GOVERNMENT OF MEGHALAYA

DIRECTORATE OF SCHOOL EDUCATION &LITERACY

RFP DOCUMENT

FOR

ITC@SCHOOL SCHEME UNDER BOOT MODEL

IN 241 SECONDARY SCHOOLS

FOR 2010-11

IMPLEMENTING AGENCY

DIRECTORATE OF SCHOOL EDUCATION & LITERACY

KENNELWORTH ROAD, LAITUMKHRAH

SHILLONG – 793 003

Ph: 0364 – 2226062, 2225083 Fax: 0364 - 2226062

OFFICE OF THE DIRECTOR, SEL

KENNELWORTH ROAD, LAITUMKHRAH, SHILLONG – 793 003

TIME-TABLE FOR

ICT@SCHOOLPROGRAMME.

DATE OF COMMENCEMENT OF SALE OF BIDDING DOCUMENT:	**21 – 07 - 2011**
LAST DATE FOR SALE OF BIDDING DOCUMENT:	**10 – 08 - 2011**
LAST DATE AND TIME FOR RECEIPT OF TECHNICAL BIDS:	**12 – 08 - 2011**
TIME AND DATE OF OPENING OF TECHNICAL BIDS:	**17 – 08 - 2011**
DATE AND TIME OF OPENING THE FINANCIAL BIDS:	Will be notified to the bidders
Commencement of the Project by the Successful bidder	Within 15 days of the allotment of Work.

VALIDITY OF BID: 120 DAYS FROM THE DATE OF OPENING OF TECHNICAL BID

PLACE OF PRE BID MEETING, OPENING OF BIDS

AND ADDRESS FOR COMMUNICATION

DIRECTOR OF SCHOOL EDUCATION & LITERACY

KENNELWORTH ROAD, LAITUMKHRAH

SHILLONG – 793 003

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SECTION-1

REQUEST FOR PROPOSAL(RFP)

1. The Director, SEL Meghalaya Shillong invites sealed Proposal (Technical & Financial)for implementation of ICT@School project in 241 Secondary schools in the State of Meghalaya including supply of hardware, software, non-technology infrastructure, capacity building of teachers, development of e-content on a **BOOT** (Build, Own, Operate, and Transfer) basis for a period of 3 years i.e. 2011 to 2013.

2. A complete set of RFP Document may be purchased by any interested eligible bidder on the payment of a non-refundable tender fee of Rs. 1000/- (One Thousand) only in the form of Cash/Demand Draft in favour of DIRECTOR, SEL payable at Shillong. The RFP Document may be obtained during office hours on working days.

3. Interested eligible Bidders may obtain further information from office of the DIRECTOR, SEL from **21-07- 2011** to **05-08- 2011**

4. Interested and eligible Bidders are required to submit the Technical and Financial Bids in two separate sealed envelopes. The Technical and Financial Bids should be accompanied by the Earnest Money as specified in this Bid Document The Bid Security should be included in the same envelope containing the Technical Bid. The Technical and Financial Bid along with Earnest Money must be delivered to the Office of the DIRECTOR SEL on or before **12th August, 2011 at 15:00 Hrs.**

5. The envelope containing the Technical Bid and the Earnest Money will be opened on **17th-August, 2011** in presence of Bidders or their authorised representative who chooses to attend in the event of the date specified for bid receipt and opening being declared as a government holiday, the due date for submission and opening of bids will be taken up on the next working day.

Scope of the bid

Within the guidelines of ICT@School proggrame of MHRD, the DSEL intends to implement ICT@School in 241 secondary Schools in 7 districts of Meghalaya. Towards this end, the DSEL proposes to impart computer education to students in 241 Secondary Schools. The proposal is that selected bidder will provide computer hardware, software and connected accessories for imparting computer education and training of teachers, etc, on BOOT basis. Technical and Financial Bids are therefore invited from the eligible firms, to participate in the bidding process for following. (Details of specification available in bid document**)**

a. To provide Computer Education to the students from Class 9 to Class 12 as per MBOSE syllabus and also requisite training to the instructor.

b. To develop and provide e-content material to the students of these schools.

c. Provide computer hardware, software and related accessories. (Details in bid document

d. Provide training to the instructor on Computer education.

RFP FOR ICT@SCHOOL

PROGRAMME SCHEDULE

PLACE OF PRE BID MEETING, OPENING OF BIDS

AND ADDRESS FOR COMMUNICATION

DIRECTOR OF SCHOOL EDUCATION & LITERACY

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SECTION-II

Instruction to Bidders

Background **:**

The ICT@Schools scheme is a partnership of the Government of Meghalaya with the Ministry of Human Resources Development, Government of India, aimed at providing state of the art Information and Communication Technology facilities in the secondary and senior secondary classes. The funding for the scheme is provided by both partners in the ratio 90:10 respectively. The scheme has been implemented by the state with the following objectives:

i. To establish an enabling environment to promote the usage of ICT in all Government and Government aided secondary and senior secondary schools in the state.
ii. To ensure the development and dissemination of appropriate e-content in English.
iii. To ensure capacity building of students, including those with special needs, in the use of ICT and ICT assisted learning.
iv. To ensure capacity building of the teachers in the use of ICT and ICT enabled teaching learning methods.

Meghalaya has been implementing this scheme since 2008-09 and 75 number of secondary and senior secondary schools have been covered under the scheme till date.
The Government of Meghalaya has defined a detailed curriculum for ICT for secondary and senior secondary classes. This curriculum defines the state's expectations, course, curricular materials, training needs and evaluation standards.

To support this curriculum and the needs of students and teachers, the state has also established a mechanism for selection, validation and supply of e-content as well as appropriate software tools to all the secondary and senior secondary schools of the state. The collections will be updated and revised as per the state's educational needs, from time to time.

