PROCUREMENT OF NON-CONSULTING SERVICES

Request for Quotations

Request for Quotations

of

Non-Consulting Services

Hiring of:

IT Firm to develop dashboard for C-2

Project:Sindh Early Learning Enhancement through Classroom Transformation SELECTPurchaser:Sindh Early Learning Enhancement through Classroom Transformation

(SELECT), School Education & Literacy Department Govt of Sindh

Country: Pakistan

Assignment: Request for Quotations for procurement of Non-Consulting Services.

Loan No./Credit No./ Grant No.: TF-B6208-PK, TF-7208-PK, IDA 69730 Ref No: RFQ: PK-RSU-SINDH-374517-NC-RFQ

Issued on: 26 September 2023

Last date for Submission of quotation: 7th September 2023 at 12:00 PM

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Request for Quotations

RFQ Ref No. PK-RSU-SINDH-365274-GO-RFQ

RFQ Date: 2023

To:

Request for Quotation (RFQ)

- 1. This RFQ is for the procurement of Non-Consulting Services required for the SELECT.
- The Islamic Republic of Pakistan has received financing from the World Bank (the Bank) toward the cost of the Sindh Early Learning Enhancement through Classroom Transformation (SELECT), School Education & Literacy Department Govt Of Sindh and intends to apply part of the proceeds toward payments under the contract for Procurement of Non-Consulting Services for the SELECT.
- 3. The Sindh Early Learning Enhancement through Classroom Transformation (SELECT), School Education & Literacy Department Govt Of Sindh now invites quotations from firms for the Non-Consulting Services described in **Annex 1: Purchaser's Requirements**, attached to this RFQ.

Fraud and Corruption

- 4. The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in the attachment to the Contract Conditions (Attachment A).
- 5. In further pursuance of this policy, Firms shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, Firms, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to the RFQ and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

Eligible Services

6. All the Non-Consulting services mentioned in Annex-1 to be delivered under the Contract and financed by the Bank may have their origin in any country <u>in accordance with Para. 10.</u>

Eligible Firms

- 7. In case the Firm is a joint venture (JV), all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Request for Quotations process and, in the event the JV is awarded the Contract, during contract execution.
- 8. A firm may have the nationality of any country, subject to the restrictions pursuant to para. 9 and 10 hereinafter. A Firm shall be deemed to have the nationality of a country if the Firm is constituted, incorporated or registered in, and operates in conformity with, the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including Related Services.
- 9. Firms and individuals may be ineligible if so, indicated in para. 10 below and:

- (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the delivery of Non-Consulting Services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of Goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 10. In reference to paras. 6 and 8, for the information of Firms, at the present time firms, goods and services from the following countries are excluded from this procurement process:
 - (a) Under para. 6 and 9 (a): Israel and India
 - (b) Under para. 6 and 9 (b): Israel and India
- 11. A Firm that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in the attachment to the Contract Conditions (Attachment A) paragraph 2.2 d., shall be ineligible to submit Quotations or be awarded or otherwise benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr.
- 12. Firms that are state-owned enterprises or institutions in the Purchaser's country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they:
 - (a) are legally and financially autonomous;
 - (b) operate under commercial law; and
 - (c) are not under supervision of the Purchaser.
- 13. A Firm shall not have a conflict of interest. Any Firm found to have a conflict of interest shall be disqualified. A Firm may be considered to have a conflict of interest for the purpose of this Request for Quotations process, if the Firm:
 - (a) directly or indirectly controls, is controlled by or is under common control with another Firm that submitted a Quotation; or
 - receives or has received any direct or indirect subsidy from another Firm that submitted a Quotation;or
 - (c) has the same legal representative as another Firm that submitted a Quotation;
 - (d) has a relationship with another Firm that submitted a Quotation, directly or through common third parties, that puts it in a position to influence the Quotation of another Firm, or influence the decisions of the Purchaser regarding this Request for Quotations process; or
 - (e) or any of its affiliates participated as a consultant in the preparation of the Terms of References of Non-Consulting Sevices , that are the subject of the Request for Quotations process; or
 - (f) or any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower for implementing the Contract; or
 - (g) would be providing Goods, works, or non-consulting services resulting from, or directly related to consulting services for the preparation or implementation of the project specified in this Request for Quotations, that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the Request for Quotations or specifications and/or the evaluation of

Quotations, of the subject Contract; or (ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the Request for Quotations process and execution of the Contract.

Performance Security

14. Not Applicable

Manufacturer's Authorization (Not Applicable)

15. A Firm that does not manufacture or produce the Goods it offers to supply shall submit a Manufacturer's Authorization (Not Applicable)

Validity of offers

16. The offers shall be valid for 120 days

Quoted Price

- 17. Prices shall be quoted in the following manner:
 - (a) For Non-Consulting Services to be delivered from within the Purchaser's Country:
 - (i) the price of the Non-Consulting Services as per TORs shall be quoted, including all customs duties and sales and other taxes already paid or payable on the Non-Consulting Services
 - (ii) if known, any Purchaser's Country sales tax and other taxes which will be payable on the Non-Consulting Services if the Contract is awarded to the Firm; and
 - (iii) The price for inland logistics, insurance, and other local services required to deliver the Non-Consulting Services to their final destination (Project Site-Office) Project Coordinator office for Sindh Early Learning Enhancement through Classroom Transformation SELECT AT Reform Support Unit 47-E/1, Street No. 48, PECHS Block-6, Near Nursery Furniture Market, Shahrah-e-Faisal, Karachi.
 - (b) for Non-Consulting Services, other than inland transportation and other services required to visit sites, whenever such Related Services are specified in the Schedule of Requirements, the price of every services comprising the Related Services shall be mentioned (inclusive of any applicable taxes).
- 18. The Firm may quote its price in a foreign currency of its choice in addition to the currency of the Purchaser's Country (for any local costs as applicable). Not Applicable

Clarifications

 Any clarification request regarding this RFQ may be sent in writing to Mr.Muhammad Suhail Baloch (Senior Procurement and Contract Management Specialist) having email <u>junee23@hotmail.com</u> before 31st august 2023.-The Client will forward copies of its response to all Firms including a description of the inquiry but without identifying its source.

Submission of Quotations

- 2. Quotations are to be submitted in the form attached at Annex 1 hard copy only.
- 3. The deadline for submission of Quotations is 7th September-2023 at 12:00PM
- 4. The address for submission of Quotations is:

Attention: Mr. Junaid Hameed Samoo sb (CPM-RSU & Project Director SELECT)

Address: Project Coordinator office for Sindh Early Learning Enhancement through Classroom Transformation SELECT AT Reform Support Unit 47-E/1, Street No. 48, PECHS Block-6, Near Nursery Furniture Market, Shahrah-e-Faisal, Karachi.

Tel: 021-34304441

E-mail: PMIUSELECT.SELD@gmail.com

Opening of Quotations

5. