

Tender Sr. No: _____

TENDER DOCUMENT

(AS REVISED AFTER PRE-BID CONFERENCE HELD ON 13-09-2010)

**Development of Multimedia Educational Content
for classes 6th to 8th for the subjects of Maths,
English, Science and Social Science for
Upper Primary Schools**

THROUGH

**DIRECTOR GENERAL SCHOOL EDUCATION
CUM PROJECT DIRECTOR PUNJAB EDUSAT SOCIETY
SCO 104-106, SECOND FLOOR SECTOR 34A,
CHANDIGARH – 160034**

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TENDER SUMMARY

1. **Tender No.** : **24/93/PES/2010/CAL-Tender**
2. **Total pages** : **53 (Including Annexures)**
3. **Description** : **Development of multimedia Educational Content for Classes 6th to 8th for the subjects of Maths, English, Science and Social Science for Upper Primary Schools**
4. **EMD** : **Rs.5, 00,000 (Rs. Five Lac only)**
5. **Cost of Tender** : **Rs. 1000.00**
6. **Last Date of Submission :** **30th Sep 2010 upto 2.00 PM**
7. **Date of Opening of bid :** **30th Sep 2010 2.30 PM**

PUNJAB EDUSAT SOCIETY
NOTICE INVITING TENDER

The sealed bids are invited from the National/ International Company for development of multimedia educational content for classes 6th to 8th for the subjects of Maths, English, Science and Social Science for approximately 5250 Upper Primary Schools. The scope of work will include:-

- (a) Development of Multimedia educational content.
- (b) Training of 50 Master Trainers for utilization and integration of multimedia content in the lesson plans (at least in each district).

Tender document can be purchased from this office of Project Director cum DGSE on any working day (9:00AM to 5:00PM) at the below mentioned address on payment of Rs. 1000/- through Demand Draft of a Nationalized bank in favor of Project Director cum Director General School Education, Punjab Edusat Society payable at Chandigarh. This amount would be non-refundable.

The sealed bid accompanied by an Earnest Money Deposit (EMD) should reach the office of Project Director cum DGSE, Punjab Edusat Society, Chandigarh on the below mentioned address as per following schedule.

Last date of submission of Bid: 30th Sep 2010 upto 2:00PM

Date of opening of Bid: 30th Sep 2010 at 2:30PM

The pre-qualification bids would be opened in presence of the authorized representatives of prospective bidders who happen to be present. If the submission and opening day is declared as holiday, the bids can be submitted on next working day at the same time.

The Project Director cum DGSE, Punjab Edusat Society reserves the rights to reject any bid or all the bids without assigning any reason and revising quantity, fine-tuning specifications as per requirement of Government of Punjab before opening the commercial bids.

Project Director- cum-
Director General School Education
Punjab Edusat Society.
SCO 104-106, Sector 34-A,
Chandigarh.
Ph: - 0172-2623106, 2623206

Note: - The prospective bidders have the option to download the tender document from www.ssapunjab.org. But they shall have to pay a fee of Rs. 1000/- being the cost of tender document alongwith the submission of tender.

Invitation of Bids

1.1 Introduction

SSA Punjab is introducing Computer Aided Learning (CAL) for classes 6th to 8th in all Government Schools of Punjab. All these Schools have the adequate Information Technology (IT) Infrastructure such as follows :-

- Servers.
- Desktop Computers.
- Dot Matrix Printers.
- Voltage Stabilizers (2KVA, 4 KVA, 5 KVA)
- Un-interrupted Power Systems (UPSs) with battery backup upto 150 minutes (1 KVA, 2KVA, 3 KVA)
- Windows Server Operating System 2003
- Windows XP professional
- Windows Office Professional
- Internet Connectivity

1.2 Objectives

The main objective of the CAL project is to attract the children, retain them in schools and also to improve the quality of the education through multimedia based educational content. CAL objective is sought to be achieved through the use of multimedia educational content having features such as story based animated cartoons, games and riddles etc. Spontaneous, self initiated and self regulated - the three critical aspects that make an activity a play, are intended to be integrated in CAL software through innovative use of cartoons, story lines, music etc, to make learning an interesting experience.

1.3 Invitation of Tender.

Project Director cum DGSE, Punjab Edusat Society (PES), Punjab invites three-tier structured sealed bids for development & implementation of multi-media educational content in Punjabi language for classes 6th to 8th under Computer Aided Learning (CAL) program for all 5250 Government Schools in the State of Punjab for following subjects :-

- Mathematics
- English
- Science
- Social Science

Note: The number of schools can vary \pm 5%

1.4 Bid Document

Tender Document can be purchased from office of PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society, Punjab, at **SCO 104-106, Sector 34 A, Chandigarh**, by paying a non-refundable Fee of Rs. 1,000/- through a demand draft (DD) drawn in favour of the PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society, Punjab,.

It may also be downloaded by any interested bidder from www.ssapunjab.org. However, the Bidder is required to submit the tender fees amounting to Rs. 1,000/- through a demand draft (DD) drawn in favour of the PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society, before submission of the bid.

1.5 Schedule of the Events

- | | |
|-----------------------------|-----------------------------------|
| 1 Submission of Bids | 30th Sep 2010 upto 2:00 PM |
| 2 Opening of Bid | 30th Sep 2010 At 2:30 PM |

Notwithstanding anything else contained to the contrary in this tender document, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society reserves the right to cancel / withdraw / modify fully or partially the "Invitation of Bids" or to reject one or more of the bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.

1.6 Amendment of invitation

In case of any seeming discrepancy between the Press Advertisement, other detailed provisions of the Tender print-document and the updated version on the web, the web-version will prevail.

At any time prior to the deadline for submission of bids, PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society reserves the right to add / modify / delete any portion of this document by issuance of an addendum, which would be uploaded on the web site and will also be made available to the all the bidders who have indicated their intention to bid. The addendum shall be binding on all bidders.

PRE-QUALIFICATION CRITERIA

Considering the requirements under Computer Aided Learning (CAL) project, the following criteria are prescribed as pre-qualification criteria for SOLUTION PROVIDERS (afterwards referred as Bidder) interested in undertaking the project.

- 2.1. The Bidder should have submit Rs. 1000/- (Rupees One Thousand Only) towards the cost of the Tender Document.
- 2.2. The Bidder should have furnished the Earnest Money Deposit (EMD) of Rs. 5,00,000 (Rupees Five Lac) only.
- 2.3. The Bidder should be a reputed National/International level Education & Training company in the business of development of multimedia educational contents for the last one year as on the date of publication of the Tender.
- 2.4. No Consortium bidding is allowed for applications development.
- 2.5. The bidder must possess ISO 9001:2000 or SEI-CMM Level – 4 or above Certification or more, on the date of publication of this TENDER.
- 2.6. The bidder must have minimum average per year turnover of Rs. 1.00 Crores (Rupees One Crore) from content development for the preceding 3 financial years ended with 31st March 2010 and supply a certificate from Chartered Accountant in this regard.. The bidder also have to submit copies of balance sheets /profit & loss accounts/ annual reports of last three financial years (upto 31-Mar-2010).
- 2.7. The bidder must have developed at least 100 multimedia based Computer Aided Learning (CAL) content in at least one regional language (including English for limited purposes) for one or more States. Bidder has to provide details of all such projects and reference details in General bid. Copies of work orders and successful completion / implementation certificates of each such project should be enclosed with the bid.
- 2.7.1 Those bidders who qualify the pre qualification criteria shall be given a common topic for preparation of Multimedia based Computer Aided Learning content in Punjabi language which will be of 30 Minutes duration within 10 days and presentation of the same will be given by the bidder before the tender evaluation committee on a given date. The bidder shall apply all the techniques as deemed fit to teach the students through computer learning methodology.
The technical eligibility of the bidder will be based on the evaluation made by the tender evaluation committee. The financial bids of the only those bidder will be opened who qualify the technical eligibility as recommended by the committee and whose decision will be final and no correspondence whatsoever on this account will be entertained.

- 2.8. The bidder must have well-established and proven methodology of conducting teacher training and should have trained at least 500 school teachers in the last three years. The profile of trainers along with No. of trainees trained to be provided.
- 2.9. The bidder should have technically qualified software workforce of atleast 50 persons as on 30-06-2010 on its payroll, involved in content development.
- 2.10. The bidders must submit an undertaking that the client will have the user right within the territorial jurisdiction of Punjab, of the solution / product/ solution, so developed, within framework being offered under this TENDER.
- 2.11. Documentary proof of at least two years experience and competency to prepare Graphics and Animation based learning material for computers and other subjects be provided.

