

UGANDA E-LEARNING INITIATIVE FOR EDUCATION INSTITUTIONS

Date: 23/05/2023 Ref: 004/RFP/CSTS/23

Attention

Dear Sir/Madam,

REF: REQUEST FOR PROPOSAL FOR THE SUPPLY AND INSTALLATION OF SOLAR SYSTEMS.

NOTICE:

Prospective proponents are expected to carefully examine this tender dossier and comply with all its instructions, forms, provisions and specifications. Failure to submit a proposal containing all the required information and documentation within the specified deadline will lead to the rejection of the proposal.

TITLE OF ASSIGNMENT

Supply and Installation of Solar Systems

BACKGROUND

Cyber School Technology Solutions (CSTS) is a global company offering online education systems, with experience designing and developing digital educational resources, portals and learning management systems. The one-stop-site for e-learning solutions, CSTS, works with experienced educators and technocrats across the globe in designing and developing these digital educational resources, portals and learning management systems. CSTS has worked for over 15 years in Uganda deploying its digitized version of the Uganda O-level curriculum in Sciences and Mathematics (Digital Science and Virtual Lab software) to over 1,000 secondary schools and educational institutions across Uganda.

In 2021, CSTS entered and partnered with Mastercard Foundation to implement a project called the *Uganda e-Learning Initiative for Educational Institutions*. The goal of the project is to improve access to quality and relevant education for 95,000 youth (50% women), in 20 Education Institutions (EIs), with 12,500 transitioning into meaningful and dignified work by 2026, with the anticipated impact on the education system of **having a responsive education**

and training system that prepares and transitions young people into meaningful and dignified work. To achieve this goal, the project will be implemented in a phased manner starting with 6 higher institutions of learning and after two years the successful components are scaled to 14 more Higher Institutions of learning in the next 3 years.

This is to be done by:

- i. Supporting Education Institutions (EI) to successfully implement eLearning, thus increasing their resilience against COVID-19 and future situations preventing in-class learning.
- ii. Addressing the skills mismatch between the young people graduating from EIs and employability by integrating work readiness and entrepreneurship skills into the technical skills curriculum.

This intervention will have two outcomes:

- 1. Increased access to market-responsive education and training systems through integration of work readiness and entrepreneurship skills.
- 2. Enhanced quality online education and skilling in Education Institutions (EIs).

The interventions to be implemented to achieve the above two outcomes are;

- 1. Development and adoption of work readiness and entrepreneurship skills
- 2. Deployment of Online Learning and Management System (LMS) platform for the 16/20 EIs that have expressed interest.
- 3. Training of instructors in digital pedagogy and instructional design, content development, and online acquisition
- 4. Increasing access to affordable internet and devices
- 5. Supporting EIs in the development, adaptation, and implementation of eLearning policies
- 6. Supporting the transitioning of youth into work through internships and work-study programs.

For successful implementation of these interventions especially 2 and 4 requires Education Institutions (EIs) to have reliable power supply. As such, Cyber School Technology Solutions through this call, is seeking for the services of a supplier to supply and install Solar Systems at designated CSTS sites.

OBJECTIVES

a)

CONTRACT FOR DELIVERABLES

The selected proponent will be requested to enter into negotiations for an agreement with CSTS for the provision of the Deliverables. The term of the agreement will be based on the timeframes outlined in the successful bid proposal.

NO GUARANTEE OF VOLUME OF WORK or EXCLUSIVITY OF CONTRACT

CSTS makes no guarantee of the value or volume of work to be assigned to the successful proponent. The Agreement to be negotiated with the selected proponent will not be an exclusive

contract for the provision of the described Deliverables. CSTS may contract with others for the same or similar Deliverables to those described in the RFP.

SCOPE, DELIVERABLES AND OUTPUT

The Supply and Installation of Solar System

Scope:

Provide a solar solution to power 100 Laptops with 15 Inch Display, 8GB of RAM 64 watts, 1 laser printer, 2 routers, and 10 LED Lights synchronously for day and night use.

Design and install an electric outlet (socket fitting) for the suggest computer room.

Deliverables:

10KW Capacity, LiFePo4, >2000 Cycles 80% DoD Full-fitted electrical sockets and light of the room

System Design;

The suggested PV system has a state-of-the-art parts and components for a small scale On Grid PV System. It consists of a strings PV generator with inverter units. The PV modules are connected in such a way, so that the power generated is in accordance to the desirable inverter operation point. All the cable connections will be fastened to the metal frame using tie wrap. This is based on a PV generator strings with an inverter unit.

