, electrical works required, video-wall solutions with audio video data 	<p>It has been decided to delete the Video Wall and Workstations from the procurement (change applicable to the entire document). The Workstations shall be provided by the CoSE, but shall be maintained by the vendor. In light of the above, the following modification is made:</p> <ul style="list-style-type: none"> i. CCC Infrastructure design should be implemented for 15-seater operations considering the scalability of solutions.

Sl.	Pg. No.	Clause No.	Existing clause in Tender document	Amendment to the clause
			<p>controller, monitoring system and wall management software; hardware along with necessary accessories.</p> <p>iii. The Tenderer should provide Videowall of 3X255" (Diagonally) Ultra-Thin Bezel Gap with smart Calibration or Higher Model.</p> <p>iv. The full HD Video Wall to be designed for 24x7 operation and should be of the most recent generation.</p> <p>v. Video wall should have the video wall processor and engine which can have the flexibility to show or display from different sources with layout flexibility, drag drop facility and desktop sharing features etc.</p> <p>vi. The large full HD video wall display shall be usable for presentations, HD Video, satellite TV displays etc. Video wall should have the flexibility for viewing many images or should have an edge to enlarge few images as required.</p> <p>vii. The video wall engine cum software should have a user friendly layout and should permit the user to watch videos from different sources on the video wall at the highest available resolutions.</p> <p>viii. The Tenderer has to supply and install the necessary licenses, software and to meet the specifications of the RFP. The cost of such licenses should be included in Video wall system cost and even after completion of contract period, the CoSE will not pay any additional cost/ charges for the same for utilization.</p> <p>ix. Audio & video when played on the video wall should be equally intelligible on all parts.</p>	<p>ii. Design, supply, installation, testing, commissioning, and maintenance of helpdesk environment equipment like civil works, furniture required, cooling solutions required, electrical works required, monitoring system; hardware along with necessary accessories.</p> <p>iii. The Tenderer has to supply and install the necessary licenses, software and to meet the specifications of the RFP. The cost of such licenses should be included and even after completion of contract period, the CoSE will not pay any additional cost/ charges for the same for utilization.</p> <p>Note: Relevant changes as a consequence of the above shall also be made in the Service Level Agreement to be signed with the finalized bidder.</p>
6.	8	1.VIII(g)(i)(a)	Enterprise Management System to be provided for ITSM, Network Management, Asset Management, Knowledge Base, SLA monitoring on all IT equipment, Security Management of all school firewalls and reporting system.	Enterprise Management System to be provided for ITSM, Network Management, Asset Management, Knowledge Base, SLA monitoring on all IT equipment of all schools (upto 10,000 nos.), Security Management and reporting system.
7.	8	1.VIII(g)(i)(b)	Proposed control center should be able to manage all the IP enabled IT components from the central locations such as SD-Wan device, Switches and Desktop systems.	Proposed control center should be able to manage all the IP enabled IT components from the central locations such as Switches and Desktop systems.
8.	8	1.VIII(g)(i)(c)	Solution should be designed to monitor, manage, facilitate IT equipment of all Schools	Solution should be designed to monitor, manage, facilitate IT equipment of all Schools and should

Sl.	Pg. No.	Clause No.	Existing clause in Tender document	Amendment to the clause
			and should be scalable to handle 10,000 schools without upgrading hardware (Network, Firewall) components.	be scalable to handle 10,000 schools without upgrading hardware components.
9.	8	1, VIII, g, ii, a	<p>i. The Tenderer shall provide help desk service which will serve as a single point of contact for all ICT related incidents and service requests. The service will provide a Single Point of Contact (SPOC) and resolution of incidents.</p> <p>ii. Help Desk facility for reporting issues / problems with the IT infrastructure.</p> <p>iii. The Help Desk shall undertake the following activities:</p> <ul style="list-style-type: none"> • Log issues / complaints related to I.T. at the school under the scope of work and • issue an ID number against each issue / complaint. • Assign severity level to each issue / complaint. • Track each issue / complaint to resolution. • Escalate the issues / complaints, to the CoSE, if necessary, as per the escalation matrix defined in discussion with 'CoSE'. • Provide feedback to 'CoSE' periodically. • Analyze the issue / complaint statistics periodically. • Creation of knowledge based on frequently asked questions (FAQs) to aid the users of the I.T. infrastructure <p>iv. Proposed control center should provide helpdesk functionality to log the calls, monitor the network, resolve the issues, manage OEM equipment and report to CoSE on equipment/ system utilization, availability, issues and complete MIS information.</p> <p>v. Helpdesk should be reachable through Mobile based contact center solutions, E-Mail, Web based applications, and social media. SMS based ticketing and status update solutions should be available. Individuals logging complaints should be able to track their complaint resolution status, and real-time complaint resolution dashboard shall be made available to the CoSE.</p>	<p>i. Proposed control center should provide helpdesk functionality to log the calls, monitor the network, resolve the issues, manage OEM and report to CoSE on Utilizations, Availabilities, Issues and complete MIS information. It should reflect on the Dashboard of CCC.</p> <p>ii. The Helpdesk Management System shall operate through Ticketing Software, to be procured and provided by the CoSE.</p> <p>iii. The vendor will map the Device IDs across schools to the Ticketing Software for easy logging of complaints and resolution.</p> <p>iv. All schools will call the assigned toll-free number as identified by CoSE only. Based on ticket raised, the respective vendor will resolve issue as per SLAs. The individuals that log their complaints should be able to track their complaint resolution status, and real-time complaint resolution dashboard shall be made available to the CoSE.</p> <p>v. Severity level of issue will be marked in the ticket against which the vendor can update a separate field for vendor assigned severity level.</p> <p>vi. The vendor's MIS shall track each issue/ complaint until resolution and update the status of resolution as per SLA.</p> <p>vii. The vendor shall escalate the issues/ complaints to the CoSE, as per the escalation matrix defined in discussion with 'CoSE' and provide feedback periodically with an analysis of complaints.</p> <p>viii. The vendor shall create a knowledge base based on FAQs to aid the users of the IT infrastructure at the schools.</p> <p>ix. The Ticketing Software will allow tickets to be raised through Mobile, E-Mail, Web based applications, and social media. SMS based ticketing and status update solutions would also be available.</p> <p>x. Vendor must provide the manpower for the Help Desk.</p>