Note

- The PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society, if required, would visit/ make enquiries about the sites mentioned by the bidder under 'Relevant Experience' to verify the level of multimedia content development infrastructure, assess long term sustainability and other aspects related to the project.
- Bidder should not be under a declaration of ineligibility for corrupt and fraudulent, practices issued by Govt. of India/State Govts. A self-declaration certificate should be submitted as part of Pre-qualification bid.
- PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society reserves the right to accept or reject any or all responses without assigning any reason.

Only successful pre-qualifiers will be called for opening of technical bids.

SCOPE OF WORK

The scope of the work includes the following three components:

- (a) Develop Multimedia Educational Content for Computer Based Education in Science, Social Science, Mathematics and English for class 6 to 8 based on Punjab State Syllabus, using Punjabi language.
- (b) Provide training on the Multimedia Educational Content to 50 Master Trainers to enable them to install, operate and train the other teachers to use the multimedia content in the schools hardware. In case of any problem/obstruction at any stage, the bidder shall provide full support.

3.1 Multimedia Based Educational Content.

The bidder shall develop the multimedia educational content for the hard spots in the subjects of Science, Social Science, mathematics and English for classes 6 to 8 based on syllabus of State of Punjab for Government schools in Punjabi language. The related activities include:-

1. Understanding the requirement for developing and installation of customized CAL product. Suggestive list of hard-spots is enclosed as per Annexure '11' with the tender document.
2. Conceptualizing the multimedia content based on story lines, animated cartoons, interactive games, live coverage, music and riddles.
3. Planning in detail, the content development during Pre-production, Production and Post- production stages.
4. Development of content with full multimedia quality control.
5. CAL soft content shall be provided by the bidder on 21 hard disks, transferable to the school computers.
6. Supply and Installation Manual, Administration Manual and User Reference/Training Manual.
7. Provide post installation/implementation support including bugs removal. Maintain help-desk and handholding for the system.
8. In case additional requirement arises for developing multimedia content for subject(s) other than the above given list, the bidder will be asked to undertake the same on pro-rata cost basis.

The installation of the product will require extensive interaction of the bidder with School(s), their staff and the Turnkey Hardware & Service Providers (THSPs) at various stages of the project.

Important Note

- The bidder is required to arrange a copy of Subject Textbooks prescribed by the Punjab School Education Board (PSEB), Mohali under own arrangements and consult these books before quoting for multi-media Content.
- Topics/ hard-spots in the said subjects for developing Multimedia based educational content, will be identified/ decided by the subject experts of the Bidder in consultation the experts committee (a single nodal agency for consultation, evaluation and approval of content) nominated by the PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society, Punjab

3.1.1 Required features of the CAL Software keeping in mind the aptitude and ability of the children (including questions and answers) It should also have interactive virtual labs especially in math and science. :-

- **User Interface:** The proposed system components should be simple comprehensive, learner centric and easy to use.
- **GUI:** The proposed solution should be based on graphical interpretation and windows architecture and the platform should be compatible with open source and windows (BOSS Linux & windows XP). The Edu-boss open source software operating system has been developed by C-Dac and will be installed in the system of the schools.
- **Local language:** For better understanding and interpretation, the Punjabi language in the multimedia content will be written and spoken with utmost correctness. The Punjabi experts may be engaged for the purpose.
- **Cultural Context of Multimedia Content:** It should predominantly reflect life ethos and culture of Punjab.

3.1.2 Implementation

The project will be completed and implemented on or before **28th Feb 2011**.

3.1.3 Period of Support

The bidder will be responsible for the installation /implementation of the CAL software and its subsequent maintenance and handholding for a period of 3 years from the date of acceptance of the Project. It shall be renewable on mutual consent.

The period of contract shall commence from the date of execution of the agreement.

3.1.4 Instructions

- a) Concepts should be explained through good and effective graphics, and animations based on imaginative analogies and examples locally available, commonly noticed by the children in real life. Instruction manuals must be supplied along with developed software.
 - (i) Time duration of every topic should ideally be 22 to 30 minutes.
 - (ii) The animation in every topic should minimum be of 3-5 minutes.
 - (iii) Animation should be a mixture of 2D/3D. The minimum time frame for 3D animations should be 30 second.
 - (iv) The quality of voice over should be good, clear and audible.
 - (v) Any topic having more than one character should have different voices for different characters.
 - (vi) Animation to be full screen display.
 - (vii) Loop will be counted for single time only.
 - (viii) DVD resolution 720X756.
 - (ix) 25 frames per second.
 - (x) Interactive mode for the teacher.
 - (xi) The proposed solution should be based on graphical user interface and compatible both with windows as the open source software such as Linux and Eduboss (developed by CDAC and loaded on the computers of schools)
- b) Subject teachers/experts committee nominated by the Project Director cum DGSE, Punjab Edusat Society shall review and monitor the content developed by the bidder in each subject. The final approval to the content shall be given by PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society.
- c) The Multimedia based Education Content is presently being developed for Class 6 to 8 for four subjects. If the syllabus gets revised by the Govt. of Punjab, the bidder will have to update the content without any extra cost if the changes are minor. However, the major changes will be paid extra pro-rata.
- d) Quality Assurance benchmarks and processes will be deployed as per best prevalent practices in the country.
- e) The bidder should ensure proper installation of the Educational Content in the Computer system at all schools and their proper functioning; the respective District Education Officers and the Head of the school of the concerned school will certify the successful installation. The installation of educational software shall be done at the risk and cost of the bidder.

The configurations of the PC system installed at the schools are as under:

Computer System

CPU Intel processor 1.6 Ghz / 1 GB RAM/ 160 GB SATA-II HDD/ 533 mhz FSB/ DVD combo drive/ 2 Nos USB/ 10/100/1000 LAN + TV Tuner card with remote Wireless Keyboard and Optical Mouse, Windows XP professional preloaded with license, MS office 2007 professional preloaded with license

Projector:-

2000 Lumens (DLP) or higher with remote control,
Resolution: True XGA
Contrast Ratio: 2000:1

- f) If any manufacturing or other technical defects are found in the Educational Content within one year from the time of installation, the same will have to be rectified free of cost by the bidder.
- g) The content developed will be the property of Punjab Edusat Society and it can be used by Punjab Edusat Society in any Govt. school, Govt. aided school as well as through Edusat programme.

3.2 Completeness of tender offer

The Bidder is expected to examine all instructions, forms, terms, conditions and deliverables in the Tender Documents. Failure to furnish all information required by the tender documents or submission of a tender offer not substantially responsive in every respect to the tender documents will be at the Bidder 's risk and may result in rejection of its tender offer. The tender offer is liable to be rejected outright without any intimation to the Bidder if complete information as called for in the tender document is not given therein, or if particulars asked for in the Forms / Performa in the tender are not fully furnished.

3.3 Training of Subject Teachers

The bidder will train 50 Nos master trainers to enable them to provide further training to the teachers at the site to be decided by the client. The training shall be 4 days duration. The bidder will also supply a soft copy of the reference manual for each subject. The reference manual should contain detailed documentation of the educational content and its integration in the lesson plans. This soft copy will be uploaded on the website of the society for teachers help.

3.4 Operational Scope of the Contract:

- a) The Client will appoint a **Technical Advisory Panel**, which will oversee production, supply and installation of the Educational Content under this contract. The Bidder will have to work under close technical supervision and guidance of the Technical Advisory Panel appointed by the PES. The decision of the Technical Advisory Panel with respect to the adherence to the technical parameters and implementation schedule given of the bidder; and on the quality standards of the product developed and their applicability at the target schools will be final.
- b) The **Technical Advisory Panel** appointed by the PES will have full powers to visit the premises of the bidder at any stage of development of software.

- c) The Bidder shall associate minimum one Subject Expert for each of the subjects nominated by PES during every stage of development of the Educational Content till the final approval by the Technical Advisory Panel is obtained.
- d) The bidder shall use only licensed versions of the system/Application software and shall be held liable for any consequent action arising out of patent/intellectual property right violations and the PES shall not be responsible for any liabilities or damages arising thereof.
- e) The development work for the Multimedia Based Educational Content should be undertaken in the premises of the successful Bidder. **The development work should ideally be carried out within Punjab but this is not mandatory. In case, the development and production of the Educational Content is carried out from a place outside of the State of Punjab, the Bidder will be required to establish a Project Coordination Unit at Chandigarh vested with adequate decision-making authority w.r.t. day-to-day coordination with the Technical Advisory Panel of the PES. Any advice of the Technical Advisory Panel will have to be responded within a period of 3 (three) working days.**
- f) The User's Rights of developed Multimedia Based Educational Content will vest with the PES as far as their use within the State of Punjab is concerned. PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall have all rights on Software, Source Code and related documentation for its unlimited, unrestricted use within the State of Punjab at unlimited number of locations, machines, computers, gadgets etc. in Govt. schools, Govt. aided schools and through Edusat programme. However, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall not allow its use to any other State Government for commercial or non-commercial purposes.