Determine the Effect of Shadow;

The Contractor should evaluate the site in terms of shading that could be occurred on the module's surface, where a detailed simulation using Pvsyst software should be provided, as the outcomes of the simulation will be considered as a reference for Energy production Guaranty.

<u>Warranty</u>

a) Supplier is responsible for providing an Operation and Maintenance Bank warranty (5% of the value of the actual executed works) with a one year Free warranty (periodic operational & maintenance) inclusive of support visits plan, routine visits and the preventive maintenance visits with an online monitoring of the system's efficiency and productivity.

• PV solar panels: 10 years on materials and work manship and 25-year linear power output warranty.

• Inverters: 5 Years from hand over date to the project of a fully functional solar system.

• Mounting system: 10 Years from hand over date to the project of a fully functional solar system.

• Monitoring system: 3 Years from hand over date to the project of a fully functional solar system.

• Cables: 5 Years from hand over date to the project of a fully functional solar system.

Electrical PV System Design:

a) The technical offer shall include an Electrical PV System Design Description, including at minimum:

• A simulation model for forecasting the energy output of the proposed design with a detailed simulation report.

- A detailed Single Line Diagram for the PV system
- Voltage drops calculations for all circuits and cables.
- An earthing design plans.

b) The Bidder shall consider in their electrical design the Industry Standards, the National Electric Code, and other applicable codes and standards.

c) All proposed AC- electrical designs must comply with IEC standards and electricity Company requirements.

d) The Bidder shall select the suitable inclination and orientation angles of the PV system at each area in the site of installation, so as to achieve the ultimate electricity production.

e) The simulation software design and results shall take into account all shading patterns and shall include shading analysis for the design.

f) The simulation software used shall be PV system.

g) The Bidder must take into consideration the following input parameters in the simulation software, and all values must be realistic and close to the field norms and standards:

- Thermal loss factor
- DC wiring losses
- AC wiring losses
- Transformer losses
- LID losses
- Mismatch losses
- Soiling losses (according to the prosper cleaning plan)
- Auxiliaries consumption
- Albedo values
- Design conditions
- Shading factor table
- Shading limit angle
- Power factor (must be 0.9 over excited)

h) The simulation report shall contain the expected annual energy output in kWh and performance ratio for 3 years, which will be the guaranteed values.

i) The simulation report shall contain the expected annual energy output in kWh and performance ratio for 20 years.

j) The simulation design and results shall be submitted as a software copy.

k) The electrical design provided in the offer documents shall include the appropriate sizing of all cabling works and all protection equipment (above and below ground) that will connect the modules, strings, arrays, inverters, and to the point of interconnection.

1) All protection equipment throughout the system shall be sized and specified to reduce damage on all components and the interconnection point in case of an electrical failure (e.g., over voltage, under voltage, over current and intermittency protections).

m) The Bidder shall include in the offer all the required sizing, cross-sectional areas and lengths of the DC and AC cables along with required sizes of conduits and trenches (if available).

n) The Bidder shall provide voltage drop calculations for all PV and AC circuits to meet the allowed voltage drop percentages from the nominal voltages as follows:

o) For PV/DC circuits: 2% voltage drop from the nominal voltages for all DC circuits.

p) For AC circuits: 3% voltage drop from the nominal voltages for all AC circuits.

q) Earthing system shall be provided for the earthing of the entire project including distribution boards, panel boards, electrical circuits, PV modules, mounting structure, inverters, and building structure...etc. and associated equipment.

r) The DC, AC, earthing systems must be separated according to Electricity Company regulation and requirements.

s) The earthing system shall achieve a maximum total resistance of 3-5 Ω .

PV SYSTEM LAYOUT:

a) The technical offer shall include PV System Layout Drawings, including 2D and 3D Layouts of the system.

b) The 2D and 3D layouts of the system shall:

i. Consider service passages to enable the ease of maintenance and system cleaning.

ii. Include the location of the PV modules, inverters and cable routes.

POINT-OF-INTERCONNECTION DESIGN:

a) The Bidder shall propose the electrical design for the Point of Interconnection

b) The coupling point shall be through separate electrical enclosure from the existing system, and should include proper CB AC/DC systems and all necessary protection relays including G59 relay, and metering.

c) Circuits Protection Devices should be from a well-known brand.