Sl.	Pg. No.	Clause No.	Existing clause in Tender document	Amendment to the clause
10.	9	1.IX.(c)	Switches and Firewall should be designed to cater to all 10,000 schools' traffic from day one.	Switches should be designed to cater to all 10,000 schools' traffic from day one.
11.	9	1.IX.(d)	Design, supply, installation, testing, commissioning and maintenance of server, storage, network, firewalls along with redundancy for five years (and extended two years) for proposed applications.	Design, supply, installation, testing, commissioning and maintenance of server, storage, network for five years (and extended two years) for proposed applications.
12.	9	1.IX.(e)	Should have Secure SD-WAN solution to connect IT components of Hi-tech Labs proposed at Schools from the central locations such as SD-WAN device and Desktop Computers.	Should have Secure Solution to connect IT components of Hi-tech Labs proposed at Schools from the central locations such as Network device and Desktop Computers.
13.	10	1.IX.(j)	The Tenderer shall have to make provision for internet leased line connectivity of at least 5,000 Mbps at CCC via Fiber along with redundant connectivity. 5,000 Mbps is minimum bandwidth, however Tenderer should size the bandwidth based on their solution and quote for the same.	Treated as Deleted (ILL for CCC shall be provided by CoSE).
14.	10	1.XII(b)	The Tenderer shall furnish Manufacturer's Authorization Form (MAF) from the Principal Manufacturer/ OEM with Make & Model for the items 1 to 13 in Chapter 7 as per the format in Annexure-II and provide support during the Warranty & Extended Warranty Periods. If the Tenderer itself is the OEM, then MAF is not required.	The Tenderer shall furnish Manufacturer's Authorization Form (MAF) from the Principal Manufacturer/ OEM with Make & Model for the items 1 to 9 in Annexure-XVII as per the format in Annexure-II and provide support during the Warranty & Extended Warranty Periods. If the Tenderer itself is the OEM, then MAF is not required.
15.	27	4.XXI.c	Scoring method for Technical Proposal Solution (S.No .1) Tie-up between OEM(s) & Bidder Remarks to be furnished by OEM(s) in the Authorization letter for 5 Products, i.e Desktop PC, Projector, Network Switch, SD-WAN Device and UPS (Maximum Marks 20 i.e. 5 Products x 4 Marks).	Scoring method for Technical Proposal Solution (S.No .1) Tie-up between OEM(s) & Bidder Remarks to be furnished by OEM(s) in the Authorization letter for 5 Products, i.e Desktop PC, Projector, Network Switch, Server and UPS (School End) (Maximum Marks 20 i.e., 5 Products x 4 Marks).
16.	28	4.XXI.c	Scoring method for Technical Proposal Solution (S.No .3) Technical Presentation for SD-WAN Network Solution to integrate between CCC & Schools – (Maximum Marks 10).	Scoring method for Technical Proposal Solution (S.No .3) Technical Presentation for Network Solution to integrate between CCC & All Components of Schools – (Maximum Marks 10).
17.	43 & 44	7	Minimum Bill of Quantities	Revised BOQ has been provided in Annexure-XVII of this document.
18.	45 to 58	8	Technical Specifications for Computer & Accessories.	Revised Technical Specifications have been provided in Annexure -XVIII of this document.
19.	60	9Form(A)(9)	The Tenderer shall have to furnish Manufacturer's Authorization Form (MAF)	The Tenderer shall have to furnish Manufacturer's Authorization Form (MAF) from the Principal

Sl.	Pg. No.	Clause No.	Existing clause in Tender document	Amendment to the clause
			<p>from the Principal Manufacturer or OEM for the proposed computer & accessories (Chapter-7 – For School - Sl.no 1 to 7 and 12 &13, For CCC - Sl. No 1 to 13).</p> <p>If the Tenderer itself is the Principal Manufacturer / OEM then MAF is not required.</p>	<p>Manufacturer or OEM for the proposed computer & accessories (Annexure XVII – For School - Sl.no 1 to 7 and 12, For CCC - Sl. No 1 to 9).</p> <p>If the Tenderer itself is the Principal Manufacturer / OEM then MAF is not required.</p>
20.	62	9.Form(B).5	<p>Scoring method for Technical Proposal Solution (S.No .1)</p> <p>Tie-up between OEM(s) & Bidder Remarks to be furnished by OEM(s) in the Authorization letter for 5 Products, i.e Desktop PC, Projector, Network Switch, SD-WAN Device and UPS (Maximum Marks 20 i.e., 5 Products x 4 Marks).</p>	<p>Scoring method for Technical Proposal Solution (S.No .1)</p> <p>Tie-up between OEM(s) & Bidder Remarks to be furnished by OEM(s) in the Authorization letter for 5 Products, i.e., Desktop PC, Projector, Network Switch, Server and UPS (School End) (Maximum Marks 20 i.e., 5 Products x 4 Marks).</p>
21.	63	9.Form(B).5	<p>Scoring method for Technical Proposal Solution (S.No .3)</p> <p>Technical Presentation for SD-WAN Network Solution to integrate between CCC & Schools – (Maximum Marks 10).</p>	<p>Scoring method for Technical Proposal Solution (S.No .3)</p> <p>Technical Presentation for Network Solution to integrate between CCC & All Components of Schools – (Maximum Marks 10).</p>
22.	104	ANNEXURE – X – (b)VII(a)	Supply, Installation, Testing, Commissioning and Maintenance of Hi-Tech Lab comprising the equipment like Desktop-PC & Other Items and Control Center Environment equipment like Server, Storage, Network, EMS, Civil, Electrical, Cooling, Safety, Security, Firewalls as per specifications in Chapter – 8 in the Tender Document for Five years as per SLA Terms.	Supply, Installation, Testing, Commissioning and Maintenance of Hi-Tech Lab comprising the equipment like Desktop-PC & Other Items and Control Center Environment equipment like Server, Storage, Network, EMS, Civil, Electrical, Cooling, Safety, Security as per specifications in Chapter – 8 in the Tender Document for Five years as per SLA Terms.
23.	104	ANNEXURE – X – (b)VII(f)	To provide an internet connection however if any other connectivity is implemented in future, SI shall have to facilitate integration of the same with the lab as and when instructed by the Purchaser.	Clause to be considered deleted.
24.	104	ANNEXURE – X – (b)VII(h)	Proposed control center should be able to manage all IP enabled IT components from the central locations such as SD-Wan Device and Desktop PCs.	Proposed control center should be able to manage all IP enabled IT components from the central locations such as Network Device and Desktop PCs.
25.	105	ANNEXURE – X – (b)VII(p)	To make provision for internet leased line connectivity of at least____ Mbps at Control center via Fiber along with redundant connectivity.____ Mbps is minimum bandwidth, however bidder should size the bandwidth based on their solution and quote the same.	Clause to be considered deleted.