INSTRUCTION TO BIDDERS

4.1. General information

4.1.1. There are THREE parts of Tender Document namely: (two sets in each part– Original bid and First Copy) :-

- **First part:** “Selection of Solution Provider for Computer Aided Learning (CAL) Software” - **Prequalification Bid.**
- **Second part:** “Selection of Solution Provider for Computer Aided Learning (CAL) Software” - **Technical Bid.**
- **Third part:** “Selection of Solution Provider for Computer Aided Learning (CAL) Software” - **Commercial Bid.**

4.1.2. The bidder is required to fill-out all the three parts of contract papers and place them in three separate sealed envelopes.

4.1.3. These envelopes should be placed in another sealed envelope and addressed to:

**Project Director-cum-DGSE,
Punjab Edusat Society
3rd Floor, SCO 104-106,
Sector 34-A, Chandigarh.**

4.1.4. Tenders (non-transferable) would be considered in the prescribed tender form/ document only, which can be obtained in printed form, from the O/o the tendering authority i.e. PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society, Chandigarh during office hours of working day, on payment of document fee (non-refundable) as per the schedule. Tender, duly filled and accompanying all supporting documents, should be submitted on or before the given time after which no tenders would be accepted.

4.1.5. The bidders who are downloading the tender document from the website: www.ssapunjab.org must furnish the given tender fee.

4.1.6. The bids will be opened at the given address in the presence of representatives of the participating bidders as per the bid opening schedule mentioned earlier. The Pre-qualification Bids of only those bidders who have submitted the Tender document fees and EMD will be opened.

The Technical Bids of only the bidders short-listed from the Pre-qualification bids will be opened. Similarly, The Commercial Bids of only the bidders short- listed from the

Technical bids will be opened. The bids will be opened on the scheduled date and time even in case of absence of the tenderers.

- 4.1.7. Tenders shall be submitted fully in accordance with the requirements of the General Terms and Conditions. Appropriate forms prescribed with this document shall be used for filling quotations. Incomplete, illegible and unsealed tenders will be rejected. Telegraphic tenders will not be accepted and no correspondence will be made in this regard.
- 4.1.8. All offers should be made in English. Conditional offers and offers qualified by vague and indefinite expressions such as "Subject to immediate acceptance", "Subject to prior sale" etc. will not be considered.
- 4.1.9. The price and conditions of the offer should be valid for at least a period of 180 days from the date of tender opening. Tender with validity of less than 180 days will be rejected.
- 4.1.10. Modification of specifications and extension of closing date of tender if required will be made by an Addendum. Copies of Addenda will be notified on the website. These shall be signed and shall form a part of the tender in full and/or part thereof.
- 4.1.11. The bidder shall carefully examine the tender documents and the technical specifications and fully acquaint themselves as to all the conditions and matters, which may in any way, affect the work or the cost thereof. Should a tenderer find discrepancies in or omissions from the specifications or other documents, or should there be any doubt as to their meaning, he should at once notify PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society and obtain clarification in writing. This however does not entitle the tenderer to ask for time beyond the due date fixed for receipt of tenders.
- 4.1.12. Submitted tender forms, with overwritten or erased or illegible rate or rates not shown in figures and words in English, will be liable for rejection. In case of discrepancy between words and figures noted against each item of the tender and between unit rates and the total amount, the decision of the tendering authority will be final and binding on the tenderers. Total of each item and grand total of whole tender should be clearly written. Corrections in the tender, if unavoidable, should be made by rewriting with dated initial of the tenderer after scoring out of the wrong entries. Clerical and arithmetical mistakes may result in rejection of the tender.
- 4.1.13. Request from the tenderer in respect of additions, alterations, modifications, corrections etc. of either terms and conditions or rates after opening of the tender will not be considered.
- 4.1.14. While tenders are under consideration, tenderers and their representatives or other interested parties, are advised to refrain from contacting by any means tenderers' personnel or representatives, on matters relating to the tenders under study.

PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society if necessary will obtain clarification on tenders by requesting such information from any or all the tenderers either in writing or through personal contact as may be necessary. The tenderer will not be permitted to change the substance of his offer after the tenders have been received in PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society. Any attempt by any bidder to bring pressure of any kind, may disqualify the bidder for the present tender and the bidder may be liable to be debarred from bidding for PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society tenders in future for a period of three years.

4.1.15. PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society reserves all rights to cancel the tender without assigning any reason thereof.

4.2. **Cost of bidding**

4.2.1. The Bidder shall bear all costs associated with the preparation and submission of its bid and PROJECT DIRECTOR-CUM-DGSE, Punjab Edusat Society will in no case be responsible or liable for these costs, whether or not the Bid is finally accepted.

4.2.2. **Non-transferable Tender:** The Tender Document is not transferable. Only the party which has purchased this tender form shall be entitled to quote.

4.3. **Proposal validity**

4.3.1. Technical and Financial Proposals shall remain valid for a period of 180 days from the date specified for opening of Technical Bid. PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall reject the Proposal as being non-responsive if it is valid for a shorter period.

4.3.2. In exceptional circumstances, prior to expiry of the original Proposal validity period, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society may request that the Bidders extend the period of validity for a specified additional period. The request and the responses thereto shall be made in writing to or by facsimile on the listed contact information of the Bidders. In such cases, the Bidders shall not be required or permitted to modify the Proposal, but shall be required to extend the validity of the Proposal for the extension period.

4.4. **EMD**

4.4.1. The bidder shall furnish, as part of its general bid, an EMD of amount Rs. 5,00,000.00 (Rupees Five Lac only). The EMD is required to protect PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society against the risk of bidder's conduct, which would warrant the forfeiture of EMD, pursuant to clause 4.12

4.4.2. The EMD shall be in the form of Demand Draft from any Scheduled Bank in favour of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society, payable at Chandigarh and will not be liable for any interest.

4.4.3. Any bid, not containing the EMD will be rejected as non-responsive. Unsuccessful bidder's EMD will be discharged / returned as promptly as possible, but not later than 30 days after the expiration of the period of bid validity.

4.4.4. Any modification of the Proposal documents which may become necessary as a result of the Pre-Bid meeting shall be made by the PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society exclusively through the issue of an Addendum on the web site.

4.5. **Bid Opening**

Bids can be submitted up to **30th Sep 2010** upto **2:00PM** and it will be opened on **30th Sep 2010** at **2:30PM**. Hours in the presence of the representatives of the bidders who wish to attend the opening of the bids. Technically qualified bids will be taken up for further processing. Financial Bids of technically qualified bidders will be opened in the presence of the bidders / representatives on a separate date and time which will be notified separately.

No discussion / interaction will be held with the bidders whose bids have been rejected / disqualified.

PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society reserves the right to accept or reject in part or full any or all the offers without assigning any reasons whatsoever.

4.5.1. **The TENDER Evaluation Committee(s)**, shall evaluate the Prequalification Bids, Technical Bids and Presentations and Commercial bids. The decisions of the Evaluation Committee(s) in the evaluation of the Commercial bids shall be final. No correspondence will be entertained outside the process of negotiation / discussion with the Committee(s).

4.5.2. At the date, time and location of the bid opening as specified in the TENDER, the Evaluation Committee(s) shall open the Proposals, in the presence of Bidders' designated representatives who choose to attend. The Bidders' representatives who are present shall sign a register evidencing their attendance. The Bidders' names, and any such other details as the Evaluation Committee(s) may consider appropriate, will be announced by the Evaluation Committee(s) at the opening.

4.5.3. The Evaluation Committee(s) reserves the right at any time to postpone or cancel a scheduled bid opening. The bids will be opened at the address specified in TENDER.

4.5.4. The bidders qualified in Pre-qualification Bids would only be called for opening of Technical Bids and for Technical Presentation.

4.5.5. After evaluation of technical bids, the commercial bids of only those Bidders who obtain atleast 70% marks in technical evaluation, will be opened. The date and time of opening of the financial bids will be intimated after technical evaluation is completed. The financial bids would be opened in the presence of the Bidders' representatives who choose to be present at that time.