Government of Meghalaya proposes to expand this scheme to an additional number of 241 secondary and senior secondary schools. The project will commence in the year 2011-12. The project will involve establishing appropriate infrastructure, provide appropriate manpower and realize the objectives of the project in strict compliance of the stipulations within this document and in the agreement (SLA) to be entered into.

In pursuance of this goal, the Director of School Education & Literacy, invites proposals from interested parties to participate in the present project. Such interested parties ("Bidders") are required to submit detailed proposals as per the provisions of the Request for Proposal document ("Proposals").

For the purposes of the ICT implementation, all the seven districts will be covered. The bids will have to be submitted for all districts.

After the process of selection, as detailed in the *RFP document*, the selected agency ("Successful Bidder") will enter into a tripartite agreement ("Service Level Agreement") with the Director of School Education & literacy Government of Meghalaya and the Principal / Head Teacher of the respective school and perform its obligations as stipulated therein in respect of the project. The model agreement (SLA) forms part III of this *RFP document* .

***List of Deliverables*:**

The successful bidder is expected to deliver the following as a part of the fulfillment of obligations under the agreement.

i. Establish the ICT infrastructure in each of the allotted schools as per the detailed specifications and norms agreed to.
ii. Appoint trained ICT teachers as per the prescribed qualifications and deploy them in each of allotted schools.
iii. Organise timetables, course work, course materials, and evaluation processes in consultation with the school as per the prescribed curriculum for both teachers and students of the school.
iv. Enable and facilitate access to all the teachers of the school at all times during school hours and to the students at least as per the prescribed time schedule.
v. Establish the process for and ensure the maintenance, repair, updation/upgradation of the ICT infrastructure as per the agreement.
vi. Maintain records and submit monitoring, evaluation, completion and such other reports in compliance of the agreement.
vii. Facilitate the inspection and evaluation of the implementation as and when the State or its representative, or the Central Government or its representative undertakes such a task.

***Schedule of delivery*:**

The successful bidder is expected to deliver each of the deliverables within the prescribed time-frame specified for it in the SLA. Failure to ensure successful delivery shall invite penalties as defined in the SLA.

Note: Each of the seven deliverables listed above will have various components unique to each State's or even school's requirement. The time schedule for their delivery will also consequently be different. The model time schedule may be suitably modified to conform to the requirements of each project.

The bidding process

A three bid process in two stages will be followed. Potential bidders may submit their proposal as three sets of documents in duplicate in separate sealed envelopes as detailed below:

First stage:

a. documents establishing the qualification of the bidder as per the criteria set out in the RFP document;
b. a proposal defining the technology mix and plan of action to realize the goals of the project.

Second stage:

a. documents setting out the bidder's technical proposal in response to the RFP
b. documents setting out the bidder's financial proposal in response to the RFP

***Note*:** The proposed technology mix and action plan suggested in part b of the first stage of the bid process is intended to inform the choice of hardware and software. The process allows bidders to suggest competitive solutions, which conform to the latest technologies, and at the same time is appropriate, cost effective and easier to manage. Using the standard specification of one server and ten desktops as indicated in the scheme may not provide the best value for money.

However, the State may decide to delink this step from the bidding process,opting to use an independent mechanism to arrive at a technology mix and plan of action. In any case, in the spirit of optimising the infrastructure requirement and providing maximum access to ICT to children and teachers, this step is recommended as a necessary step before the bidding.

The evaluation of the bids will be carried out in three stages. Following the first stage, bidders meeting the experience, expertise, financial capability and other criteria as laid out in the RFP shall be shortlisted as “Qualified Bidders”.

The proposed plan of action and technology mix of all bidders will be considered and the optimum solution selected as a preferred solution. However, the scope of the suggestions of the bidder will not be binding on the State of Meghalaya and the State is free to accept or reject all or part of any or every solution and suggest its independent preferred solution.

All “Qualified Bidders” will be invited to participate in the second stage. The technical proposals of only the qualified bidders will be considered at the second stage. Compliance and suitability of the technical plan proposed by the bidder will be evaluated against criteria laid out in the RFP and the bidders qualifying at this stage will be shortlisted as “Technically Qualified Bidders” and would be considered at the third stage.

The financial proposals of the shortlisted technically qualified bidders will be evaluated as per criteria laid out in the RFP in order to identify the preferred bidder.

(3) Availability of Request for Proposal (RFP) Document The Request for Proposal (RFP) document along with all annexures, together referred to as the tender document may be downloaded from our website http://www.meghalaya.nic.in or from the office of the Director of School Education and Literacy, Kennelworth Road, Laitumukhrah Shillong 3 on or before the date as specified in the programme.
In case the document is dowloaded from the internet, the cost of the RFP document should be enclosed along with the proposal in the form of a demand draft payable to the DSEL at Shillong.

Eligibility criteria for bidders

The bidder can be an Organisation, Institute, Company, Corporation, Society, Trust, Firm, registered/incorporated in India. They should have credible indications of their capability to participate in the ICT implementation on their own. This could be evidenced by their products, work experiences, participation in similar projects.

The bid can be submitted by any of the above agencies, in their individual capacity or as a consortium of not more than three companies. In the case of such a consortium, each of the bidding partners would have to be individually eligible to carry out a significant part of the implementation and together, the consortium should be capable of undertaking all components of the implementation. The bidder or at least one member of the consortium, must have been in the business of sale, supply, installation and maintenance of IT hardware and software, and empanelled for this purpose with the Government of Meghalaya or any other State Government or Central Government agencies like the DGS&D.

Or

Maintenance of ICT facilities including computer systems, peripherals, UPS, management of operating systems and software, in geographically dispersed locations, particularly remote rural locations in the State of Meghalaya or similar locations in any State of the Indian Union.

The bidder or at least one member of the consortium must have a sound understanding of and demonstrable capability to provide and manage an educational support system, particularly in remote rural schools. To this effect, they must have been in the business of organising and management of ICT based educational services like teacher training, publishing of ICT based digital content and its implementation in schools, or other forms of ICT based teaching and learning in schools.