DESCRIPTION OF WORKS & PROJECT TIME PLAN:

a) The Bidder shall include a Description of the Works which will be provided throughout the project in details including all procurement, installation and operation tasks in compliance with the works.

b) The Bidder shall include a time plan of the project implementation phases excluding the time needed for Electricity Company / Third Party GIS study. The time plan shall be a maximum (6) weeks.

TESTING AND COMMISSIONING PLAN

a) The Bidder shall include in the technical offer a Testing and Commissioning Plan in compliance with the testing and commissioning technical requirements provided.

b) If there is a need of any additional tests or testing equipment asked by CSTS, the Contractor must accept and provide it on his own expenses.

c) The final commissioning will be performed by the Contractor on his own expenses and will be witnessed and approved by CSTS project staff

MAINTENANCE AND CLEANING PLAN

The Bidder shall include in the technical offer for a Three (3) years maintenance for the new system and cleaning for exciting and extension systems, with the following details:

a) A detailed maintenance plan including a maintenance checklist and technical support as per the requirements.

b) Detailed cleaning mechanism for the PV system including the devices used for cleaning.

c) The cleaning frequency should be 6 times per year at least.

d) The Cleaning activities should include the existing PV system, where the price of each system cleaning costs should be indicated separately.

e) The awarded contractor should submit a monthly report about performance the system till the end of 3^{rd} year.

f) The contractor must make any corrective action when production isn't as design proposal.

Output:

1.

ROLE OF IMPLEMENTING PARTNER

The supplier is expected to work closely with staff of the implementing partner (CSTS). Specifically, the implementing partner (CSTS) staff will:

- Coordinate with the EIs to plan and support the survey, delivery, inspection and successful installation of fully functional solar systems.
- Report on the delivery and installation of the solar systems.

The supplier is expected to provide a high level of cooperation with the assigned staff to ensure quality deliverables of the assignment. Likewise, the implementing partner will support the supplier to ensure successful execution of the assignment.

DURATION AND TIME FRAME

The assignment is expected to begin on 15/06/2023 and be completed not later than 20/07/2023.

NB. If external conditions hamper the study process, affecting the work plan, the supplier will agree with CSTS on ways to guarantee the accomplishment of the assignment.

OUTLINE OF THE REPORT

The supplier shall propose an adequate report structure including the inception report, required progress reports and final assignment report indicating how many devices distributed to particular locations, at particular dates.

REPORTING

The supplier will report to the Affordable Internet and Device Officer and/or to the Project Manager for overall strategic guidance and consult with the Affordable Internet and Device Officer for the day-to-day management and coordination of the assignment.

FORMAT OF THE PROPOSAL

The proposal should clearly indicate the following;

- Technical proposal detailing interpretation of the terms of reference (ToR), comments on the ToR if any, and why they are most suitable for the assignment (max 25 pages)
- Detailed CVs of all engineers or personnel proposed to work on the assignment as well as their roles and responsibilities under the assignment.
- Detailed work plan and timeline for the assignment
- Report Structure
- Financial proposal, quotations with detailed breakdown of tasks and costs stated in Uganda Shillings
- Evidence of work experience including 3 recent accomplished assignments of similar focus and scope and respective contacts of reference

QUESTIONS AND CLARIFICATIONS

Tenderers may submit questions and clarifications by email until 31/05/2023, 5:00pm EAT to the following email contact: <u>klubega@cyberschooltech.co.ug and</u>

jrmukiibi@cyberschooltech.co.ug with copy to <u>dkisembo@cyberschooltech.co.ug</u> .

INSTRUCTIONS TO SUBMIT A TENDER

Response Format

Tenders should be electronically submitted in PDF (for narrative) and excel (for the budget). Hand-written tenders will not be accepted.

Content of Tenders

Tenderers must provide sufficient information in the proposals to demonstrate compliance with the requirements set out in the Terms of Reference.

In addition, the tender shall include documents and information below – and in the below order:

- 1. Copy of company registration certificate
- 2. List of directors

3. Copy of Memorandum and Articles of Association

- 4. Address of the company or offices
- 5. Contact person (name, email, phone)
- 6. Copy of tax compliance certificate
- 7. TIN number
- 8. VAT number
- 9. Company profile
- 10. Bank details
- 11. Copy of latest company audited accounts
- 12. Academic documents of the consultant.
- 13 Valid Trading License
- 14 Three letters of reference from reputable clients
- 15 CVs for key staff for the assignment.