Sl.	Pg. No.	Clause No.	Existing clause in Tender document	Amendment to the clause
26.	116 & 117	10	Price Bid format	Price bid to be submitted as per Annexure-XIX

Annexure – XVII - MINIMUM BILL OF QUANTITIES for Hi-Tech Lab

I. BOQ for Schools (5792 Schools)

Sl.	Product Description	Qty per School	UNOM	Total Req. in 5792 Schools
1	Desktop PCs with Display, Keyboard, Mouse with Linux OS	10	Nos.	57,920
2	24 Port Switch	1	Nos.	5792
3	Projector with Mounting kit	1	Nos.	5792
4	External Speakers	1	Nos.	5792
5	Web camera	3	Nos.	17,376
6	Head Phone	20	Nos.	1,15,840
	Dual Splitter	10	Nos.	57,920
7	3 KVA – Online UPS	1	Nos.	5792
8	9U Wall Mount Rack	1	Nos.	5792
9	LAN Connectivity	-	Lot	5792
10	Electrical Wiring for all Equipment	-	Lot	5792
11	Table & Chair	10	Nos.	57,920
12	1 TB – External Hard disk and 1 TB External SSD	1 of each	Nos.	5792 of each

II. BOQ for Command Control Centre

Sl.	Product Description	Qty	UNOM
1	Private Cloud Infrastructure (Compute, Storage, Network) for hosting all CCC Applications in High Availability	1	Lot
2	CCC Applications consists of EMS, Helpdesk Management, Content Management System and Learning Management as per functional requirement	1	Lot
3	DR – Replication content on Cloud (Activation on demand)	1	lot
4	Layer 3 48 Port 1/10G Switch with HA	1	Nos.
5	Layer 2 48 port 1G POE Switch	1	Nos.
6	Multifunctional Printer 40 PPM of Higher	1	Nos.
7	CCTV and Access Security System	1	Lot
8	UPS – 40 KVA – Redundant System	1	Nos.
9	125 KVA - Generator – DG Set	1	Nos.
10	CCC & DC Infrastructure (Racks, Passive Cabling, Cooling, Power, Civil) etc	1	Lot
11	Any other additional Component (As per Bidder Design)	1	Lot

III. BOQ for 31 schools (Hitech lab cum additional Infra required for Online Examinations)

Sl.	Product Description	Qty per School	UNOM	Total required for 31 Schools
1	Desktop Server	1	Nos.	31
2	Desktop - PCs with Display, Keyboard, Mouse with Linux OS	100	Nos.	3100
3	Projector with Mounting kit	1	Nos.	31

Sl.	Product Description	Qty per School	UNOM	Total required for 31 Schools
4	External Speakers	1	Nos.	31
5	Web camera	100	Nos.	3100
6	Head Phone	200	Nos.	6200
	Dual Splitter	100	Nos.	3100
7	24 Port POE- Managed Switch	6	Nos.	186
8	40 KVA- Redundant – Online UPS	1	Nos.	31
9	50 KVA – Generator set for Power Backup	1	Nos.	31
10	4U Wall Mount Rack	5	Nos.	155
11	9U Wall Mount Rack	1	Nos.	31
12	LAN Connectivity	-	Lot	31
13	Electrical Wiring for all Equipment with Air-Conditioning facility	-	Lot	31
14	Chair & Work Station partitions	100	Nos.	3100
15	1 TB – External Hard disk and 1 TB External SSD	1 of each	Nos.	3100

Annexure – XVIII – TECHNICAL SPECIFICATIONS FOR COMPUTERS & ACCESSORIES

This chapter provides the minimum hardware & technical specifications for the IT infrastructure requirements. In case the Tenderer feels that higher specifications / additional hardware is required to meet the complete project requirements from the viewpoint of the software applications, functions to be carried out, services to be delivered, connectivity, future growth, operations and maintenance, desired service levels as mentioned in this Tender Document, the same shall have to be proposed at the bidding stage. In case after winning the contract, the Tenderer is not able to maintain the mentioned agreement due to improper judgment of IT infrastructure requirements on its part, the Tenderer shall have to provide the additional hardware / same specification hardware as mentioned in tender at no additional cost to CoSE.

- The Tenderer shall have to provide a detailed Bill of Material (BOM) with model numbers of each and every hardware along with the technical bid.
- The Tenderer shall have to provide a technical compliance sheet for all hardware and software defined in this Tender and as mentioned in this section along with technical bid.

Part-1 - For 5792 Schools

1. Specification for Desktop - PC

Parameter	Specification	Compliance
Processor	10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor	
Memory	8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with at least one free slot.	
Mother Board (Intel/Gigabyte/ASUS/MSI/OEM)	1.Min 2 PCI/PCI Express Slots. 2.Integrated Graphics Controller 3.10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4. VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	
Monitor	19" TFT (± 0.5 inch) TFT/ Wide LED Color Monitor. Resolution 1366 X 768 or higher. (Should be in the same brand of Desktop Computer)	
Hard Disk Drive	Min 1TB SATA HDD, 5400 RPM or higher	
Keyboard	USB – Membrane Keyboard (Should be in the same brand of Desktop Computer)	
Mouse	USB – Optical Mouse (Should be in the same brand of Desktop Computer)	
Operating System	Pre-loaded Linux	
General Certification	a) Hazardous - RoHS, Energy efficient - Energy star, Safety - CE / UL, Environment – EPEAT for Desktop Computer (Copies should be enclosed) b) TCO Certification for Monitor (Copy should be enclosed)	
OS Compliance	Windows & Linux compliance by OEM.	

2. Specification for L2 Managed 24 ports switch

Specification	Compliance
The proposed Switch shall have 24 ports x 1GbE RJ45 or more along with 4 x 1GbE SFP.	
Device should have Switching Capacity of 56Gbps	
Device should have Packet Forwarding Rate 82 Mpps or more	
Device should Support QOS features	

Specification	Compliance
The proposed Switch shall support Zero Touch Provisioning deployment with zero configuration from day 1	
The proposed Switch shall support 802.1X Radius, port security etc.	
Should be able to integrate with the central management and logging platform at the command Control Centre.	
Should be capable of displaying the device details connected on each switch port on the central management	
Should be able to monitor the bandwidth performance of each application from the central management	
Additional 50 Switches to be supplied and stored at CCC as spares for the Operation & Maintenance	

3. Specification for Multimedia Projector

Parameter	Specification	Compliance
Technology	DLP / LCD	
Brightness	3000 ANSI-Lumens or higher	
Resolution	XGA, 1024 x 768 or higher	
Screen Size (Projection Distance)	Min 75" Screen size at less than or equal to 3 Mtr	
Input / Output Sources	HDMI, VGA, Audio In & Out	
Lamp Life	Normal Mode - 3000 hrs or higher	
Important Features	Facility for Zooming, Keystone Correction and Wall Color Correction	
Speakers (Internal)	Min 2.0 Watts	
Accessories	a) Remote Control along with battery b) Good Quality Carry Case c) VGA Cable – 1.5 meters d) AC Power Card e) Manual f) Wall mount kit g) Screen 5.5' tall x 10' wide h) Other Standard Accessories	
Certification	BIS	