4.6. Source Code and User's rights

The User's Rights of all applications developed for CAL software shall be transferred to PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society. PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall have all rights on Software, Source Code and related documentation for its unlimited, unrestricted use within the State of Punjab at unlimited number of locations, machines, computers, gadgets etc.. However, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall not allow its use to any other State Government for commercial or non-commercial purposes.

4.7. Language of bid & Correspondence

The Bid will be prepared by the Bidder in English language only. All the documents relating to the Bid (including brochures) supplied by the Bidder should also be in English, and the correspondence between the Bidder & PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society will be in English language only. The correspondence by Fax / E-mail must be subsequently confirmed by a duly signed formal copy.

4.8. Bid currencies

Prices shall be quoted in INDIAN RUPEES, inclusive of all prevailing taxes.

4.9. Evaluation & selection criteria

The Evaluation Committee will carry out a detailed evaluation of the Proposals in order to determine whether the technical aspects are in accordance with the requirements set forth in the TENDER Document. In order to reach such a determination, the Evaluation Committee will examine and compare the technical aspects and thoroughness of the proposals on the basis of information provided by the bidder, taking into account the following factors:-

- a. Overall completeness and compliance with the requirement
- b. Proposed work-plan and methodology shall demonstrate that the bidder will achieve the performance standards with in the time frame described in TENDER documents.

- c. Any other relevant factors, listed in TENDER document, or which the PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society deems necessary or prudent to take into consideration.

Presentation of Sample Multimedia Educational Content

All bidders to meet pre qualification criteria will be required to develop and submit one episode on the topic to be given by the evaluation committee within 10 days alongwith script and the procedure adopted. The eligibility to going for opening of financial bid will depend upon the evaluation of Quality of the said episode.

4.10. Disqualification or Rejection of Tender

The tender is liable to be rejected or the bidder be disqualified at any stage on account of the following.

- 4.10.1. If the bid or its submission is not in conformity with the instruction mentioned herein.
- 4.10.2. If the bid is not accompanied by the requisite TENDER document cost
- 4.10.3. If the bid is not accompanied by the requisite EMD.
- 4.10.4. If it is not signed with seal, on all the pages of the bid document.
- 4.10.5. If it is received after the expiry of due date and time.
- 4.10.6. If it is incomplete and required documents are not furnished.
- 4.10.7. If it is misleading or false statements/ representations are made as part of pre-qualification requirements.
- 4.10.8. If found to have a record of poor performance such as having abandoned work, having been black-listed, having inordinately delayed completion and having faced Commercial failures etc.

4.11. Forfeiture of EMD (bid security)

EMD submitted by the bidder may be forfeited under the following conditions:

- If the bid or its submission is not in conformity with the instruction mentioned herein.
- If the bidder withdraws the tender before the expiry of the validity period.
- If the bidder violates any of the provisions of the terms and conditions of the tender.
- In the case of a successful bidder fails to
 - (a) accept award of work,

(b) sign the Contract Agreement with PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society, after acceptance of communication on placement of award,

(c) furnish performance security, or the bidder violates any of such important conditions of this tender document or indulges in any such activities as would jeopardize the interest of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society in timely finalization of this tender. The decision of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society regarding forfeiture of bid security shall

be final and shall not be called upon question under any circumstances. A default in such a case may involve black-listing of the bidder by PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society.

4.12. Compensation for termination of contract

If the bidder fails to carry out the award / work order in terms of this document within the stipulated period or any extension thereof, as may be allowed by PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society, without any valid reasons acceptable to it, may terminate the contract after giving one month notice, and the decision of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society in the matter shall be final and binding on the bidder. Upon termination of the contract, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall be at liberty to get the work done at the risk and cost of the bidder through any other agency, and to recover from the bidder compensation or damages.

4.13. Liquidated damages

In the event of delay in execution of work, specified in this Contract / furnishing of deliverables, the bidder shall be liable to a penalty @ 2% of the value of work order for every week of delay up to a maximum of 10%, after which PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society shall be at liberty to cancel the award. For the purpose of this clause, part of a week shall be considered to be a full week.

4.14. Payment terms

The 50% payment will be made on delivery of episodes on 21 hard discs and the balance payment shall be made on successful installation and commissioning of the episodes in the school hardware.

AWARD OF WORK

4.15. PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society's right to accept or reject any or all bids

Notwithstanding anything else contained to contrary in this Tender Document, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society reserves the right to accept or reject any

Bid or to annul the bidding process fully or partially, or modifying the same and to reject all Bids at any time prior to the award of work, without incurring any liabilities in this regard.

Notwithstanding anything else contained to contrary in this Tender Document, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society reserves the right to distribute the work to more than one bidder on rates of L1 bidder.

4.16. Notification of award

4.16.1. Prior to the expiry of the period of Bid validity, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society will notify the successful Bidder in writing by speed post or Fax or email that its Bid has been accepted.

4.16.2. The liability of the bidder to perform the services will commence from the date of notification of Award. The Completion Period shall be counted from the date of 'Notification of Award of Work'.

4.17. Signing of Contract

4.17.1. At the time as the Client notifies the successful bidder that its bid has been accepted, the Indenting Officer will send the bidder the Contract Form, incorporating all agreement between the parties.

4.17.2. Within 10 (Ten) days of receipt of the Contract Form, the successful Bidder shall sign and date the Contract and return it to the Indenting Officer. Any incidental expenses of execution of agreement shall be borne by the successful Bidder(s).

4.17.3. A Service Level Agreement (SLA) will be signed with the bidder at the time of awarding the contract for providing post implementation support and services for the application software.

4.18. Corrupt or fraudulent practices

PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society requires that the bidders under this tender observe the highest standards of ethics during the bidding and execution of the contract. In pursuance of this policy, the PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society defines the terms set forth as follows:-

4.18.1. "Corrupt Practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of the public official in the procurement process or in contract execution; and

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

- 4.18.3. The PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- 4.18.4. The PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society will declare a Bidder ineligible, either indefinitely or for a stated period of time, to be awarded a contract if at any time it is determined that the Bidder has engaged in corrupt and fraudulent practices in competing for or in execution of the contract.

4.19. Performance security

- 4.19.1. Within 7 (Seven) days of Notification of "Award of the Work" the company shall furnish Performance Security to PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society @ 5% of the total accepted order value of quoted bid by way of irrevocable and unconditional Bank Guarantee in favor of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society for a period to be specified in the award of work.
- 4.19.2. This Bank Guarantee should be of sufficient duration to cover the risk of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society. The proceeds of the Performance Security shall be payable to PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society as compensation for any loss resulting from the Company's failure to fulfill its obligations under the terms and conditions of the Work Order.

4.20. Fall Clause

- (i) The prices charged for the stores supplied under contract by the bidder shall in no way exceed the lowest price at which the bidder sells the Goods/ Services or offer to sell Goods/ Services of identical description on similar terms and conditions to any person/Organization including the purchaser or any department of the Central Govt. or any Deptt. of the State Govt. or any statutory undertaking of the Central or State Govt. as the case may be during the period till performance of the supply order placed during the currency of the contract is completed.
- (ii) If at any time during the said period the bidder reduces the rate of sale price, sells or offers to sell such Goods/ Services to any person/Organization including the purchaser or any Deptt. of Central Govt. or any Deptt. of State Govt. or any statutory undertaking of the central or State Govt. as the case may be at price lower than the price chargeable under the contract shall forthwith notify such reduction sale or offer to sell to the Society and the price payable under the contract for the Goods/ Services supplied after the date of coming into force of such reduction or shall offer to sell shall stand correspondingly reduced.
- (iii) The bidder shall furnish the following certificate alongwith each bill or payment for supplies made against the contract. The supplier has to certify that there has been no reduction in sale price of the Goods/ Services of description identical to the Goods/ Services supplied to the Govt. under the contract herein and such Goods/ Services have not been offered and sold by him on similar terms and conditions to any person/Organization

including the purchaser of any Deptt. of the Central Govt. or any Deptt. of the State Govt. or any statutory undertaking of the Central or State Govt. as the case may be upto the date of the bill/date of completion of supplies against the supply order placed during the currency of the contract at a price lower than the price charged to the Society under the contract.

4.21.Termination for default

PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society may without prejudice to any other remedy for breach up of terms and conditions (including forfeiture of Performance Security) by written notice of default sent to the company, terminate the work / task in whole or in part, after sending a notice to the Company in this regard:

- a) If the Company fails to deliver or complete the job assigned in the terms and conditions within the time period (s) specified in the Tender Document.
- b) If the Company fails to perform any other obligations under the terms and conditions.