In case the bidder has a demonstrable expertise of only one of the above areas, the bidder may necessarily partner with other agencies and the bid be made by the consortium. Proposals submitted by a consortium should further comply with the following:

i)The number of members in the consortium will not exceed three. One of the members will be designated as the Lead Member of the consortium and others as Operating Members. The members of the consortium shall enter in to a Memorandum of Understanding for the express purpose of this project, explicitly

agreeing to remain partners throughout the period of contract and extended periods if applicable, and this document will be submitted along with the proposal.

The members of the consortium shall execute a Power of Attorney in favour of the Lead Member authorising that member to participate, negotiate, enter into contract and undertake the project on their behalf as per the SLA. The format of the Power of Attorney is enclosed at Appendix 3.

The proposal should clearly delineate the roles, functions, responsibilities and deliverables against each member separately. Each member of the consortium would explicitly agree to fulfill each and every part of their obligation within the project individually and collectively. This agreement will constitute a part of the MOU as well as the Power of Attorney defined above. However the State shall deal only with the Lead Member, who in turn will ensure the delivery of all parts of the SLA. Every member of the consortium, individually and as a group would be liable for any violation or non-compliance or non-delivery on the part of the consortium as a whole or any of its partners.

A bidder who chooses to submit a proposal in their individual capacity cannot simultaneously participate in this tender as a member of any other consortium. No agency can be a member of more than one consortium simultaneously. Any such submission will automatically disqualify their proposals.

The present project involves the implementation of the ICT programme in 241 schools across the state of Meghalaya as per details below.

Districts	**No. of schools**
1. East Garo Hills	21
2. East Khasi Hills	63
3. Jaintia Hills	24
4. Ri Bhoi	14
5. South Garo Hills	15
6. West Garo Hills	78
7. West Khasi Hills	26

The constitution of any consortium shall remain constant in all the bids. Irrespective of eligibility, bidders may submit separate proposals for every one of the districts under consideration. Bidders bidding for more than one district, but not eligible for all the districts as per their eligibility, may indicate their preferred districts in a decreasing order of preference. For example, if a bidder is eligible for 4 out of 8 districts, then they may be awarded a maximum of four districts. The list of schools under each district is given in Appendix 1.

The actual school to be included for implementation may be subject to change. However, the number of schools shall remain the same. The bidder is required to submit only one qualification proposal irrespective of the number of districts for which bid is being submitted. However, technical and financial proposals are to be submitted separately for each district for which bid is being submitted. All costs pertaining to and as a consequence of the preparation and submission of the proposal by a bidder shall be borne by the bidder and no part of this cost shall be chargeable to the State of Meghalaya.

The bidder is encouraged to visit at least some of the locations where the programme is to be implemented so as to assess first hand the scope and challenges of the project. While the DSEL will on request, facilitate such visits, all costs and other logistics will be borne entirely by the bidder without any liability to the State of Meghalaya.

It would be deemed that by submitting a proposal, the bidder has:

- made a complete and careful examination of the RFP document and agrees to all conditions and implications that arise from it;
- sought, obtained and perused all relevant information for the submission of the proposal;
- made a thorough examination of all aspects of the project including, but not limited to:

  i. the project sites;
  ii. existing facilities, infrastructure and structures, if any and its present condition;
  iii. status and condition of utilities in the neighbourhood of the project sites
  iv. conditions that are likely to affect transportation, communication, access, disposal, handling, storage and safety of goods, travel and access by personnel
  v. all other prevailing conditions that may affect the bidder's performance under the SLA.

Any error or incomplete submission arising out of an interpretation of the RFP document, its annexures or any information passed on to the bidder by the State of Meghalaya or any of its officials, the State of

Meghalaya shall not be liable and no request for redressal of grievance or reconsideration can be accommodated.

The DSEL reserves the right to annul the entire or part of the bidding process or to reject any or all proposals if:

- at any time during the bidding process, any material misrepresentation is made or discovered;
- the bidder does not respond to queries or requests for clarifications or requests for additional information; or
- the bidder or their representatives or any person on their behalf attempts to influence the process of tender in any manner whatsoever

In case of rejection of one or more proposals after the opening of bids, and the bids belong to the lowest bidders, the DSEL reserves the right to continue with the bid and invite the next lowest bidder to match the price quoted by the lowest bidder.

Any measure, taken to modify the bid process as mentioned above, will be at the sole discretion of the State of Meghalaya represented by the DSEL and is not negotiable.

Submission of proposal

Qualification Proposal:

Part 1

The following certificates with all supporting documents are to be submitted as part of the qualification proposal in the formats prescribed in Appendix 3:

- Letter of Intent and submission of proposal
- Certificate of being an IT/Education business
- Copy of Memorandum of Understanding entered into in the case of a consortium
- Power of Attorney authorising signatory of proposal to function as Lead Member of the consortium
- Certificate of incorporation of bidder (in case of a consortium applying, of each of the partners)
- Details of bidder / members of the consortium
- Certificate of Experience (details of same/similar projects)

- Certificate of non-collusion
- Certificate of non-debarrment or disqualification (include details of such cases/litigations/pending cases, etc.)
- Cost of RFP Document (enclose receipt of payment or DD in case of download)
- Bid Security
- Statement of financial capability
- Annual reports
- Check-list of certificates/documents required for the qualification proposal

Part 2

Proposal highlighting how the bidder / consortium intends to fulfill the requirements of the project and realise the objectives of the project. This shall include a proposed technology mix and a plan of action in sufficient detail to enable its evaluation on feasibility, appropriateness and cost.