4,5 &6) Specifications for Head Phone with Dual Splitter, Web Camera & Speaker

Item	Spec.	Description	Compliance
Head Phones	Headphones	Over ear headphones: Headphones with attached Microphone	
		Frequency Range 20Hz to 20Khz	
	Headphones Splitter	Dual Splitter - should pair for two head phones - 3.5mm Audio Stereo Cable with 12 cm cable length, The splitter must be able to split input as well as output	
Web Camera	I/O Interface	USB 2.0	
	Microphone	Built In	
	Image Resolution	High definition webcam. Automatic white balance, 3P High quality lens	

Item	Spec.	Description	Compliance
	Video resolution	640 x 480 (30 FPS)	
	Clip	Built in clip for PC Monitor	
Speaker	External	Min 2 Nos. External Speakers (Min. 30 Watts Output)	

7) Specification for Online – UPS – 3 KVA

Parameter	Specification	Compliance
Capacity	3 KVA TRUE ONLINE UPS	
Back-up Time	60 minutes	
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)	
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE	
Input power factor	> 0.9	
Input Frequency with Tolerance	50 Hz, +/- 3 Hz	
Battery (Secondary Source)	Sealed maintenance free(SMF) type – AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.	
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.	
Battery Storage Box/ Rack	External Storage Box / MS-Rack for housing the Batteries. with safety provisions to be supplied along with the UPS system	
Output Voltage	230V AC, Single Phase (+/-1%)	
Output Frequency with Tolerance	50 Hz, +/- (0.2) Hz	
Waveform	Pure Sine wave	
Load power factor	0.7 lag to unity	
Overload Capacity	Withstand for 5 Minutes at 110% load	
Total Harmonic Distortion	< 4% for Linear load and 5% for non-linear load	
Overall Efficiency	> 80%	
Ambient Temperature	0 – 50°C	
Duty Cycle	Continuous	
Cooling	Forced air cooling	
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightning	

Parameter	Specification	Compliance
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications	
Power sockets	1 No. 32 Amps. Capacity Terminal Block	
Trip Conditions	Over load, Over and Under voltage, Short Circuit	
Indications	Mains ON, Inverter ON, Battery Low, Overload.	
Alarms (Audio)	For extreme battery low voltage.	
Meters	AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,	
Manuals	Operating and User manual to be Provided	
Name Plate in the UPS	Sr. No and Name plate in UPS-Riveted metal plates / Stickers	
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.	
Certification	SAMEER / ETDC / NTH / ERTL / NABL's or any other Government authorized Testing Lab Certification	
Other Features	SNMP Card - Provisions should be available Diesel Generator – Compatible	

8) Specification for 9U – Rack – Wall mount for Network device & UPS

Parameter	Specification	Compliance
Height & Dimension	Height 9U, Width 550 and Depth 550mm	
Material Thickness	0.8mm or better	
Loading capacity	35KG ± 10% or better Loading capacity	
Front Door	4mm toughened Glass door with Lock and Key	
Cabinet Material	Powder coated CRCA sheet	
Mounting	Wall Mount equipped with 1.2 mm mounting angle	
Form Factor	Rack Mount/DIN Rail	
General	Rubber Closure for cable entry holes 19" Adjustable rails in the front and rear, Top and bottom cable entry facility Hardware Screw pocket included	

9) Specifications for Hi-tech Lab Infra and Other Facilities

Parameter	Specifications	Compliance
Network connectivity to	LAN Ethernet Connectivity (to Desktop PCs, Network Devices)	

10 & 11) Specifications for Furniture, Electrical Work

Specifications	Compliance
Wooden Tables for mounting of Computing Devices (Computer Tables)	
Wooden Chairs without arm for students (Age between 10 to 14) to sit at a comfortable height to handle the system	
Wooden Chair with arm for in-charge of Lab Operations	

Specifications	Compliance
Must Ensure that the furniture items provided are durable for the project period and take care that replacement of damaged furniture items is made in a prompt manner during the project period	
Should do sufficient electrical wiring (of ISI marked & branded) for all electrical and IT equipment like Desktop PC's, UPS, LAN equipment etc.	
Electrical wiring should include earthing arrangements	

12) External Hard disk

Specifications	Compliance
1 TB – External Hard disk with USB 3.0 higher Support	
1 TB – External SSD Disk with USB 3.0 higher support	

Part-2 - For Command Control Centre

1.Specifications for Private Cloud Infrastructure at CCC

Hyper-Converged Infrastructure requirement	Specification	Compliance
	Proposed solution must be based on converged IT infrastructure platform that integrates storage, compute, networking, hypervisor, real-time deduplication, compression, and optimization along with powerful data management, data protection, and disaster recovery capabilities in a standard x86 server building block	
	The solution should provide hyper converged software that allows delivery of enterprise-class storage services using latest x86 server infrastructures without dependence on a separate Storage Area Network & associated components such as SAN Switches & HBAs.	
	The HCI solution should support deployment on any one of leading hypervisors (VMware/Hyper-V). The solution components quoted including HCI system, hypervisor, server, network switch should be as a factory fitted engineered appliance.	
	The proposed HCI solution should be a factory shipped engineered & integrated appliance. All the components of HCI such as compute nodes, hypervisor OS, storage disks, management software should be factory installed and shipped ready for fast deployment.	
	The HCI solution should support scaling hyperconverged node (compute+storage), compute-only, independent of each other under a single cluster.	
	Single dashboard to manage all clusters, virtual machines, network, storage, monitor performance and manage events & alerts	
	The HCI solution should be able to present cluster wide storage performance to any single large Virtual machine.	
	The Solution should allow for taking clones of individual Virtual Machines for faster provisioning. Any additional software or license required should be provided on day 1.	
	The solution should automatically rebalance data to maintain balanced utilization of storage across the HCI converged nodes. When storage capacity is scaled up or scaled out, the HCI nodes must automatically redistribute data equally across all nodes equally without migrating VMs.	