4.22.Progress of the project

Progress of the Project may be intimated in writing to PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society on monthly basis.

4.23.Confidentiality

Any information pertaining to the Govt. of Punjab or any other agency involved in the project, matters concerning Govt. of Punjab that comes to the knowledge of the vendor in connection with this contract, will be deemed to be confidential and the bidder will be fully responsible, for the same being kept confidential and held in trust, as also for all consequences of its concerned personnel failing to observe the same. The vender shall ensure due secrecy of information and data not intended for public distribution. The affidavit to this effect should be submitted along with security deposit.

4.24.Force Majeure

a) This clause shall mean and be limited to the following in the execution of the contract placed by PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society.

- War / hostilities
- Riot or civil commotion
- Earth Quake, Flood, Tempest, Lightning or other natural physical disaster
- Restrictions imposed by the Government or other statutory bodies, which is beyond the control of the consultant, which prevent or delay the execution of the order by the consultant

b) The Solution Provider shall advise PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society in writing the beginning and the end of the above clauses of delay, within 7 days of

occurrence and cessation of the force majeure conditions. In the event of a delay lasting for more than one month, if arising out of clauses of force majeure, PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society reserves the right to cancel the contract without any obligation to compensate the consultant in any manner for whatsoever reason, subject to the provision of clause mentioned.

4.25.Arbitration

- a) All disputes, differences, claims and demands arising under the contract shall be referred to the Administrative Secretary, Govt. of Punjab, Department of School Education for final decision and the same shall be binding on all parties.
- b) Any other terms and conditions mutually agreed prior to finalization of the order / agreement shall be binding on the consultant.
- c) PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society and the selected Solution Provider shall make every effort to resolve amicably through direct negotiation, any disagreement or dispute arising between them under or in connection with the work order. If any dispute arises between parties on aspects not covered by this agreement, or the construction or operation thereof, or the rights, duties or liabilities under these except as to any matter the decision of which is specially provided for by the general conditions, such disputes shall be referred to two arbitrators, one to be appointed by each party and the said arbitrators shall appoint an umpire in writing before entering into the reference and the award of the arbitration or umpire, as the case may be shall be final and binding on both the parties. The arbitrators or the umpire as the case may be, with the consent of parties, may modify the time frame for making and publishing the award. Such arbitration shall be governed in all respects by the provision of the Indian Arbitration and Conciliation Act, 1996 or later and the rules there under and any statutory modification or reenactment thereof the arbitration proceeding shall be held in Chandigarh.

4.26.Legal jurisdiction

All legal disputes are subject to the jurisdiction of Chandigarh courts only.

Checklist

PRE-QUALIFICATION BID Compliance statement

Sr. No.	Eligibility criteria	Yes/ No	Page
1)	Acceptance of Terms and conditions of TENDER (Please refer Annexure-1)		
2)	Bidder Profile (Please refer Annexure-2)		
3)	Authorization letter (Please refer Annexure-3)		
4)	Self-certification (Please refer Annexure-4)		
5)	The Bidder should have submitted Rs. 1000/- (Rupees One thousand) only towards the cost of the Tender		
6)	The Bidder should have furnished the Earnest Money Deposit (EMD) of Rs. 5,00,000 (Rupees Five Lac) only.		
7)	The Bidder should be a national / International level IT organization/company in operation for the last FIVE years as on 31 st March 2010 in India.		
8)	No Consortium bidding is allowed for applications development of PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society.		
9)	The bidder must possess ISO 9001:2000 or SEI-CMM Level – 4 or above Certification or more, on the date of publication of this TENDER.		
10)	The bidder must have developed at least 100 CAL episodes and should supply list of such episodes.		
11)	The bidder have to submit copies of balance sheets/profit & loss accounts/ annual reports of last three financial years (upto 31-Mar-2010) (2007-08), (2008-09) and (2009-10). (Please refer Annexure-5)		
12)	The bidder must have well-established and proven methodology of conducting teacher training and should have trained at least 500 school teachers in the last two years.		
13)	The Bidder should have technically qualified software workforce of at least 50 as on 30-06-2010 on its payroll.		
14)	The bidders must submit an undertaking about client's claim for having the User's rights Source Code of the solution / product/ solution, so developed, within framework being offered under this TENDER.		
15)	The profile of subject trainers along with No. of trainees trained to be provided.		

Technical bid

		Yes/ No
1.	CVs of Manpower persons (Please refer Annexure-7)	
2.	Proposed Methodology (Please refer Annexure-8)	
3.	Implementation schedule	

Note: The Bidder shall be required to study the complete requirements of the PROJECT DIRECTOR CUM DGSE, Punjab Edusat Society and prepare the live prototype with full functionalities for few hard-spots under a particular topic before the Committee.

Proforma and Annexures

ANNEXURE-1

ACCEPTANCE OF TERMS & CONDITIONS CONTAINED IN THE RFP DOCUMENTS

To,

Project Director cum DGSE,
Punjab Edusat Society,
SCO 104-106, Sector 34-A, Chandigarh.

Sir,

I have carefully gone through the Terms & Conditions contained in the RFP Document regarding Appointment of Software Solution Provider for development & Implementation of Computer Aided Learning (CAL) project in Punjab Upper Primary Schools under Punjab Edusat Society.

I declare that all the provisions of this RFP/Tender Document are acceptable to my company. I further certify that I am an authorised signatory of my company and am, therefore, competent to make this declaration.

Signature of witness
Date:
Place:

Signature of the Tenderer
Date:
Place:

Company Seal

DETAILS OF THE ORGANISATION**a) Name of the Organisation:****b) Registered Address:****c) Year of Establishment:****d) Details of Registration /
Incorporation****e) Details of the Technical Specialist employed with the Organisation:**

Sl. No.	Specialty / Skill-set	No. of People	Average length of service with the Organisation

f) Content Development Platform Used:

Hardware Platform	Software Platform

g) List of Project Handled:

- 1.
- 2.
- 3.
- 4.

PLACE :**DATE : SIGNATURE OF AUTHORISED PERSON WITH SEAL**

REPRESENTATIVE AUTHORIZATION LETTER

Date : _____

Ref : _____

To,
Project Director cum DGSE,
Punjab Edusat Society,
Sco. 104-106, Sector 34-A, Chandigarh.

Ms. /Mr. _____ is hereby authorised to sign relevant documents on behalf of the company in dealing with invitation reference No. _____, Dt: _____. S/He is also authorised to attend meetings & submit technical & commercial information as may be required by you in the course of processing above said application.

Thanking you,

Authorised Signatory

Representative Signature

Signature attested

Company Seal

ANNEXURE-4

SELF DECLARATION

Date : _____

Ref : _____

To,

Project Director cum DGSE,
Punjab Edusat Society
Sco. 104-106, Sector 34-A,
Chandigarh.

In response to the invitation No. _____,

Dt:_____. Of Ref. Ms. _____/Mr. _____, as a

_____, I / We hereby declare that our company

_____is having unblemished past record and was

not declare ineligible for corrupt & fraudulent practices either indefinitely or for a

particular period of time.

Signature of witness

Date:

Place:

Signature of the Tenderer

Date:

Place:

Company Seal

DECLARATION OF COMMERCIAL & ADMINISTRATIVE DETAILS**Company Name & Address**

Name :
Address :
City : **District** :
State : **Pin** :
Telephone : **Cell** :
Fax : **E-mail** :

SL#	COMMERCIAL YEAR	TURN OVER	PROFIT BEFORE TAXES (PBT)	PROFIT AFTER TAXES (PAT)
01	FY 2007-2008			
02	FY 2008-2009			
03	FY 2009-2010			
04	Average Turn over for the last three year _____			

Copies of Audited Balance sheets for the above mentioned financial years are attached.

Signature of witness
 Date:
 Place:

Signature of the Tenderer
 Date:
 Place:

Company Seal

CERTIFICATE FOR SATISFACTORY WORK FROM CLIENTS
(to be submitted in the letterhead of client)

This is to certify that M/s _____ has
undertaken satisfactory work of software development/implementation of related to

_____ valued

Rs. _____

located at _____ on our behalf.

It is further certified that M/s _____ has
completed the entire job successfully within the stipulated time of
_____.