Technical Proposal:

The following certificates with all supporting documents are to be submitted as part of the technical proposal in the formats prescribed in **Appendix IV**

- Detailed specifications of all infrastructure and components of the proposed system
- Details of implementation including time schedules, staffing, management of system and ensuring delivery of products and services
- Details of support system for maintenance, repair, monitoring and supervision of project implementation
- Checklist of certificates/documents required for the technical proposal

Financial Proposal:

The following certificates with all supporting documents are to be submitted as part of the financial proposal in the formats prescribed in **Appendix V**:

- Price proposal for the project
- Financial assumptions
- Detailed break up of prices for infrastructure components including installation, and commissioning
- Detailed break up of prices for ICT components
- Recurring items and their costs

- . Establishment and operational costs

Evaluation of proposals

The evaluation of the proposals will be conducted by a Committee specifically constituted for the purpose. The Committee will consist of technical experts, representing all components of the ICT implementation, including administration, finance, technology and management. The Committee will also be empowered to co-opt other experts and / or seek the expert opinion from any other person /agency.

Evaluation of Qualification Proposals:

Bidders fulfilling the basic eligibility criteria will be shortlisted. The capability of the eligible bidder will be established using a rating list **(see Appendix VI)**, which will include previous experience, performance in similar projects and financial soundness. In case a bidder has participated previously as a part of a consortium, but has applied as an independent bidder, then, details of the role of bidder and the contract value of the bidder's component of the project, appropriately weighted, would be used to rate the bidder.

Only bidders qualifying at this stage will be considered at the next stage of evaluation.

Evaluation of the Technical Proposals:

The technical proposal primarily details a potential plan for the realisation of the objectives of the ICT programme. The evaluation of the technical proposal, therefore, will be made on the appropriateness and completeness of the proposal.
The proposal will be rated using a rating list **(see Appendix VII).**

Completeness of the proposal will be measured on the following:

- the components proposed adequately meet the requirements and are essential to realise the objectives of the project
- the infrastructure and ICT components proposed are state of the art, currently available and can be supported technologically through the life time of the project
- the bidder's ability to source and supply the infrastructure and ICT components as evidenced by arrangements / agreements with manufacturers or dealers for the specific purpose of this project

The other parts of the proposal which will be evaluated include:

- Proposal for implementation including time schedules, staffing, management of system and ensuring delivery of products and services
- Proposal for support system for maintenance, repair, monitoring and supervision of project implementation

Only bidders qualifying at this stage will be considered at the next stage of evaluation.

Evaluation of the Financial Proposals:

The financial proposal consists of two parts, one, consisting of prescribed fixed costs, e.g. teacher salary and two, variable costs as quoted by the bidder. For the fixed cost items, a certificate of acceptance and assurance of compliance will be the minimum eligibility. For the variable cost components, lowest prices will be considered. The total price quoted for the project will be considered for comparison of quotes. However, if unreasonable deviations in prices are observed between the quotes on any one or more components, the Evaluation Committee will be empowered to seek explanations for these deviations and negotiate the price of the lowest bidder within the provisions of the General Financial Rules (GFR) of the Government. Any attempt by a bidder to grossly underquote or in other ways vitiate the process of bidding will be taken serious note of and will result in the bidder being disqualified and action initiated to debar the bidder from participation in future bids. The project-wise ranking of bidders for each of the projects will be declared and the selected bidder invited to fulfill further requirements before placing of orders.

SECTION-II

SERVICE LEVEL AGREEMENT

Service Level Agreement

This agreement made this ……. day of …….. between the State of Meghalaya on the one part, hereinafter referred to as the State, the Principal/ Headmaster of _____(name of school) on the second part, hereinafter referred to as the School, and Shri / Smt …….of M/s……hereinafter referred to as the Contractor (which expression shall unless excluded by or repugnant to the context be deemed to include his/ her heirs, executors, administrators and legal representatives) on the third part.

Whereas the State has called for Contract for the implementation of the ICT programme (replace with appropriate title if different) vide letter No. …… dated ……..…..and the Contractor has submitted a bid dated ……. for a sum of Rs …….., which has been accepted by the State vide notification……... ……..dated ……whereunder the Contractor has made a security deposit of Rs _____ (Rupees _____ only) as per letter No._____, dated ……..…….. and execute the agreement.

NOW IT IS HEREBY MUTUALLY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

General terms of contract

i. The State shall provide along with the Work Order, a document explicitly defining the deliverables, time schedules for activities, conditions, check lists for compliance, and list of officials of the State responsible for different components of this contract.

ii. The Contractor shall accept this document and return a signed copy of the same as proof of acceptance within ___ days of the issuance of the work order.

iii. This document will function as a guide and the Contractor shall strictly comply with any and every provision defined therein.

iv. The Contractor will indicate the acceptance of the Work Order in writing within the specified period along with a Performance Security of 10% of the total contract value (the GFR prescribes 5-10%; modify if need be) and a signed copy of this Service Level Agreement.

Scope of Work:

- The Contractor shall inspect the School premises and draw up a plan of action and time schedule for the preparation of the school premises, in consultation with the school.

- The Inspection and the consequent plan of action, shall include all access issues (for transport of equipment, etc.), civil works, electrical works, and security.

- The actual layout, electrical and civil shall be based on the ground situation and exigencies, the needs of the School as defined by the School and the technological requirements. The plan of action will be a negotiation between the Contractor, the State and the School and will be implemented within the time frame defined by the State.

- The Contractor shall organise to transport, store and secure equipment during the process of establishment of the system at his/her own cost with no liability to the State and the School.

- The Contractor shall ensure the establishment of the civil, electrical, IT or other infrastructure without any interference whatsoever to the School programme.

- The Contractor shall develop and maintain an inventory and the document shall form a part of the completion report to be submitted. A copy of this inventory will be available with the School at all times and shall be made available for scrutiny as and when called for

- The Contractor and the School shall undertake to jointly inspect, test and certify successful implementation at each stage of the process.