Hyper-Converged Infrastructure requirement	Specification	Compliance
	Virtualization software should support live Virtual Machine migration with enhanced CPU compatibility and without the need for shared storage option.	
	Virtualization manager software should be provided along with the proposed solution. Virtualization manager should have the capability to monitor other same platform virtualized workloads in the data center.	
	Bidder must quote appropriate license to enable and meet mentioned above features for 20 workloads per cluster	
	The vendor must provide all features and license applicable in Hypervisor OS, VMM Manager & HCI solution providing enterprise licenses (highest tier available).	
Hardware Specifications	Provide 60 cores, 1800 GB usable RAM and 50 TB usable storage	
	Each node should support up to 2 latest Intel Xeon Scalable Processors offering from 8 to 56 cores per node	
	Each node should allow inbox upgrade from 1 to 2 processors	
	Each node should support latest DDR4-2xxx Registered Smart Memory.	
	Each node should allow inbox upgrade of RAM up to 1536GB per processor and should scale to 3TB per Node	
	Hyper-converge solution should be configured using not more than 1.2 TB drive for Data & 1.92 TB drive for cache	
	Each node should have embedded 4 x 1GbE ethernet ports & support 4 x 10/25GbE SFP+ ethernet ports with option to select Fiber optic, Copper DAC or RJ45 connectivity.	
	Each node should have embedded 1 x out-of-band management to simplify remote management.	
	Each node should have 1 or more 12G RAID controllers to manage drives within the node. In case vendor doesn't support Raid controller then resiliency shall be built using below guidelines given in the RFP.	
	Each node should have at least 3 PCI slots available and shall also support at least 1 x GPU adapter.	

2.Specification for Application to be hosted in CCC

Specification	Compliance
<p>Following Applications and should provide integrated dashboard for CCC <i>(Requirements specified in Scope of work)</i></p> <ul style="list-style-type: none"> a. Enterprise Management System b. Helpdesk Management System c. Content Management System d. Learning Management System and Online Exams 	

3. DR – Replication of Content in Public Cloud – Activation on Demand

Specification	Compliance
<p>a) Provision to made in any MeitY approved Public Cloud to have complete the content and it should be activated in the event of failure at CCC.</p> <p>b) To be ensured replication of 100% of content available in CCC.</p>	

4.& 5. Specification for 48 Port Switches

Specifications	Compliance
a) Layer 3 48 Port 1/10G Switch with HA b) Layer 2 48 port 1G POE Switch	

6.Specification for Multi-functional printer

Parameter	Specification	Compliance
Type	Floor mounted	
Technology	Laser	
Print, Copy Speed	A4 - 40 PPM or higher, A3 - 20 ppm or higher	
Resolution	1200 x 1200 dpi or higher	
Interface	USB 2.0, Ethernet 10/100 Mbps (RJ45)	
Zooming	25 to 400 Percentage	
Paper Input Capacity	100-sheet multi-purpose tray, 2 x 500-sheet input trays	
Paper Size	A5 - A3	
Network	Ethernet 10/100 Mbps	
Features	Duplex with RADF/DADF	
Scanning facility	Scan to PC, Scan to E-mail	
OS Compliance	Windows and Linux Compliance by OEM	
Toner	Toner Yield of minimum 30,000 pages for B/W	
duty cycle	170000 or above	
Trolley	Trolley with wheels and lock for locking the wheels	
Certification	BIS	

7.CCTV and Access Security System

Specifications	Compliance
- CCTV facilitation to be provided with IP Camera's & NVR having backup of minimum for 90 working days - Access Card System to be placed to restrict the access	

8.Specification for 40 KVA – UPS

Parameter	Specification	Compliance
Capacity	40KVA – Parallel - On-Line UPS	
Back-Up Time	120 minutes	
Inverter Type	IGBT (make and current capacity to be specified by the tenderer)	
Mains Voltage Regulation	440V 3Ph -20%, +10%	
Input Power factor	> 0.9	
Input Frequency with Tolerance	50 Hz, +/- 3 Hz	
	Sealed maintenance free (SMF) type – AH and no. of Batteries shall be suitably selected for the	

Parameter	Specification	Compliance
Battery (Secondary Source)	respective minimum backup time of 70% Resistive Load. Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.	
Make of the battery	Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted	
Battery Storage Box/Rack	External Storage Box / MS-Rack for housing the Batteries. with safety provisions to be supplied along with the UPS system	
Output Voltage	230V AC, Single Phase (+/-1%)	
Output Frequency with Tolerance	50 Hz, +/- (0.2) Hz	
Waveform	Pure Sine Wave	
Load Power factor	0.7 lag to unity	
Overload Capacity	Withstand for 5 Minutes at 110% load for 10min and 120% load for 5min.	
Total Harmonic Distortion	< 3% for Linear load and 5% for non-linear load	
Overall Efficiency	> 85%	
Ambient Temperature	0 – 50°C	
Duty Cycle	Continuous	
Cooling	Forced air cooling	
Protections	1) Input, output - Low and High 2) Battery low 3) Input, output – Breaker 4) Battery – Fuse 5) Short circuit 6) Over load 7) Temperature over load 8) Transient 9) surge	
Controls	In-Built Static bypass switch to be provided	
Trip Conditions	Over load, Over and Under voltage, Short Circuit	
Indications	Mains ON, Inverter ON, Battery Low, Overload.	
Alarms (Audio)	For extreme battery low voltage	
Meters	AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,	
Manuals	Operating and user manual to be provided	
Name Plate in the UPS	Sr.No and Name plate in UPS-Riveted metal plates / Stickers	
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.	

Parameter	Specification	Compliance
Certification	SAMEER / ETDC / NTH / ERTL / NABL's or any other Government authorized Testing Lab Certification	
Other Features	1) SNMP Card - Provisions should be available Diesel Generator – Compatible 2) Major components such as power modules and replacement of the hot swappable batteries without disrupting power to target equipment	
load regulation	+ 2%	
Input cable and output cable:	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided	
Interface ports	RS-232 or USB	
Emergency Switch OFF	To be provided	

9.Diesel Generator Set

Specifications	Compliance
125 kVA Diesel Generator - Power – 125 KVA / 100 KW, Phase – 3 Support, Output Voltage 380-440, Frequency 50 Hz, Fuel Tank Capacity – 300 Ltr & above.	

10.Infrastructure Facilities

Specifications	Compliance
<p>CCC & DC Infrastructure - Racks, Passive Cabling, Cooling, Power, <i>Civil to be</i></p> <ul style="list-style-type: none"> - Intelligent Integrated Infrastructure essentially should include internal redundant or backup power supplies, environmental controls (Rack mounted air conditioning, smoke detection, Water leak detection Temperature and humidity sensors), and security devices. Rack mounted air-conditioning systems should have N+N topology respectively. Environmental monitoring shall be done from IP based software. - The detail specifications of the intelligent integrated/inbuilt infrastructure, standalone system shall be in adherence to standard Data Centre guidelines 	

Part-3 - For 31 Schools (Hi-tech Lab with Additional Infra)

1. Desktop Server

Parameter	Specification	Compliance
Processor	One Intel Xeon E-2300 series processor with up to 8 cores or Higher	
Memory	1 x 16 GB DDR4 RDIMM with atleast one free slot scalable up to 64GB. Proposed memory should have ECC support	
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10 or Higher	
Hard disk drive	1 x 1 TB 6G SATA 7.2K LFF or higher, expandable upto 4 nos. or higher	
Bays	4 or higher	
Form factor/ cabinet type	Tower	
Monitor	19" wide monitor	
Keyboard	USB OEM keyboard	
Mouse	Optical mouse	
System fans	Required	
CD/ DVD drive	DVD-RW	
Interfaces/ PCI slots	Minimum 3 PCI-Express slots	
Network	1Gbps Dual Port Network Adapter	
Ports	USB-min 4 USB ports with atleast one with 3.0	
Power supply	Required	
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM/Graphical Console Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)	
OS support	Latest Microsoft Windows Server, Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware	
OS	Pre-Loaded with Linux Server Edition	
Pre failure notification	Failure-Failure notification on HDD, Processor & Memory	
Industry standard compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support	
Security	Power-on password/ Keyboard password/ Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.	
End of life and end of support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, equivalent or improved configuration should be provided without any additional cost.	