16 Copies of Certifications for the major computer manufacturers (Gold, Platinum or lower levels)

NB: Failure to provide the above and in the formats stipulated may result in the disqualification of the tender.

Late tenders

Late tenders shall not be accepted.

Cyber School Technology Solutions (CSTS) reserves the right in its sole discretion to clarify any tender after closing by seeking further information from any or all tenderers. However, tenderers are cautioned that any clarification sought will not be an opportunity to either correct or change their tender in any manner.

Period of validity of tenders

Tenderers shall be bound by their tenders for a period of thirty (60) days minimum from the deadline for submission of their proposals.

Currency of tenders

Tenders will only be presented in US Dollars (\$).

Language of tenders and procedure

The tenders, all correspondence and documents related to the tender must be written in English.

Costs of preparing tenders

All costs incurred by the tenderers in preparing and submitting the tender are not reimbursable. All such costs will be borne by the tenderers. The contract will be awarded to the tender offering best value for money (i.e. the tender offering the best price-quality ratio) or, as appropriate, to the tender offering the lowest price. CSTS will evaluate the tenders received against objective criteria which enable measuring the quality of the tenders and which take into account the price.

Tenders will be examined and evaluated by the Evaluation Committee appointed by CSTS. All tenders will be assessed according to the following steps and criteria:

Opening and administrative checks: Tenders will be assessed on whether the deadline was met, if any of the requested information is missing or incorrect, and if the supporting documents requested for submission have been fully provided.

If any of the requested information is missing or is incorrect, the tender may be rejected on that sole basis and not be evaluated further.

The tenders that pass this check will be evaluated in accordance with the Evaluation Grid as presented below:

Cumulative Analysis;

The proposals will be evaluated using the cumulative analysis method with 70% technical and 30% financial scoring. The proposal with the highest cumulative scoring will be awarded the contract.

Applications will be evaluated technically, and points are attributed based on how well the proposal meets the requirements of the Terms of Reference using the guidelines detailed in the table below:

When using this weighted scoring method, the award of the contract may be made to the individual consultant whose offer has been evaluated and determined as:

a) Responsive/compliant/acceptable, and

b) Having received the highest score from a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weighting. 70%

* Financial Criteria weighting. 30%

Only candidates obtaining a minimum of 50 points in the Technical Evaluation would be considered for the Financial Evaluation. Interviews may be conducted as part of the technical assessment for shortlisted proposals.

Technical Criteria - 70%

Criteria (Quality Score)	Scale
Understanding of the ToR - Quality and extent of information provided by	1-5
the proposal	
Proposed work plan, methodology, approach and timelines.	1-15
	1-5

Technical experience of the team/consultants	1-10	
Knowledge of gender equality and women empowerment issues	1-10	
(leadership) / livelihoods / GBV / social norms interventions		
Knowledge of safeguarding issues	1-5	
Conceptual design, footprint, and quality of components	1-10	
Post installation services	1-5	
Experience in training and knowledge transfer	1-5	

Eventually, the price-quality ratio will be calculated by dividing the total quality score by the price tendered.

Financial Criteria Weighting – 30%; Lowest Price

Any attempt by a bidder to influence the evaluation committee in the process of examination, clarification, evaluation and comparison of tenders, to obtain information on how the procedure is progressing or to influence the decision concerning the award of the contract will result in the immediate rejection of the tender.

Notification award and contract signature

The tenderers will be informed in writing of CSTS's decision concerning their tender and, if rejected, the reasons for the negative decision.

Following the decision to award, the successful tenderer will be offered a contract based on CSTS's standard service agreement. If the successful tenderer fails to sign and send back the contract within five (05) working days, CSTS may consider the award notification null and void.

Cancellation of the tender procedure

In the event of a cancellation of the tender procedure, tenderers will be notified by CSTS.

Cancellation may occur where and when:

The tender procedure has been unsuccessful in terms of quality and/or quantity (less than
of tenders received;

2. The economic or technical parameters of the project have been fundamentally altered;

3. Exceptional circumstances or force majeure render normal performance of the project impossible;

4. All technically compliant tenders exceed the financial resources available;

5. There have been irregularities in the procedure, in particular where these have prevented fair competition;

6. Eligibility criteria were not fulfilled and/or incomplete tender dossier submitted.

NB: Under no circumstances will CSTS be liable for damages or losses, whatever their nature, in relation with the cancellation of the tender. The publication of a procurement

notice does not commit CSTS to implement the announced programme, project or assignment.