Date: _____

Signature :

Place: _____

Name
: _____

Designation :

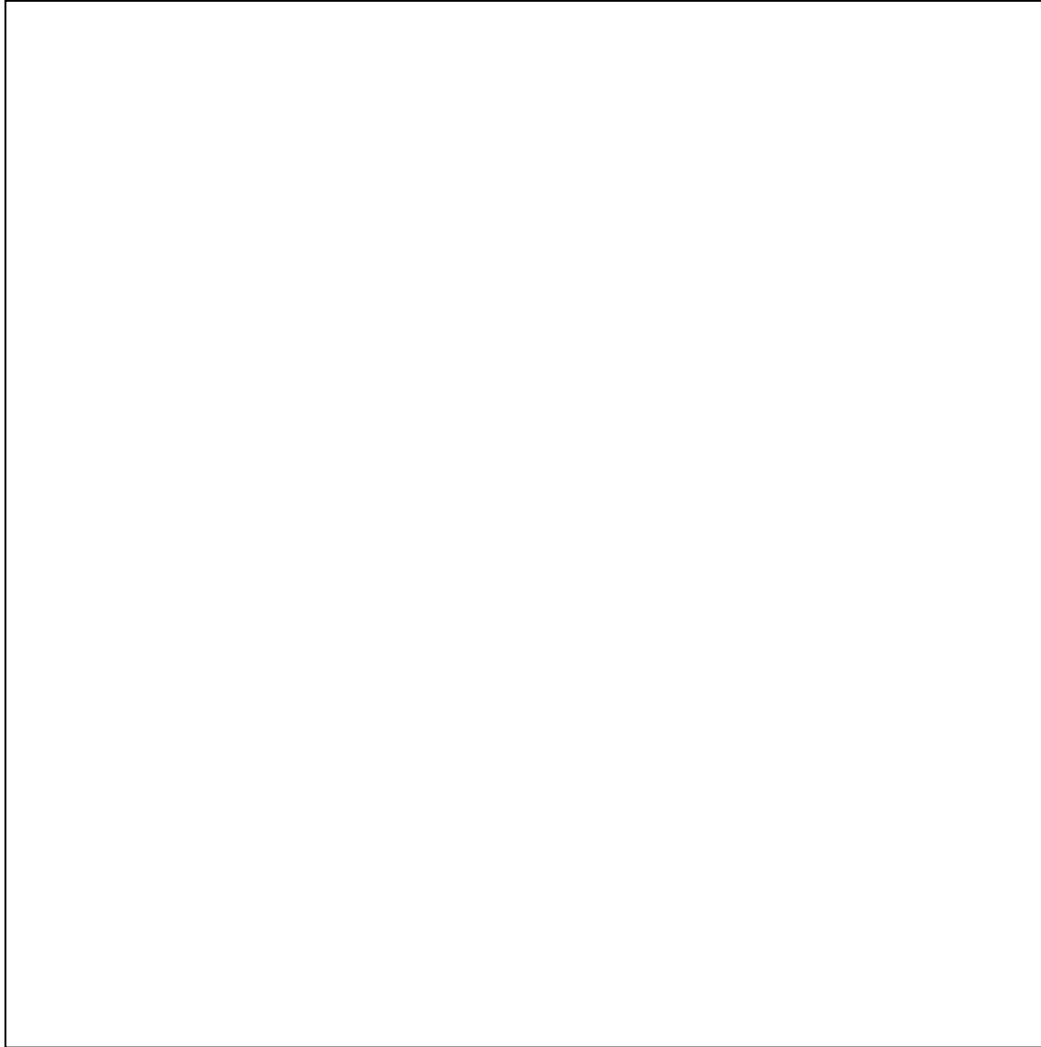
Company Seal

Note:- Initially the copies of the work orders and completion certificates of clients could be submitted in support. However the certificates in the above given format will be submitted within 4 weeks of placing the order.

FORMAT OF CV FOR PROPOSED TECHNICAL STAFF OF BIDDER

Sr. No	Name	Qualifications	Role	Responsibilities
---------------	-------------	-----------------------	-------------	-------------------------

PROPOSED METHODOLOGY & TIME LINE



- Attach extra sheet(s), if required.

Signature of witness
Date:
Place:

Signature of the Tenderer
Date:
Place:

Company Seal

PRICE SCHEDULE

We/ M/s _____ offer the following price

Sr. No.	Item Description	Subject	Unit Rate (In Rs.)	Taxes if any	Total per unit	Amount in words
1	Development, supply, installation, implementation and support for Multimedia content for 3 years with minimum 3-5 minutes multimedia animation as per requirement of topics as specified in the tender inclusive of cost of 50 Master Trainers.	Math				
		English				
		Science				
		Social Science				

Note (*) :

- (i) The number of hard topics on which the episodes are to be prepared has been given in the Annexure '11'.

Signature of witness

Tenderer

Name:

Date:

Place:

Stamp:

Signature of the

Name:

Date:

Place:

Stamp:

PERFORMANCE SECURITY FORM

To

Sir/Madam,

WHEREAS..... (Name of the Bidder) hereinafter called "the Bidder" has undertaken, in pursuance of Contract No..... dated.....2009 to (a) produce, supply Multimedia Based Educational Content (b) Provide manpower at respective locations (c) provide training to Master Trainers, hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said Contract that the Bidder shall furnish you with a Bank Guarantee by a Nationalised Bank for the sum specified therein as security for compliance with the Bidders performance obligations in accordance with the Bidder.

AND WHEREAS we have agreed to give the Bidder a Guarantee:

THEREFORE WE hereby affirm that we are Guarantor and responsible to you, on behalf of the Bidder, up to a total of (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Bidder to be default under the Contract and without cavil or argument, any sum or sums within the limit of..... (Amount of Guarantee) as aforesaid, without your needing to prove or show grounds or reasons for your demand for the sum specified therein.

This guarantee is valid until the..... day of.....2009.

Signature and Seal of Guarantors

.....

Date.....

Address.....

.....

Development of Multimedia Educational Content for Class 6th to 8th for the Subject of Maths, English, Science and Social Science for Upper Primary Schools

**List of Hard- Spots in Subjects. (Classwise)
Annexure-11**

Class 6	Subject: Science	
Chapter No	Chapter Name	Hard-Spots
1	The Earth	Atmosphere
1	The Earth	Earth And Solar System
1	The Earth	Essential Features Of Life
1	The Earth	Water Cycle
2	Measurement	Measurement of length
2	Measurement	Measurement of Volume
2	Measurement	Measurement of temperature
2	Earth	Structure of Earth
3	Force and motion	Speed and Acceleration
3	Force and motion	Force And Motion
3	Force and motion	Kinds of force
4	Work and energy	Different types of lever
4	Work and Energy	Work and Energy
4	Work and energy	
6	Separation Of Substances	Separation Of Substances
6	Separation Of Substances	Sublimation
6	Separation Of Substances	Separation Of Metal
6	Separation Of Substances	Centrifugation
7	Changes Around Us	Changes Around Us

7	Changes Around Us	Transformation of energy during the changes
8	Our Environment	Our Environment
8	Our Environment	Food Chain
8	Our Environment	Soil
8	Our Environment	Wind Mill
8	Our Environment	Structures of flower
9	Characteristic and classification of living organisms	Nutrition
9	Characteristic and classification of living organisms	Parts Of Flower
9	Characteristic and classification of living organisms	Detailed Classifications Of Plants And Animals
9	Characteristic and classification of living organisms	Classification Living Organisms
10	Structure and function of the living organisms	Human Digestive System
10	Structure and function of the living organisms	Blood circulation system
10	Structure and function of the living organisms	Parts Of A Leaf and Types
10	Structure and function of the living organisms	Root And Its Functions
10	Structure and function of the living organisms	Structure And Functions Of Living Organism
10	Structure and function of the living organisms	Parts Of Plant
10	Structure and function of the living organisms	Human Urine System
10	Structure and function of the living organisms	Respiration System
11	Health & health science	Health & health science
11	Health & health science	Eyes care
11	Health & health science	Balanced Diet
11	Health & health science	Purification of water
11	Health & health science	Health & Diseases

Class 6	Subject: Science	
Chapter No	Chapter Name	Hard-Spots
14	Natural Resources	Natural Resources
16	Management of waste	Septic Tank
16	Management of waste	Method Of Solid Waste Disposal
16	Management of waste	Management of Waste

Class 7	Subject: Science	
Chapter No	Chapter Name	Hard-Spots
1	Measurement	Measurement
1	Measurement	Area of an Irregular surface
2	Heat & temperature	Heat & temperature
2	Heat & temperature	Thermos flask
2	Heat & temperature	Modes of transfer of Heat
3	Light	Light and reflection
3	Light	Solar system
3	Light	Light Travels In Straight Line
3	Light	Pin Hole Camera
3	Light	Solar Eclipse
3	Light	Lightening Conductor
3	Light	Sonar
4	Sound	Reflection of sound
5	Stable Electric Charge	Stable Electric Current
5	Stable Electric Charge	Electric charges at rest
5	Stable Electric Charge	Different ways of charging of a body