2. Specification for Desktop - PC

Parameter	Specification	Compliance
Processor	10th Gen. or Higher Intel Core i5 processor (2.90 GHz or above, 12 MB L3 Cache, 6 cores) / Equivalent AMD 4000 Series - Ryzen™ 5 Processor	
Memory	8 GB DDR4 SDRAM @ 2666 MHz or higher Expandable upto 32 GB with at least one free slot.	

Parameter	Specification	Compliance
Mother Board (Intel/Gigabyte/ASUS/MSI/OEM)	1.Min 2 PCI/PCI Express Slots. 2.Integrated Graphics Controller 3.10/100/1000 Mbps Network Card; Min 6 USB Ports with at least two with 3.0, 2 Additional USB Ports, 4. VGA / Display port, HDMI, 5.RJ 45 6. Audio 3.5mm. Internal speakers and support to Ext speakers of min 2 watts.	
Monitor	19" TFT (± 0.5 inch) TFT/ Wide LED Color Monitor. Resolution 1366 X 768 or higher. (Should be in the same brand of Desktop Computer)	
Hard Disk Drive	Min 1TB SATA HDD, 5400 RPM or higher	
Keyboard	USB – Membrane Keyboard (Should be in the same brand of Desktop Computer)	
Mouse	USB – Optical Mouse (Should be in the same brand of Desktop Computer)	
Operating System	Pre-loaded Linux	
General Certification	a) Hazardous - RoHS, Energy efficient - Energy star, Safety - CE / UL, Environment – EPEAT for Desktop Computer (Copies should be enclosed) b) TCO Certification for Monitor (Copy should be enclosed)	
OS Compliance	Windows & Linux compliance by OEM.	

3. Specification for Multimedia Projector

Parameter	Specification	Compliance
Technology	DLP / LCD	
Brightness	3000 ANSI-Lumens or higher	
Resolution	XGA, 1024 x 768 or higher	
Screen Size (Projection size)	Min 75" Screen size at less than or equal to 3 Mtr	
Input / Output Sources	HDMI, VGA, Audio In & Out	
Lamp Life	Normal Mode - 3000 hrs or higher	
Important Features	Facility for Zooming, Keystone Correction and Wall Color Correction	
Speakers (Internal)	Min 2.0 Watts	
Accessories	a) Remote Control along with battery b) Good Quality Carry Case c) VGA Cable – 1.5 meters d) AC Power Card e) Manual f) Wall mount kit g) Screen 5.5' tall x 10' wide	

Parameter	Specification	Compliance
	h) Other Standard Accessories	
Certification	BIS	

4,5 &6) Specifications for Head Phone **with Dual Splitter**, Web Camera & Speaker

Item	Spec.	Description	Compliance
Head Phones	Headphones	Over ear headphones: Headphones with attached Microphone	
		Frequency Range 20Hz to 20Khz	
	Headphones Splitter	Dual Splitter - should pair for two head phones - 3.5mm Audio Stereo Cable with 12 cm cable length, The splitter must be able to split input as well as output	
Web Camera	I/O Interface	USB 2.0	
	Microphone	Built In	
	Image Resolution	High-definition webcam. Automatic white balance,3P High quality lens	
	Video resolution	640 x 480 (30 FPS)	
	Clip	Built in clip for PC Monitor	
Speaker	External	Min 2 Nos. External Speakers (Min. 30 Watts Output)	

7.Specification for L2 Managed 24 ports switch

Specification	Compliance
The proposed Switch shall have 24 ports x 1GbE RJ45 or more along with 4 x 1GbE SFP.	
Device should have Switching Capacity of 56Gbps	
Device should have Packet Forwarding Rate 82 Mpps or more	
Device should Support QOS features	
The proposed Switch shall support Zero Touch Provisioning deployment with zero configuration from day 1	
The proposed Switch shall support 802.1X Radius, port security etc.	
Should be able to integrate with the central management and logging platform at the command Control Centre.	
Should be capable of displaying the device details connected on each switch port on the central management	
Should be able to monitor the bandwidth performance of each application from the central management	
Additional 50 Switches to be supplied and stored at CCC as spares for the Operation & Maintenance	

8.Specification for Online UPS 40 KVA

Parameter	Specification	Compliance
Capacity	40KVA – Parallel - On-Line UPS	
Back-Up Time	120 minutes	
Inverter Type	IGBT (make and current capacity to be specified by the tenderer)	
Mains Voltage Regulation	440V 3Ph -20%, +10%	

Parameter	Specification	Compliance
Input Power factor	> 0.9	
Input Frequency with Tolerance	50 Hz, +/- 3 Hz	
Battery (Secondary Source)	Sealed maintenance free (SMF) type – AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.	
Make of the battery	Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted	
Battery Storage Box/Rack	External Storage Box / MS-Rack for housing the Batteries. with safety provisions to be supplied along with the UPS system	
Output Voltage	230V AC, Single Phase (+/-1%)	
Output Frequency with Tolerance	50 Hz, +/- (0.2) Hz	
Waveform	Pure Sine Wave	
Load Power factor	0.7 lag to unity	
Overload Capacity	Withstand for 5 Minutes at 110% load for 10min and 120% load for 5min.	
Total Harmonic Distortion	< 3% for Linear load and 5% for non-linear load	
Overall Efficiency	> 85%	
Ambient Temperature	0 – 50°C	
Duty Cycle	Continuous	
Cooling	Forced air cooling	
Protections	1) Input, output - Low and High 2) Battery low 3) Input, output – Breaker 4) Battery – Fuse 5) Short circuit 6) Over load 7) Temperature over load 8) Transient 9) surge	
Controls	In-Built Static bypass switch to be provided	
Trip Conditions	Over load, Over and Under voltage, Short Circuit	
Indications	Mains ON, Inverter ON, Battery Low, Overload.	
Alarms (Audio)	For extreme battery low voltage	
Meters	AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,	