Ethics

CSTS conducts its activities with the greatest respect for its stakeholders with the aim of honoring the trust placed in it by donors and beneficiaries and achieving the goals it shares with them. It undertakes to foster and respect the rights of beneficiaries in accordance with the UN conventions (UN Convention on Human Rights, Convention on the Rights of the Child, Convention on the Elimination of All Forms of Discrimination against Women, and Convention on Racial Discrimination) and treaties and the principles of international law. Furthermore, CSTS undertakes to comply with the legal provisions, guidelines and policies of the donor (Mastercard Foundation).

CSTS takes particular care not to work with individuals or organizations involved in drug trafficking, human exploitation or people trafficking, fraud or tax evasion, or suspected of being associated with any other form of criminality or terrorism.

CSTS fosters a culture of trust and respect. It requires all employees and contractual partners to conduct themselves correctly – everywhere and at all times.

Insurance

The tenderer shall bear sole responsibility for any losses or damages incurred and for personal insurance cover (for social benefits, sickness, accident and repatriation) in relation to the tender process as well as during the execution of the assignment in case of the award of a contract.

Proponents to Follow Instructions

Proponents should structure their proposals in accordance with the instructions in the RFP. Where information is requested in the RFP, any response made in a proposal should reference the applicable section numbers of the RFP where that request was made.

CSTS's Information in RFP Only an Estimate

CSTS and its advisers make no representation, warranty or guarantee as to the accuracy of the information contained in the RFP or issued by way of addenda. Any quantities shown or data contained in the RFP or provided by way of addenda are estimates only and are for the sole purpose of indicating to proponents the general size of the work. It is the proponent's responsibility to avail itself of all the necessary information to prepare a proposal in response to the RFP.

Communication after Issuance of RFP

Proponents to Review RFP

Proponents shall promptly examine all of the documents comprising the RFP, and

(a) shall report any errors, omissions or ambiguities; and

(b) may direct questions or seek additional information in writing by email on or before the proponent's Deadline for Questions to the CSTS Contact. All questions submitted by proponents

by email to the CSTS Contact shall be deemed to be received once the email has entered into the CSTS Contact's email inbox. No such communications are to be directed to anyone other than the CSTS Contact. CSTS is under no obligation to provide additional information.

It is the responsibility of the proponent to seek clarification from the CSTS Contact on any matter it considers to be unclear. CSTS shall not be responsible for any misunderstanding on the part of the proponent concerning the RFP or its process.

All New Information to Proponents by Way of Addenda

The RFP may be amended only by an addendum in accordance with this section. If CSTS, for any reason, determines that it is necessary to provide additional information relating to the RFP, such information will be communicated to all proponents by addenda.

Each addendum forms an integral part of the RFP. Such addenda may contain important information, including significant changes to the RFP. Proponents are responsible for obtaining all addenda issued by CSTS. Proponents should confirm their receipt of all addenda by email to the CSTS Contact.

Post-Deadline Addenda and Extension of Submission Date.

If any addendum is issued after the Deadline for Issuing Addenda, CSTS may at its discretion extend the Submission Date for a reasonable amount of time.

Verify, Clarify and Supplement

When evaluating responses, CSTS may request further information from the proponent or third parties in order to verify, clarify or supplement the information provided in the proponent's proposal. CSTS may revisit and re-evaluate the proponent's response or ranking on the basis of any such information.

Proposal to Be Retained by CSTS

CSTS will not return the proposal or any accompanying documentation submitted by a proponent.

Selection of Top-Ranked Proponent

The top-ranked proponent, as established following the evaluation process, will receive a written invitation to enter into direct contract negotiations with CSTS.

Timeframe for Negotiations

CSTS intends to conclude negotiations within fourteen (14) days commencing from the date CSTS invites the top-ranked proponent to enter negotiations. A proponent invited to enter into direct contract negotiations should therefore be prepared to provide requested information in a timely fashion and to conduct its negotiations expeditiously.

Failure to Enter Into Agreement

Proponents should note that if the parties cannot execute a contract within the allotted fourteen (14) days, CSTS may invite the next-best-ranked proponent to enter into negotiations. In

accordance with the process rules, there will be no legally binding relationship created with any proponent prior to the execution of a written agreement. With a view to expediting contract formalization, at the midway point of the above noted timeframe, CSTS may elect to initiate concurrent negotiations with the next-best-ranked proponent. Once the above-noted timeframe lapses, CSTS may discontinue further negotiations with that particular proponent. This process shall continue until a contract is formalized, until there are no more proponents remaining that are eligible for negotiations or until CSTS elects to cancel the RFP process.