- The Contractor shall submit a completion report to the State, duly certified by the School.

- The date of the completion report shall be considered the date of establishment of the IT facility. This date will be used for all future transactions relating to the project, including warranties, payment of bills, period of contract, etc.

- The Contractor shall conduct a formal selection process for appointment of ICT teachers. The State shall be represented on the selection board. Qualifications and experience prescribed by the

State shall be strictly complied with. A future discovery of any misrepresentation shall invite immediate removal of the teacher and penal actions against the Contractor.

- The ICT Teacher shall report to the School and perform his/her duties under the supervision of the School authorities. All work conditions, including code of conduct, working hours, attendance and reporting, normally applicable to teachers in the school shall be equally applicable to the ICT Teacher.

- The ICT Teacher's pay and compensations by the Contractor shall be subject to a satisfactory performance report by the School.

- The School shall be free to demand a replacement of the ICT Teacher on grounds of absenteeism, non-performance or competence.

- The Teacher shall implement the time table drawn up by the School and enable the successful attainment of the objectives of the ICT programme. The School shall conduct periodic assessment of the implementation, including evaluation of the students. Milestones identified in the syllabus of the ICT programme shall be used for such evaluation.

- The attainment of students and the successful implementation of the ICT programme shall form an integral part of the report to be made by the Contractor for the release of payments. Unsatisfactory attainments will invite penalties as defined in the SLA

Validity of the contract

The Contract shall be normally valid for a period of five years from the date of acceptance of the Work Order, as evidenced by the submission of the Performance Security and the Service Level Agreement or upto the date of expiry of the notice period, in the instance of a termination notice issued by the State..

The Contract shall be subject to review at all times during the contract period of the satisfactory compliance and implementation of all aspects of the ICT programme, including and not restricted to upkeep and maintenance of the ICT facilities, conduct of the prescribed programme and its quality. The performance appraisals conducted by or on behalf of the State, including the third party evaluation shall be used as a basis.

The Contractor shall hand over the IT infrastructure to the School at the end of the contract period, in proper working conditions. All software components shall be up to date and upgraded. Licenses if any shall be handed over to the School. A certificate of handing over along with a checklist of all components supplied as per the initial Work Order and a certificate of satisfactory condition of the infrastructure will form a part of the bill for the last quarter of the contract period.

The Contract shall be liable for termination if after due notice and adequate time, explicit and tangible measures are not taken to rectify the faults in the implementation.

Deliverables

The Contractor shall procure, transport, install, operate and maintain the ICT infrastructure including software and all related civil and electrical equipment defined in the Work Order at the School.

The Contractor shall define and organise a mechanism for the regular maintenance and upkeep of all equipment, which shall include an appropriate maintenance contract and replacement of faulty equipment.

The Contractor shall organise a three level complaint redressal mechanism. The ICT teacher deployed at the school shall form the first level, assisted by a service team at the nearest District headquarters or large town/city which shall form the second level. An authorised service centre of the OEM supplying the computers and accessories shall form the third level.

The Contractor shall ensure availability of appropriate spares at each level to ensure repair of equipment and/or replacement within the limits of downtime defined below.

The Contractor shall identify a contact person and a chain of officials for the escalation of complaints, beyond the scope of the ICT teacher.

The response time for attending the faults will be the same day after they are noticed at the first level. In case of upgradation of faults to the second level, the time for attending a fault by the service team shall be within 48 hours failing which the vendor will arrange temporary replacements, till the third level completes the repair.

In case the fault has not been attended to within the stipulated period, it would be open to the School or the State to have the fault rectified through any other source. The Contractor shall bear the costs of such repairs. The expenses so incurred would be deducted from the amount due to the Contractor. Faults include LAN, Internet distribution, Server, desktops, and each piece of hardware and software.

The Contractor shall ensure the upkeep and repair of all civil and electrical works as and when warranted and at regular intervals.

The Contractor shall provide an alternate source of electricity (typically a generator) to ensure that the ICT infrastructure is available to the School on all working days. An appropriate meter will be installed to

monitor fuel consumption. Detailed logs of fuel consumption, maintenance and repair of the generator will be maintained, submitted along with the bill and made available for inspection on demand.

The Contractor shall establish a mechanism to keep all software including the Operating System, security software including virus scans, application software and digital content, up to date and upgraded at all times.

The Contractor shall organise internet connectivity to all the computers of a bandwidth as defined in the Work Order.

The Contractor shall ensure access to the ICT facilities to all students and teachers in accordance with the time schedule drawn up by the School. The ICT facilities will include computers and accessories, software and digital content in accordance with the list prescribed by the State.

The Contractor shall allow the ICT facility to be used for appropriate purposes at the instance of the School or the State, in pursuance of the overall objectives of the ICT programme, including capacity building programmes and teacher workshops for content development, etc.

The Contractor shall maintain records of all complaints and their redressal and establish that all components of the system was in proper upkeep at all times. These records shall form a part of the quarterly compliance report to be submitted along with the bill.

Monitoring and evaluation

The Contractor will establish a system of monitoring of each component of the deliverables listed above and any other system or service which is part of the ICT programme implementation. This system will be independent of the employees of the Contractor directly responsible for the implementation.

The Contractor will submit reports of monitoring, status of the system, completion of activities and such other components of the implementation every quarter, in a format to be provided by the State, duly certified by the Principal / Head Teacher of the school.

The Contractor will facilitate the inspection of the system or any of its component by the State or its representative or the Central Government or its representative and make available to them all information with regard to the implementation sought by them.

The Contractor will facilitate an independent third party evaluation by an agency appointed for the purpose by the State and make available to them all information with regard to the implementation sought by them.

The Contractor will agree to any and all course correctives suggested by the State as a consequence of the monitoring, inspection or evaluation carried out at any point in time during the project. Compliance reports to this effect will be submitted immediately after completion or in any case within the stipulated period.