Parameter	Specification	Compliance
Manuals	Operating and user manual to be provided	
Name Plate in the UPS	Sr.No and Name plate in UPS-Riveted metal plates / Stickers	
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.	
Certification	SAMEER / ETDC / NTH / ERTL / NABL's or any other Government authorized Testing Lab Certification	
Other Features	3) SNMP Card - Provisions should be available Diesel Generator – Compatible 4) Major components such as power modules and replacement of the hot swappable batteries without disrupting power to target equipment	
load regulation	+ 2%	
Input cable and output cable:	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided	
Interface ports	RS-232 or USB	
Emergency Switch OFF	To be Provided	

9.Specification for 50 KVA - Diesel Generator Set

Specifications	Compliance
<ul style="list-style-type: none"> 125 kVA Diesel Generator - Power – 50 KVA / 40 KW Phase – 3 Support Output Voltage 380-440 Frequency 50 Hz Fuel Tank Capacity – 150 Ltr & above. Electric Self Start 	

10.Specification for 4U Rack – Wall mount for Network device

Parameter	Specification	Compliance
Height & Dimension	Height 4U	
Material Thickness	0.8mm or better	
Front Door	4mm toughened Glass door with Lock and Key	
Cabinet Material	Powder coated CRCA sheet	
Mounting	Wall Mount equipped with 1.2 mm mounting angle	
Form Factor	Rack Mount/DIN Rail	

11.Specification for 9U – Rack – Wall mount for Network device

Parameter	Specification	Compliance
Height & Dimension	Height 9U, Width 550 and Depth 550mm	
Material Thickness	0.8mm or better	
Loading capacity	35KG ± 10% or better Loading capacity	
Front Door	4mm toughened Glass door with Lock and Key	

Parameter	Specification	Compliance
Cabinet Material	Powder coated CRCA sheet	
Mounting	Wall Mount equipped with 1.2 mm mounting angle	
Form Factor	Rack Mount/DIN Rail	
General	Rubber Closure for cable entry holes 19" Adjustable rails in the front and rear, Top and bottom cable entry facility Hardware Screw pocket included	

12.Specifications for Hi-tech Lab Infra and Other Facilities

Parameter	Specifications	Compliance
Network connectivity to	LAN Ethernet Connectivity (Desktop PCs, Network Devices)	

13 & 14) Specifications for Work Station partitions & Furniture, Electrical Work

Specifications	Compliance
Work Station partitions with wooden Chairs Without arm for students (Age between 10 to 14) to sit at a comfortable height to handle the system	
Wooden Chair with arm for in-charge of Lab Operations	
Must Ensure that the Work Station partitions and furniture items provided are durable for the project period and take care that replacement of damaged furniture items is made in a prompt manner during the project period	
Should do sufficient electrical wiring (of ISI marked & branded) for all electrical and IT equipment like Desktop PC's, UPS, LAN equipment etc.	
A/c Arrangements should be accordingly to accommodate for 100 persons in 5 Computer Lab and Each lab should be furnished with 2-ton Split A/c Units	
Electrical wiring should include earthing arrangements	

15.External Hard disk

Specifications	Compliance
1 TB – External Hard disk with USB 3.0 higher Support	
1 TB – External SSD Disk with USB 3.0 higher support	

Annexure XIX - PRICE BID - TO BE FURNISHED IN PART – B COVER

Tenderer is required to provide a financial quote for the following:

- A) Project Duration
- B) Extended project duration
- C) Total price for Project Duration and Extended Project Duration (A+B)

A) Price for Project Duration (SIITCM&PM)

Sl.	Location	Qty	UOM	Accepted Unit Price for Each School**	Accepted Total Price
1	SIITCM&PM of Hi-Tech Labs in Government Schools	5,792*	Schools		
2	SIITCM&PM of Hi-Tech Labs with Additional Infra in Government Schools	31	Schools		
3	SIITCM&PM of Command & Control Centre	1	State	N/ A	
4	Operation and Maintenance Services for 5792 Hi-Tech Labs in Project Duration	60	Months		
5	Operation and Maintenance Services for 31 Hi-Tech Labs with Additional Infra in Project Duration	60	Months		
6	Operation and Maintenance Services for CCC in Project Duration	60	Months		
Total without GST					
GST Value					
Total with GST for Part A					
Total Amount including GST in words:					

* shall either increase or decrease the quantity mentioned in the tender to the extent of 25%

** Unit Rate for each Hardware/ Software items to be supplied at Schools and CCC including manpower charges involved for O&M should also be enclosed.

B) Price for Extended Project Duration

Sl.	Location	Qty	UOM	Accepted Unit Price for Each School/CCC	Accepted Total Price
1	Operation and Maintenance Services for 5,792 Hi-Tech Labs – 6 th Year	12	Months		
2	Operation and Maintenance Services for 31 Hi-Tech Labs with additional Infra – 6 th Year	12	Months		
3	Operation and Maintenance Services for CCC – 6 th Year	12`	Months		
4	Operation and Maintenance Services for 5,792 Hi-Tech Labs – 7 th Year	12	Months		
5	Operation and Maintenance Services for 31 Hi-Tech Labs with additional Infra – 7 th Year	12	Months		
6	Operation and Maintenance Services for CCC – 7 th	12`	Months		

Sl.	Location	Qty	UOM	Accepted Unit Price for Each School/CCC	Accepted Total Price
	Year				
Total without GST					
GST Value					
Total with GST for Part B					
Total Amount in words including GST:					

C) Total Price for Project Duration and Extended Project Duration (A+B)

Sl.	Description	Accepted Total Price
1	Total price with GST for Part A	
2	Total price with GST for Part B	
3	Total price with GST for Part A & B	

Sl. 3 will be used as the price for calculating the financial score of the technically qualified tenderers.