5	Stable Electric Charge	How make the electricity
5	Stable Electric Charge	Structure of electricity conductor
6	Life on earth	Life on earth
7	Water-A wonderful liquid	Sources of water
7	Water-A wonderful liquid	Water System
8	Structure of matter	Elements and compound
8	Structure of matter	Symbol Of Elements & Chemical Formula
8	Structure of matter	Atomic Symbols
8	Structure of matter	States of Matter in Solids, Liquids & Gases
9	Acids, Bases and salts	Acids, Basis and salts
9	Acids, Bases and salts	Chemical Reactions
10	Organism in Living Things	Organization in Living Things
10	Organism in Living Things	Stometal Apparatus
12	Control and Coordination of Living Things	Control and Coordination of Living Things
13	Reproduction in Living Things	Reproduction in Living Things
13	Reproduction in Living Things	Human Digestive System
13	Reproduction in Living Things	Human Urine System
13	Reproduction In Plants And Animals	Reproduction In Plants And Animals
13	Reproduction In Plants And Animals	The generation of Seed
13	Reproduction In Plants And Animals	Germination of seed
Class 7	Subject: Science	
Chapter No	Chapter Name	Hard-Spots
14	Adaptation	Adaptation
14	Our Food	Food and its nutritive value
15	Health & Diseases	Health & Diseases
16	Solid waste and its management	Recycling Of Waste

16	Solid waste and its management	Harmful effects of solid waste
18	Air- A natural resource	Ozone layer and its importance
18	Air- A natural resource	Composition of Air
18	Air- A natural resource	Green House Effect
18	Air- A natural resource	Air
19	Effects of human activities on environment	Renewable & non-renewable source of energy
19	Effects of human activities on environment	Environment
19	Effects of human activities on environment	Soil erosion
19	Effects of human activities on environment	Energy crisis
19	Effects of human activities on environment	Effect Of human activities on environment

Class 8	Subject: Science	
Chapter No	Chapter Name	Hard-Spots
1	Light	Human eye
1	Light	Light
1	Light	Photographic camera
1	Light	Compound microscope
1	Light	Convex lens
1	Light	Refraction through prism
1	Light	Images Formed By Lenses
1	Light	Images Formed By Spherical Mirror
1	Light	Refractive Index
1	Light	Telescope
1	Light	Sphere And Hemisphere
1	Light	Simple Microscope
1	Light	Main focus and length

2	Magnetism and Electricity	Magnetism
2	Magnetism and Electricity	Electricity
2	Magnetism and Electricity	Electric Bell
2	Magnetism and Electricity	To Prepare The Voltaic Cell In Lab
2	Magnetism and Electricity	Dry Cell
2	Magnetism and Electricity	Denial Cell
3	The Universe	Artificial Satellite
3	The Universe	The Universe
3	The Universe	Planets
3	The Universe	Solar System
4	Sources of Energy	Nuclear Energy
4	Sources of Energy	Solar Energy
4	Sources of Energy	Petroleum
Class 8	Subject: Science	
Chapter No	Chapter Name	Hard-Spots
4	Sources of Energy	Green House Effect
5	Air	Air as a Mixture
5	Air	How To Prepare Oxygen
5	Air	Nitrogen cycle
5	Air	Oxygen Cycle
6	Change of Matter	Characteristics Of Chemical Reaction
6	Change of Matter	Types of Chemical Reactions
7	Structure of Atom	Chemical Bonding
7	Structure of Atom	Isotopes
7	Structure of Atom	Structure of Atoms
7	Structure of Atom	Molecular Mass

7	Structure of Atom	Physical And Chemical Changes
8	Metals and Non-Metals	Physical Properties Of Metals And Non Metals
8	Metals and Non-Metals	Periodic Table
8	Metals and Non-Metals	Chemical Properties of Metals & Non Metals
9	Carbon	Preparation of Co ₂ Gas
9	Carbon	Carbon Cycle
9	Carbon	Preparation Of Methane Gas
7	Carbon	Preparation of Gasses & Chemical Reactions
7	Carbon	Structure of Diamond and Graphite
10	Soil	Formation of Soil From Rocks
10	Soil	Soil Erosion
11	Life Under Microscope	Life Under Microscope
11	Life Under Microscope	Bacteria & Virus
11	Life Under Microscope	Diatoms
11	Life Under Microscope	Fungi And Its Types
12	Micro Organisms and Diseases.	Aids
12	Micro Organisms and Diseases.	Micro Organisms and Diseases.
12	Micro Organisms and Diseases.	Immunization
13	Food production and management-Basic practices	Dairy Farming
13	Food production and management-Basic practices	Agriculture
13	Food production and management-Basic practices	Management & Disposal of wastage

List of Hard- Spots in Subjects. (Classwise)

Class 6	Subject: Maths	
Chapter No	Chapter Name	Hard-Spots
4	Ratio, Proportion And Unitary Method	Ratio, Proportion And Unitary Method
5	Percentage & Its Use	Percentage & Its Use
5	Percentage & Its Use	Profit & Loss
5	Percentage & Its Use	Simple Interest
5	Percentage & Its Use	Compound Interest
7	Linear Equations In One Variable	Linear Equations In One Variable
8	Basic Geometrical Concepts	Basic Geometrical Concepts
9	Line Segment	Division (Construction) Of Line Segment
9	Line Segment	Measurement Of Line Segment
10	Angles	Angles
10	Angles	Linear Pair
10	Angles	Types Of Angles
10	Angles	Drawing Angel
11	Pairs of Lines and Transversal	Pairs of Lines and Transversal
12	Triangles	Triangles
12	Triangles	Types Of Triangle
13	Construction	Construction
14	Perimeter and Area	Perimeter

Class 7	Subject: Maths	
Chapter No	Chapter Name	Hard-Spots
5	Direct and Inverse Variation	Direct and Inverse Variation
5	Direct and Inverse Variation	Direct and Indirect conversion
6	Percentage and its Application	Percentage and its Application
7	Algebraic Numbers	Algebraic Factorization
7	Algebraic Numbers	Algebraic Numbers
Class 7	Subject: Maths	
Chapter No	Chapter Name	Hard-Spots
9	Equations	Solution Of Equation
10	More About Triangles	Measurement
10	More About Triangles	Pythagoras Theorem And Problems Related To Theorem.
10	More About Triangles	Geometry
10	More About Triangles	Making Triangles
11	Congruent Triangles	Congruent Triangles
11	Congruent Triangles	Equivalent Triangles
12	Quadrilateral	About Quadrilateral
12	Quadrilateral	Parallelogram
12	Quadrilateral	Diagonals of quadrilateral
13	Circle	Circle
13	Circle	Angle Inside Circle
14	Area of rectangular paths	Rectangle
14	Area of rectangular paths	Area Of Road Side
15	Area and Volume of Surface	Area and Volume of Surface
15	Area and Volume of Surface	Area & Volume Of Cube

Class 8	Subject: Maths	
Chapter No	Chapter Name	Hard-Spots
4	Profit And Loss	Profit And Loss
5	Discount	Discount
7	Algebraic Identities	Algebraic Identities
8	Polynomial and division of polynomials	Polynomial and division of polynomials
9	Linear Equations in one variables	Linear Equations
10	Parallel Lines	Parallel Lines
11	Quadrilaterals	Quadrilaterals
11	Quadrilaterals	Construction Of Quadrilaterals
12	Circle	Arc And Chord Of Circle
14	Area	Area Of Different Figures
15	Circumference & Area Of Circle	Circumference
16	Surface Area & Volume of Cylinder	Area, Cone& Cylinder
18	Sphere And Hemisphere	Sphere And Hemisphere

List of Hard- Spots in Subjects. (Classwise)

Class 6	Subject: English	
Chapter No	Chapter Name	Hard-Spots
1	The Golden Touch	Golden Touch
1	The Golden Touch	Difficult Vocabulary
1	The Golden Touch	Noun-Number,Gender
2	Brave Sunderlal	Brave Sunde lal
3	The Bengal Seller	The Bengal Seller
4	A story from Bapu's life	A story from Bapu's life
5	The Wooden Sticks	Autonyms and synonyms
6	My shadow	My shadow