Notification to Other Proponents

Other proponents that may become eligible for contract negotiations will be so notified at the commencement of the negotiation process. Once a contract is executed between CSTS and a proponent, the other proponents may be notified directly in writing and shall be notified by public posting in the same manner that the RFP was originally posted of the outcome of the procurement process and the award of the contract.

Debriefing

Proponents may request a debriefing after receipt of a notification of award. All requests must be in writing to the CSTS Contact and must be made within seven (7) days of notification of award. The intent of the debriefing information session is to aid the proponent in presenting a better proposal in subsequent procurement opportunities. Any debriefing provided is not for the purpose of providing an opportunity to challenge the procurement process.

Bid Protest Procedure

If a proponent wishes to challenge the outcome of the RFP process, it should provide written notice to the Chairman of the CSTS Contact within three working (3) days of notification of award, and CSTS will respond in accordance with its bid protest procedures.

Prohibited Communications and Confidential Information

Prohibited Proponent Communications

The proponent shall not engage in any Conflict of Interest communications and should take note of the Conflict of Interest declaration requirement.

Proponent Not to Communicate with Media

A proponent may not at any time directly or indirectly communicate with the media in relation to the RFP or any contract awarded pursuant to the RFP without first obtaining the written permission of the CSTS Contact.

Confidential Information of CSTS

All information provided by or obtained from CSTS in any form in connection with the RFP either before or after the issuance of the RFP (a) is the sole property of CSTS and must be treated as confidential; (b) is not to be used for any purpose other than replying to the RFP and the performance of any subsequent Contract; (c) must not be disclosed without prior written

authorization from CSTS; and (d) shall be returned by the proponents to CSTS immediately upon the request of CSTS.

Confidential Information of Proponent

A proponent should identify any information in its proposal or any accompanying documentation supplied in confidence for which confidentiality is to be maintained by CSTS. The confidentiality of such information will be maintained by CSTS, except as otherwise required by law or by order of a court or tribunal.

Proponents are advised that their proposals will, as necessary, be disclosed on a confidential basis, to CSTS's advisers retained for the purpose of evaluating or participating in the evaluation of their proposals. If a proponent has any questions about the collection and use of personal information pursuant to the RFP, questions are to be submitted to the CSTS Contact.

No Contract until Execution of Written Agreement

The RFP process is intended to identify prospective vendors for the purposes of negotiating potential agreements. No legal relationship or obligation regarding the procurement of any good or service shall be created between the proponent and CSTS by the RFP process until the successful negotiation and execution of a written agreement for the acquisition of such goods and/or services.

Non-binding Price Estimates

While the pricing information provided in responses will be non-binding prior to the execution of a written agreement, such information will be assessed during the evaluation of the responses and the ranking of the proponents. Any inaccurate, misleading or incomplete information, including withdrawn or altered pricing, could adversely impact any such evaluation, ranking or contract award.

Cancellation

CSTS may cancel or amend the RFP process without liability at any time.

Conflict of Interest

For the purposes of this section, the term "Conflict of Interest" means;

(a) in relation to the RFP process, the proponent has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including but not limited to (i) having, or having access to, confidential information of CSTS in the preparation of its proposal that is not available to other proponents, (ii) communicating with any person with a view to influencing preferred treatment in the RFP process (including but not limited to the lobbying of decision makers involved in the RFP process), or (iii) engaging in conduct that compromises, or could be seen to compromise, the integrity of the RFP process; or

(b) in relation to the performance of its contractual obligations contemplated in the contract that is the subject of this procurement, the proponent's other commitments, relationships or financial interests (i) could, or could be seen to, exercise an improper influence over the objective, unbiased and impartial exercise of its independent judgement, or (ii) could, or could be seen to, compromise, impair or be incompatible with the effective performance of its contractual obligations.

If the box below is left blank, the proponent will be deemed to declare that (a) there was no Conflict of Interest in preparing its proposal; and (b) there is no foreseeable Conflict of Interest in performing the contractual obligations contemplated in the RFP.

Otherwise, if the statement below applies, check the box below.

 \Box The proponent declares that there is an actual or potential Conflict of Interest relating to the preparation of its proposal, and/or the proponent foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the RFP.