Payments

The annual price agreed to will be paid in four equal installments.

The Contractor will raise a quarterly bill along will monitoring reports and a Service Compliance Certificate signed by authorised signatories of Contractor & the school.

All the rates, terms and conditions of this agreement will be applicable for a period of five years from…… to…….. In case of extension, if any, granted by the State, the same terms and conditions of this agreement will be applicable during the extended period.

Penalties: The Contractor shall be liable to be penalised for deficiency of services as defined in the Work Order. The following failures/deficiencies in service will invite penalties as listed below:

S.No. Faulty/deficiency Penalty

Arbitration and Exit Options

The State reserves the right to exit the agreement, giving the Contractor a three month's notice for any reasons, whatsoever. However the State shall bring on record the reasonableness and inevitability of the situation leading to the decision to cancel the Contract. Dues if any at the time of closure of the agreement will be decided on a prorata basis.

The Contractor or any member of the Consortium servicing the Contract, is not permitted to exit the Contract individually or collectively under normal circumstances. If any member or members of the Consortium exit(s) the Contract, adversely affecting or threatening to affect the continuation of the project in any manner whatsoever, the act shall be considered a breach of contract and the State shall proceed to cancel the contract and take appropriate measures to implement the project through alternate means, which can include inviting the next lowest bidder or call for fresh bids to undertake the remaining part of the project.

Any costs accruing due to this cancellation shall be borne by the Contractor. The Contractor would also be liable for penalties including the cost of establishing an alternate mechanism to implement the project and the cost of running the project in the interim.

Contractors whose contracts have been cancelled for any reasons whatsoever, will not be eligible for participation in future bids under the ICT scheme. The disqualification will be equally applicable to all members, in the case of a consortium.

The Contractor will ensure the status of the system and its smooth transfer to any other contractor identified by the State. This condition will be binding and the State will be free to apply penalties as deemed fit in case of any violation.

The authority for redressal of any grievances will be ....., Government of .....

The place of Jurisdiction in any case shall be a court of law situated in Shillong.

Bribe

The Contractor shall not under any circumstances offer or give or agree to give to any person connected to the Contract any gift or consideration of any kind and any inducement for reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other agreement or for showing or forbearing to show any favour or disfavor to any person in relation to this or any other agreement. Any breach of this condition by the Contractor or by any one employed by him / her or acting on his/her behalf whether with or without his/her knowledge shall entitle the State to forfeit the Contractor's security deposit, terminate the agreement forthwith and to deduct from the Contractor's bill the
amount of any loss or damage resulting from the cancellation thereof without prejudice to any other rights available under the terms of the agreement or under law.

Appendices

1. List of schools for present tender
2. Eligibility criteria for bidders
3. Formats of certificates, enclosures and supporting documents for Qualification Proposal
4. Formats of certificates, enclosures and supporting documents for Technical Proposal
5. Formats of certificates, enclosures and supporting documents for Financial Proposal
6. Rating List for Qualification Proposal
7. Rating List for Technical Proposal

Annexure I:

1. Infrastucture Options

Computers:

Use of computers could be envisaged in three broad scenarios, viz, a laboratory consisting of multiple computers in one location; a distributed environment with one or two computers in each location, for example, office room, teachers common room or library; a mobile environment, where the units have to be moved, for example from classroom to classroom, or to make presentations elsewhere. There may exist a need to simultaneously provide of one or more of these scenarios. There are multiple options available for each of these scenarios. These include:

Regular desktops in each location

Server and thin clients

Laptops and Netbooks :

Software Applications:

Three classes of software applications are envisaged.

The operating system, for instance Windows or Linux, manages the computer environment, facilitating access to all other software applications, access to the internet and other storage, communication or input/output devices. The operating system also require to be supported by security software like firewalls and virus scans which requires management (configurations, periodic actions and updations).

The second class of software applications allow the user to create and manage data and content. Word processors, browsers and e-mail clients, data base applications, graphics and animation applications, audio and video applications, programming tools, management information systems, inventory systems, etc. belong to this class.

The third category of software applications are containers of digital content. Ranging from simple documents and images to websites, learning management systems, web repositories, online libraries – they may require supporting software like pdf viewer, media plugins, archive managers (eg.,zip – unzip) or even specific fonts to view languages which do not use the roman script.

Each software application requires a specific hardware environment to function. The memory (RAM) requirement, hard disk space, the operating system, and in some cases other software (for example, Java runtime environment).

In terms of licensing, and therefore the rights to install and use software applications, there are three broad categories – proprietary, proprietary but freeware or shareware, and open source software. In the case of proprietary software, governed by an end user license agreement, the user is granted permission to install and use one single instance per license. Hence in a typical laboratory of 20 computers, 20 licenses of each software application will have to be bought. Further, the subsequent releases are not covered under the licenses and will have to be bought again. Campus licences covering all the computers and educational licences (concessional rates for schools) are offered by software manufacturers. In the case of shareware or freeware software (usually very specific tools, like a browser, virus scan, or even a graphic tool), the software is still governed by an end user license agreement, but is given to the user free. Shareware are usually versions of proprietary software with a reduced functionality. Open Source applications not only provide the software (usually free but at times at a cost), but also the source code. This has enabled community participation in the software development process, which has facilitated improvement of the software as well as its translation.

Keeping in view the wide range of applications suggested for the school infrastructure, choices about software categories mentioned above will have to considered to balance the cost of software applications, its installation, use and keeping it upgraded.

Accessories:

Accessories extend the functionality of the computers. Printers, scanners, still and video cameras, web cameras, audio players and recorders, and a variety of storage devices are commonly used with computers.

Printers: Dotmatrix printers, inkjet printers and laserjet printers are common. Multifunction devices, which perform the functions of a photocopier, printer as well as a scanner are also available..