7	Sajjan, The Robber	Sajjan (The Robber)
9	The Clever Brother	The Clever Brother
9	The Clever Brother	Use of Nouns
9	The Clever Brother	Verbs and adjectives in sentences
9	The Clever Brother	Use of Prepositions
10	From walking to flying	From walking to flying
11	The Kabuliwallah	The Kabuliwala
12	Games For Fun	Games For Fun
13	The gift	The gift
14	Panna - The Faithfull Nurse	Panna - The Faithfull Nurse
18	Sharvan Kumar	Sharvan Kumar
1 (Grammar)	Nouns: Noun-Gender	Gender
1 (Grammar)	Nouns: Noun-Number	Number
1,2 (Grammar)	Nouns, Pronouns	Noun And Pronoun
10 (Grammar)	The Sentence	Making Sentences
10(iii)	The Blind beggars	The Blind beggars
11 Grammar)	Punctuation	Punctuation
12(Grammar)	Occupation	Occupation
13(Grammar)	Young Ones	Young Ones
15(Grammar)	Synonyms & Antonyms	Synonyms & Antonyms
15(iv)	Poem- The clock	Poem- The clock
16(Grammar)	Homonyms	Homonyms
2 (Grammar)	Pronoun	Use Of This, It, That, These, Those
3 (Grammar)	Story Writing	Story- Fox and the grapes
3 (Grammar)	Story Writing	Story- Thirsty crow
3 (Grammar)	Adjectives	Adjectives

4 (Grammar)	Verbs	Verbs And Its Kinds
4(i)	Night	Poem- Night
5 (Grammar)	Adverbs	Adverbs
5,6 (Grammar)	Adverb & Tenses	Adverb & Tenses
7 (Grammar)	Prepositions	Prepositions
8 (Grammar)	Conjunctions	Concatenation Of Two Words
8 (Grammar)	Conjunctions	Conjunction
9 (Grammar)	Articles	Articles
Class 7	Subject: English	
Chapter No	Chapter Name	Hard-Spots
1	How the Camel got its hump	Conjunctions
1	How the Camel got its hump	Right Meanings
2	The selfish giant	The selfish giant
2	The selfish giant	Vocabulary
2	The selfish giant	Opposite Words
3	Deserts	New Vocabulary
3	Deserts	Opposites, Letter Writing
4	Reaching for the stars	Reaching for the stars
4	Reaching for the stars	Technical Vocabulary
5	Birbal hits back	Birbal hits back
5	Birbal hits back	Conjunctions
6	Kindness always pays	Kindness always pays
6	Kindness always pays	One word substitution
6	Kindness always pays	Homophones
6	Kindness always pays	Correct forms of verb

7	Let's meet them	Let's meet them
7	Let's meet them	Narration
8	A Clean Confession	A Clean Confession
8	A Clean Confession	Vocabulary
8	A Clean Confession	One word substitution
8	A Clean Confession	Synonymous
10	The child's return- I-II	The child's return-1
10	The child's return- I-II	Conjunctions
10	The child's return- I-II	That cause
10	The child's return- I-II	Punctuation
10	The child's return- I-II	Adverbs
11	A Letter from a son to his mother	Parts of speech
11	A Letter from a son to his mother	Synonyms
12	The Olympic Games	The Olympic Games
12	The Olympic Games	Olympic symbols
12	Poem I	Vocabulary
12	Poems II	Central Idea
12	Poem III	Comprehension
10(Grammar)	The Sentences	Simple Compound & Complex Sentences
13(Grammar)	Adverb	Adverb
14(Grammar)	Preposition	Preposition
15(Grammar)	conjunction	The conjunction
16(Grammar)	Tenses	Tenses
17(Grammar)	Direct & Indirect Speech	Direct & Indirect Speech
17(Grammar)	Direct And Indirect Speech	Narration
18(Grammar)	Use of articles	Determiners

2(Grammar)	Nouns: Number	Singular-Plural
4(Grammar)	Noun: countable & uncountable	Kinds of nouns
Class 7	Subject: English	
Chapter No	Chapter Name	Hard-Spots
5(Grammar)	Possessive case	Nouns: Possessive case
6(Grammar)	Verbs Main & Helping Verb	Verbs Main & Helping Verb
7(Grammar)	Kinds of verbs	Forms Of Verb
7(Grammar)	Kinds of verbs	Kinds of verbs
8(Grammar)	Agreement of the verb with its Subject	Agreement of the verb with its Subject
9(Grammar)	Active And Passive Voice	Active And Passive Voice
Poems 2	The Fox & Grapes (Story)	The Fox & Grapes (Story)
Poems 4	The master plan	The master plan

Class 8	Subject: English	
Chapter No	Chapter Name	Hard-Spots
1	The Monkey and the Crocodile	The Monkey and the Crocodile
1	The Monkey and the Crocodile	Narration is too lengthy
2	Abdul Hamid	Abdul Hamid
2	Abdul Hamid	Vocabulary is Very Difficult
2	Abdul Hamid	Dialogue Practices
2	Abdul Hamid	Creative Writing
3	Say No	Say No
4	How Daddy Decided What He Wanted To Be	How Daddy Decided What He Wanted To Be
4	How Daddy Decided What He Wanted To Be	Reading Comprehension is Very Difficult
5	Three Questions	Questions Are Too Lengthy
5	Three Questions	Opposites

5	Three Questions	Punctuation
6	Our National Symbols	Our National Symbols
7	A Robot Called Makito	A Robot Called Makito
8	Krishna's Childhood	Krishna's Childhood
9	The Punjab - A Glimpse	The Punjab - A Glimpse
9	The Punjab - A Glimpse	Prepositional Phrases
9	The Punjab - A Glimpse	Tenses
9	The Punjab - A Glimpse	Verb
9	The Punjab - A Glimpse	Noun- Number & Gender
10	Lucy Gray	Reading Poetry
10	Lucy Gray	Central Idea
12	Saint Ravidas	Saint Ravidas
13	Our Civilization1	Our Civilization
1 (Grammar)	Parts Of Speech	Parts Of Speech
1(Paragraph)	My Best Friend	Paragraph: My Best Friend, Diwali
1(Poetry)	True Growth	True Growth (Poem)
10(Grammar)	Determiners	Determiners
12(Grammar)	Prepositions	Prepositions
12(Paragraph)	A Street Quarrel	Paragraph-A Street Quarrel,
13(Grammar)	Change Of Narration	Change Of Narration
2 (Grammar)	Nouns	Nouns
Class 8	Subject: English	
Chapter No	Chapter Name	Hard-Spots
23(Paragraph)	A road Accident	A road Accident
3 (Grammar)	Pronoun	Pronoun
4 (Grammar)	Adjectives	Adjectives

5(Poetry)	Snakes Are Slithery	Snakes Are Slithery
6 (Grammar)	Tenses	Tenses
6(Poetry)	He that is Down Needs Fear No Fall	He that is Down Needs Fear No Fall
7(Grammar)	Active and passive voice	Voice
8(Grammar)	Adverb	Adverb
9 (Grammar)	Non Finite	Non Finite
9(Paragraph)	A Visit To A Hospital	A Visit To A Hospital
Class 6	Subject: S.St	
Chapter No	Chapter Name	Hard-Spots
1	Earth-The part of Solar System	Satellites
1	Earth-The part of Solar System	Planet system
2	Globe-The Model of Earth	Latitudes and Longitudes
2	Globe-The Model of Earth	Globe
4	Maps-How Helps Us	Working of magnetic compass
6	Our India- In The World	Map(India)
11	Vedic civilization	Vedic civilization
14	India 200 B.C to 300 A.D	South Indian culture
16	Harshvardhan Preiod(600 to 650 A.D)	Harshvardhan Period
17	Chaulakyas and pallavas	Chaulakyas and pallavas
20	Development of Villages and Local Govt.	Working of panchayat
10	Harrapa culture	the culture of Harrapa in Punjab
13	Moriya Time and sung time	
Class 7	Subject: S.St	
Chapter No	Chapter Name	Hard-Spots

4	Atmosphere and temperature	Atmosphere and temperature
4	Atmosephere and Temprature	Particles in atmosphere
7	Natural Vegetation & Wild Beast	Natural Vegetation & Wild Beast
11	New Kings and kingdoms	New Kings and kingdoms
11	New Kings and kingdoms	Mohammad gauri and gaznavi
14	Mugal Empire	Mugal Empire
18	Religious Development.	Religious Development.
23	State Govt.	State Govt.

Class 8	Subject: S.St	
Chapter No	Chapter Name	Hard-Spots
4	Our Agriculture	Crops and soil according to area
5	India- Land and Climate	Map of India
15	1857 Revolt	1857 Revolt
22	Struggle for India's Freedom:1919 to 1947	1942 Quit India Movement.