Signature of the Tenderer with Seal

Corrigendum No. 1B: Addressing Non-Technical Pre bid queries Sl. No. 243 to 342

Date: 30-01-23

Sl.	Pg. No.	Clause	Tender Content	Modified Clause/ Clarification
1	-	General	Not specified.	<p>With regard to the procurement of items from neighbouring countries, the provisions of Govt. of India, vide Office Memorandum issued on 23rd July 2020 shall apply.</p> <p>Click here to download order.</p>
2	1	Notification	Date and time for submission: 19.01.2023 3.30 PM	Date and time for submission: XX.XX.2023 3.30 PM
3	25	4, XVII	<p>Period of Contract:</p> <p>The period of contract is 120 days for supply & installation of Hi-Tech Labs, and 90 days for CCC (or as mutually agreed upon). In addition, Operation and Maintenance of Hi-Tech Labs on SIITCM&PM model is to be carried out by the Tenderer till the end of Project Duration/ Extend Project Duration.</p>	<p>a) The Supply, Installation, Integration, Testing, Commissioning, Maintenance and Strengthening Project Management of Hi-Tech Labs shall be completed as per Delivery Schedule, further elaborated below:</p> <p>a1) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with Schools as per the technical specifications in the Tender Document to the CoSE within 180 days.</p> <p>a2) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with CCC as per the technical specifications in the Tender Document to the CoSE within 120 days.</p>
4	26	4, XXI, c, 2	<p>Positive Net Worth Criteria 2 Positive Net Worth (Supporting documents)</p> <p>Copy of Annual report/ Certificate from the CA on Net-worth details over the last three (3) financial years.</p> <p>If Tenderer is a Consortium, this applies to Lead Bidder.</p>	<p>1) Copy of Annual report with audited financials (i.e. P&L, BS) over the last 3 FY.</p> <p>AND</p> <p>2) Certificate from the CA on Net-worth details over the last three (3) FY.</p>
5	32	5, III, IV	<p>SPECIAL TERMS AND CONDITIONS OF THE CONTRACT: Supply</p> <p>The Supply, Installation, Integration, Testing, Commissioning of Hi-Tech Labs with the CCC shall be completed within 120 days for Schools & 90 Days for CCC from the date of issue of the Work Order.</p>	<p>a) The Supply, Installation, Integration, Testing, Commissioning, Maintenance and Strengthening Project Management of Hi-Tech Labs shall be completed as per Delivery Schedule, further elaborated below:</p> <p>a1) The Successful Tenderer shall supply, install, integrate, test and commission 50% of work related with Schools as per the technical specifications in the Tender</p>

Sl.	Pg. No.	Clause	Tender Content	Modified Clause/ Clarification
				Document to the CoSE within 90 days and 100% of the work within 180 days. a2) The Successful Tenderer shall supply, install, integrate, test and commission 100% of work related with CCC as per the technical specifications in the Tender Document to the CoSE within 120 days.
6	34	5, XI, d)	The Tenderers shall have to submit the Manufacturing Authorization Forms (MAF) for all the Hardware and Software items that are proposed in the bid response. It must be noted by the Tenderers that only the make and models mentioned in the MAF shall be accepted during the delivery and installation of hardware and software.	d) The Tenderers shall have to submit the Manufacturing Authorization Forms (MAF) for all the Hardware and Software items (maximum of 3 make and model) that are proposed in the bid response.
7	35	5, XIII	<p>PENALTY FOR DELAY IN EXECUTION OF PROJECT:</p> <p>If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs.2000/- (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 30 days. Further, Rs. 5,000/- (Rupees Five Thousand only) per calendar week will be charged beyond 30 days up to 80 days.</p> <p>After 80 days penalty shall be Rs. 10,000/- (Rupees Ten thousand only) per calendar week per school subject to the condition that contractor has completed 50% work in earlier 80 days. If the installation and commissioning is not completed even within 120 days from the date of order then contract will be liable for termination in part or whole at the discretion of the CoSE, Tamil Nadu State, Chennai at the risk and cost of the contractor.</p>	<p>a. PENALTY FOR DELAY IN EXECUTION OF PROJECT:</p> <p>If the installation and commissioning of the systems is not completed in full within the stipulated period as prescribed, a penalty of Rs. 2,000 (Rupees Two Thousand only) per calendar week will be imposed for every School to which the installation and commissioning is not completed, up to 90 days.</p> <p>Further, Rs. 5,000/- (Rupees Five Thousand only) per calendar week will be charged beyond 90 days up to 180 days.</p> <p>After 180 days penalty shall be Rs. 10,000 (Rupees Ten thousand only) per calendar week per school.</p> <p>If the installation and commissioning is not completed even within 240 days (for both Schools and CCC) from the date of order then contract will be liable for termination in part or whole at the discretion of the CoSE, Tamil Nadu State, Chennai at the risk and cost of the contractor.</p> <p>The overall penalty will be restricted to 10% of the total contract value.</p>
8	15	1, XXII, i	Other Requirements: The CoSE shall have the right to change /modify the school location and to replace a school location with other school with same terms and conditions. Tenderer shall not be eligible for any increase in contract amount due to this change on what	Cost to shift location post date of commissioning will be borne by School Education department.

Sl.	Pg. No.	Clause	Tender Content	Modified Clause/ Clarification
			so ever reason. CoSE shall have right to increase/decrease the number of schools and contract amount shall be increased or reduced accordingly.	
9	23	4, XVII, a and b	Signing of Tender: Tenderer to the contract. All pages of the tender shall be signed by the Tenderer or person(s) authorized to sign the Tender with the seal. b. Any alterations, corrections or overwriting in the Tender document shall be treated valid only if they are authenticated by full signature of the person authorized to sign the tender.	Scanned signature on each page is acceptable with original signature on last page.
10	24	4, XVI, a	Submission of Tender: a. Tender shall be submitted in two parts in original i.e. Part-A and Part-B. The Part- A cover shall contain the EMD, the response to the pre-qualification and the Technical Bid and superscripted on the envelope as Part-A Technical Bid- Tender for Establishment of "Hi-Tech Labs in Government Schools and Command & Control Centre in Tamilnadu State". On the Part-A cover, the Name and Address of the tenderer shall be written and sealed. The tender document shall compulsorily be spiral bound & indexed with page numbers.	The bidders are requested to submit the editable of their technical documents (CL, Word) for quicker evaluation by the Tender Committee. The same shall be submitted in a pen drive (which is to be included within the Technical Envelope).
11	39	5, XVII, 3	3. Termination for Convenience: a. The Corporation may terminate the Contract in whole or in part at any time during the validity period of the Contract for its convenience by giving 15days' written notice and without compensation to the Successful Tenderer. The notice of termination shall specify that termination is for the Corporation's convenience, the extent to which the Contract is terminated, and the date upon which such termination becomes effective. The termination of the contract is without prejudice to the penal consequences and damages for which the Successful Tenderer shall be liable for violation of the Contractual obligations.	Clause deleted
12	60	9, Form A, 8	The Tenderer/ Lead Tenderer (in case of a consortium) shall have a minimum cash credit facility of Rs. _____ exclusively for this work duly certified by the Banker.	The Tenderer/ Lead Tenderer (in case of a consortium) shall have a minimum cash credit facility of Rs. 46.25 Crore exclusively for this work duly certified by the Banker.
13	-	General	Not Specified	Payment related with Bid processing fee shall be paid to TNTBESC through Demand Draft

Managing Director
Tender Inviting Authority
Tamilnadu Textbook and Educational
Services Corporation
Chennai – 600 006.