Scanners: As a basic digitising equipment, a scanner can perform roles in a variety of situations. Development of digital document archives for the MIS, submission of online applications, digitisation of student artwork or worksheets, and collections of digitised media (pictures, illustrations, maps, etc.) are some of the applications scanners can support. Flat bed scanners, usually supporting an A4 size of paper (bigger ones are also available at higher costs) can provide very high resolution colour scanning. Scanners are accompanied by Optical Character Recognition (OCR) software, which provides the ability to read and recognise text from the scanned image. At least one scanner for the laboratory and one for the office could be considered.

Digital media devices: Still and video cameras have become increasingly popular and can serve a variety of purposes. They eliminate the need for films and tapes and subsequent processing. While users may require some orientation for effective use, they can perform a much needed role in documentation. They can be used by students and teachers to extend the scope of their academic activities. It enable students and teachers to enrich the documentation of activities, projects and events.

Usually interfaced with the computer through the USB or firewire ports, the software accompanying the cameras and recorders enable the storing, editing and re-purposing media. Choice of cameras and audio recorders are a function of their capabilities (optics, capacity of the digitising device (CCD or CMOS), size and quality of the image produced, sound quality and the storage capacity) and consequently their cost.

Interfaced through the USB port, digital microscopes and telescopes can extend the capability of a teacher (or even a student). They can store the results on a computer or project the same to a larger audience.

Projectors: Unlike the conventional overhead projectors, which transmitted light through a transparency and projected it on to a screen, modern versions use a small camera which looks down on the object

placed and trasmits the image to a computer and/or a projector. Therefore, it doubles up as an epidiascope. This not only eliminates the need for darkening the room, but also allows pictures of opaque objects to be stored or projected.

Projectors are useful to display information simultaneously to a larger audience. Projectors require a darkened room. This issue has been compensated by the use of brighter light sources (measured in lumens). Projector bulbs may have to be replaced if they fuse out. Hence availability of these bulbs and their cost becomes a criterion for selection. The resolution of the projector (vga, svga, or xga) governs the capability of a projector to reproduce colours and pixel density. Higher resolutions produce better pictures, at the same time increasing initial cost of the projector.

LCD televisions are becoming increasingly common. As they take an input from video as well as computer sources, an LCD television can become a multifunctional device, supporting a variety of inputs. In terms of ease of use, quality of picture, initial cost and manageability, LCD televisions could be preferred.

Microscopes, telescopes, etc : Devices connected to the computer enable storing, projecting and in other ways, processing of digital data. A variety of devices which connect through the USB or the serial ports of computers have been designed.

Digital microscopes connect to the computer and allow students to explore the microscopic world. Projecting the results in a classroom can aid teachinglearning. Optics, sturdy material and construction, ease of use and cost may be used as the criterion for selection. Associated software and the ability to use the images in a variety of other software applications may also be considered. Digital telescopes are not so common. Further a telescope has to be used outdoors and generally in the dark. If the requirement of the school infrastructure includes a telescope, one with a digital interface may be preferred.

Kits for interactive science experiments have been developed. Supported by a variety of probes, measuring, electrical, light, sound and other physical variables, they can facilitate a variety of experiments in the science laboratory. Interfaced with computers, they allow for not only plotting the data and measurement, but also repurposing the data in other software applications. As an extension to the science lab, these devices can enhance the range of experiments currently carried out. Cost of the device, the variety of probes, the capabilities of the associated software may be used as selection criteria.

Internet Connectivity and Networking:

As a general principle, it would be highly desirable that all computers and accessories are networked. This would not only ensure sharing of resources, but also reduce the total costs.

Internet Connectivity: The choices for internet connectivity in a given physical area may be limited. A broadband connectivity with adequate bandwidth (512 Mbps or higher) are suitable when a few computers are to be connected. If the school envisages providing larger numbers of connections, higher bandwidth may be preferred. Speed of the connection at each node will be the criteria. In some places, wired (through a conventional telephone connection, or a network cable connection, or a cable television connection) and wireless (through an antenna, a mobile telephone, or a satellite dish) connectivity is offered. At times, many competitive plans from a variety of internet providers may be encountered. Choice of provider and plan will depend on initial and recurring costs, equipment to be installed (shifting to a wireless from wired, for instance will require network cards on all computers to be changed), reliability of connections and response to complaints, bandwidth usage in the school, and security of the connections (internet connectivity is prone to virus attacks, mail spamming, stealing of data and damage to software and equipment)

Networking within the school: A school wide network is desirable to facilitate data sharing, avoiding multiple copies of documents across the computers creating confusions, and rapid access to information. They also eliminate the use of memory sticks (pen drives) or CD, which are a primary source of viruses. If the system proposes to use thin clients or virtualisation, then a network is essential. Simultaneously, it eliminates the need for multiple licenses of software and a drastic reduction in hardware like hard disks, CD/DVD drives on individual computers etc.

Networks can be wired or wireless. In either case, it requires a network switch to distribute and manage the connections to individual computers. All modern day computers come equipped with a wired network connectivity. Laptops can be equipped with both wired and wireless capabilities. A desktop computer can be converted to a wireless capable network node by attaching a wireless network card.

Choice of wired/wireless connectivity depends on various factors. If the physical location is a single large room or rooms are separated by thin walls and is not spread over a large area, a wireless network can perform efficiently. While a wired network once established is more reliable, it involves increased initial

cost and regular maintenance and repair. If the school has an already established wired network, changing over to a wireless network would involve a very high initial cost (replacement of network cards on each node). If the school is establishing a network for the first time, a wireless network, if feasible, would be the best option.

Networks are prone to security issues. Protection and appropriate restriction of data transfer, protection of the individual computers from viruses, and ensuring adequate bandwidth to all users would require the use of firewalls, password protections, updated virus scanners and scanning regimes, and procedures to restrict data flow on the network would become essential.