If the proponent declares an actual or potential Conflict of Interest by marking the box above, the proponent must set out below details of the actual or potential Conflict of Interest:

.....

APPLICATION

The procurement schedule, subject to possible change, is as follows:

Invitation to submit tenders	26/05/2023 (Monitor)
Deadline for requesting any clarifications	31/05/2023
Deadline for responding to requests for	31/05/2023
clarification	
Deadline for submission of tenders	11/06/2023 (Sunday)
Opening of tenders, administrative checks,	12/06/2023 Monday)
and evaluation	
Notification to applicants	12/06/2023
Contract award and signature	13/06/2023
Start date of assignment	15/06/2023

The Application, CV plus detailed proposal shall be submitted before application deadline **11/06/2023 12pm** via email on procurement@cyberschooltech.co.ug and copied to the Risk and Compliance Officer on dkisembo@cyberschooltech.co.ug..

Subject: E-LEARNING INITIATIVE – Supply and Installation of Solar Systems.

Proponents should submit one (1) hard copy and one (1) electronic copy in PDF format in a sealed package and by E-mail on procurement@cyberschooltech.co.ug

Proposals are to be prominently marked with the RFP title and the full legal name and return address of the proponent, and with the Submission Date. In the event of a conflict or inconsistency between the hard copy and the electronic copy of the proposal, the hard copy of the proposal shall prevail.

Proposals Should Be Submitted on Time at Prescribed Location.

Proposals should be submitted at the location set out above on or before the Submission Date. Proposals submitted after the Submission Date and Time will be rejected.

Withdrawing Proposals

At any time throughout the RFP process, a proponent may withdraw a submitted proposal. To effect a withdrawal, a notice of withdrawal must be sent to the CSTS Contact and must be signed by an authorized representative. CSTS is under no obligation to return withdrawn proposals.

Appendix A:

Solar Systems Component Specifications

Following are the minimum requirements of the proposed PV system component:

1.1 PV Modules:

The PV Panel is a packaged, connected assembly of photovoltaic cells, with the following specification:

a) The Photovoltaic should be from a well-known Tier 1 Modules Manufacturer.

b) The Photovoltaic modules should be grade A.

c) Cell Type: mono-crystalline or poly-crystalline modules are acceptable

d) The output power of the modules should not be less than 450 Wp at (STC) using higher output modules and thus less Area use for the project will be appreciated, Conversion efficiency (not less than 19.5%).

e) 72 cell photovoltaic modules must be used in RO Building and its Preferred to use 60 cell

photovoltaic modules for the JCO Building (a Higher power modules will be counted in the evaluation)

f) Operating PV temperature should be between -10 deg.C and + 85 deg.C.

g) Modules temperature sensitivity at peak power should not exceed -0.40%/°C.

h) PV module frame should be Anodized Aluminium.

i) The PV modules maximum system voltage should not be less than 1,000 V.

j) The PV modules should be PID resistant.

k) The PV modules should have a positive power tolerance only +3%.

l) The modules shall have individual serial numbers behind each front glass.

m) Electrical connection shall be on a robust terminal block in an IP65 junction box or higher.

n) The warranty for module defects after installation should be at least 10 years.

o) The awarded Bidder shall provide a manufacture power guarantee for all PV modules that will be installed with their serial numbers that guarantees that the loss of the output is not more than 10% during the first 10 years and up to 20% in total after 25 years. The warranty must state that the malfunctioning solar photovoltaic module must be exchanged by the manufacturer.

The replacement solar module must be identical to, or an improvement upon, the original design of the malfunctioning solar module.

p) Mechanical stability – IEC 61215: Design qualification and type approval for crystalline silicon terrestrial photovoltaic (PV) modules.

q) PV module safety qualification standard: IEC/EN 61730 for safety class II test.

r) Along with TUV, CE compliant and UL certification, salt mist/ammonia resistance should be provided.

s) Mechanical load tests up to 5400 Pa, Damp Heat, Thermo Cycle and Humidity and Freeze tests. Flash reports of PV modules (SN, Voc, Ipmax etc) shall be provided.