Electrical Conditioning, backup and electrical wiring and safety:

The ICT infrastructure may be the largest consumer of electricity. Also, components of this infrastructure are most sensitive to variations in electrical supply and consequent break downs or burning. Designing the electrical supply and appropriate safeguards therefore become an essential part of the design of the school infrastructure.

Electrical Supply: The electricity received at the school may not be regulated (constant voltage and current). The first step would be to adequately safeguard the installations (wires, switches, outlets) with the use of circuit breakers, current limiters and if feasible (cost wise) a voltage regulator. This must be implemented at the inlet (before the electricity meter)

Wiring, electrical fittings and earthing: Ensuring the quality of wires used, quality of electrical outlets and switches, and earthing of the whole circuit will not only safeguard the equipment but also human lives. Periodic checks for faults and broken installations must be carried out and a routine established for it. Any faults detected must be attended to promptly and rectified. Education of all users with regards to safe use of electrical fittings and outlets is a must.

Use of gadgets consuming higher power like motors, air coolers or room heaters on the same circuit as the ICT infrastructure must be avoided. Designating electrical outlets for such use is a must to protect the ICT equipment.

Non-supply or breakdown of electricity is very common. Not only does it disrupt work, but also results in sudden variations in voltage or current. In some cases, low voltage or low frequency current is a common feature. Voltage regulators designed for use in such special conditions are becoming available. Identifying such situations and making appropriate choices of voltage and current conditioning devices will ensure safety and longevity of the infrastructure.

Sudden switching off of computers not only results in loss of unsaved data, but also corrupts software. To safeguard data and software, it is necessary that an Uniterrupted Power Supply (UPS) is used in the circuit. There are two kinds of UPS in common use – an online UPS and an offline UPS. In the case of an online UPS, the charging and discharging of the battery happen simultaneously and all the time, the output being provided by the battery always. In the case of an offline, the system switches over to a

battery when power supply breaks down. The discharge time of the battery, the delay before the equipment switches over to battery, and the voltage range over which the UPS operates are critical factors to be considered. Batteries degrade after a definite number of charge-discharge cycles and will have to be replaced, typically once in about two years. Absence of backup time can be used an indicator for this replacement.

There are two options available in providing UPS support. One could provide a separate UPS for each individual computer. Alternatively, one could provide a common UPS for the entire circuit. While cost considerations may be used to make such choices, the support available for repair or replacement also should be considered. A breakdown in one of the separate UPS will affect only that computer.
Use of low power and battery driven equipment like laptops eliminates the need for UPS. Use of thin clients also reduce the demand for UPS on the node. Only the server needs to be supported. Judicious choice keeping in mind the requirements of the system would make the system safe and economical.

Manageability and Support:

Schools are generally not equipped with personnel well versed in the maintenance and upkeep of ICT or electrical equipment. Dependence on outside support also leads to recurring expenses, delay in repair, down time of equipment. Nonavailability of infrastructure reduces teacher confidence in technology. A system of management and support of the total system is therefore an essential part of the infrastructure design.

Outsourcing maintenance : An annual maintenance contract with a service agency is the most common form resorted to. This may become unreliable in far flung areas (for example rural places far removed from cities). Where the ICT infrastructure is supported or run by a BOOT agency, an expectation for a resident engineer/technician, well versed in all aspects of day-to-day repair and maintenance of the infrastructure should be incorporated into the agreements. Telephonic or e-mail based support to such engineers from the vendor/service agency must be ensured.

Remote service suppor t: Major manufacturers of ICT equipment, particularly computers have online service support mechanisms, whereby service engineers can connect to computers online and rectify most software faults, diagnose and report hardware faults and suggest mechanisms for replacement or repair. Designing provisions for and entering into appropriate agreements for such support will ensure maximising the use and longevity of the ICT infrastructure.

Extending Warranties : Comprehensive onsite warranty is provided for hardware. While computers are normally covered for three years, accessories and peripherals like printers, scanners or projectors and spares are covered for one year. Manufacturers have developed models of extension of warranties. Keeping in view the life time of this infrastructure and absence of a refresh (replacing older or non-functional equipment with newer ones regularly) mechanism, working out appropriate state level agreements with manufacturers for maintenance support for extended periods will be desirable. While developments and advances in technology may necessitate upgradation earlier, typical life of ICT equipment can range from five to seven years.

Software related issues: A wide majority of break downs or faults can be attributed to software related issues. Corruption of files, cluttering of data on hard disks, and virus attacks lead to slowing down, and

sometimes, break down of the computer. Repeated freezing (also referred to as hanging) of the Operating System necessitates forced shutting, which in turn leads to instability or even breakdown in the operating system. This not only results in data loss but also necessitates re-installation of the Operating System and other software applications at great expense of time and effort. A regular system of cleaning of all computers and education of the user in safe handling of computers will help avoid problems. Virus scanner software are constantly updated to help protect from newer and newer viruses. These upgrades (referred to as patches) are regularly released online. Access to the internet, regular downloading and patching of virus scans, and scanning of all storage devices (hard disks and memory sticks) is a must. Firewalls can be used to protect computers from unauthorised access and data Educating all users on protection from viruses and safe practices to avoid virus transmission is essential. As timely action is very important, constant vigil and reporting mechanisms will have to be established.

Updates and patches for operating system and other software applications are also released regularly. Downloading these and patching the software to keep it up to date is also essential to ensure smooth functioning of all the equipment. Thin clients and virtual computers reduce maintenance tasks to the server alone. All software and virus protection tasks need to be carried out on the server alone.

Fire Safety: With many electrical connections located in closed spaces, fire hazards will have to be taken care of. Adequate numbers of portable fire extinguisher (suitable for use in electrical fires) should be provided. All persons using the space have to be oriented to evacuating the space safely, operating the fire extinguisher and switching off equipment and electrical supply. A fire safety drill should be conducted regularly and the extinguishers checked and serviced.