1.2 Inverter:

Three Phase Inverters which converts the variable direct current (DC) output of solar PV modules into utility frequency alternating current (AC) that can be fed into an electrical grid with the following Specification:

a) Three phase power inverters.

b) The inverters must comply with the British standard ENA, G99 Code. Preferably brand SMA

c) The inverters shall comply with the EMRC and Electrical Company regulations and standards.

d) The Inverter should be equipped with 2 or more MPPT.

e) Efficiency should not be less than 97%.

f) The Inverter shall be provided with LED Indicators to provide an instantaneous information about the system status.

g) The Inverter shall have the following protections: reverse current, input over voltage & over current via fuses.

h) Temperature operating range: -20 °C to 60 °C

i) Total harmonic distortion (THD) should not exceed 3%.

j) Protection degree is IP65 or higher (outdoor).

k) TUV and CE compliant.

1) Warranty after installation should be for 5 years at least. The warranty must state that the

malfunctioning inverter must be exchanged by the manufacturer. The replacement inverter must be identical to, or an improvement upon, the original design of the malfunctioning inverter.

m) All Outdoor installed inverters should be covered with Metal shades including the existing inverters if needed.

1.3 Mounting System:

The mounting structures will constitute of the main supporting structure of a suitable height in addition to the module-holding sub-structure with the necessary inclination in relation to the horizontal plane so as to gain the maximum of solar radiation and energy production.

The PV modules will be kept below 2.7 m height from the back (for easy cleaning). In detail, the minimum specifications of the mounting structure and sub-structure are:

a) Hot –Dip Galvanized steel structure / G90, minimum 2 mm thikness.

b) Manufacturer's warranty should be at least 10 years.

c) Durable design which is capable to withstand high-speed wind of at least 140 km/h, the contractor should provide a detailed design analysis and get approval on them prior the implementation.

d) The steel structure shall be anti-corrosion, anti-rust and can withstand high humidity.

e) The mounting structure shall be all fitted / Pre-fabricated and should be assembled at the site (no welding)

f) The Mounting structure should be fixed on Concrete bases (the Weight and Dimensions should be determined based on the Load Structure Load analysis), so that no drilling will be carried out on the roof.

g) All bolts, nuts, and washers for the PV modules' mounting structure must be made of stainless steel. Stainless steel must not contact the PV modules' aluminum frames.

h) All clamps in contact with the PV modules' aluminum frames must be made of aluminum.

i) All exposed sharp edges in the mounting structure must be covered with an appropriate material.

1.4 Data logging & Monitoring System:

a) System monitoring, remote diagnosis, data storage and visualization.

b) Collects data from the inverters on the system side, keeping you informed of the system 's status at any given time (Compatible with the inverter).

c) Shows the Instantaneous Values on Both DC and AC Side, which includes but not limited (Voltage, Current, Power, etc...)

d) Connection inverters with Data points.

e) The inverter must be equipped with Ethernet connection that enables real time data logging with all related hardware and software required.

f) CAT6 data cable should be included in the installation with separated labelled conduit to the nearest approved internet point.

g) Warranty after installation should be for 3 year at least.

<u>1.5 Earthing protection:</u>

a) A complete system for grounding the PV modules one by one and the mounting structure for safety.

b) Each array structure of the PV system should be grounded properly.

c) All metal casing/shielding of the plant are to be thoroughly grounded.

d) To check the existing earthing system resistance and modify if need, the earth resistance should be 3-5 Ω .

1.6 Cables:

The minimum specifications of the PV and AC cables are:

a) PV cables shall comply with TUV standards.

b) Operation temperature for PV cables should be up to +80 C

c) PV cables shall be UV resistant, flame retardant, double insulated and with low smoke

characteristics.

d) PV and AC cables shall comply with local and international standards and Electrical Company requirement.

e) All external cables must be installed inside a cable basket PVC Flexible pipes with glands shall be used between the modules and the cable basket tray or hot dipped galvanized cable tray.

f) PVC Flexible pipes with glands shall be used between the modules and the cable tray.

g) The cable ties shall be black color and UV resistance.

h) All cables shall be marked properly by means of good quality labels or by other means so that cable can be easily identified.

i) All cables shall be marked in compliance with IEC 60446-3 category C Basic and safety principles for man-machine interface, marking and identification.

j) Factory warranty shall be not less than 5 years.

k) Cabling losses: the cable losses are 1-3%; from string to inverter (DC side), and from inverter unit to the load (AC side).

5.7 Labelling

a) Each item of equipment must have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place.

b) Tags for each power cable or wire located in manholes, hand holes, and vaults shall be provided.

c) Warning labels shall be provided and affixed in a conspicuous place.

d) Warning Signs shall be provided and affixed in a conspicuous place in Kiswahili & English Sign

e) All labelling material shall be weather-resistant.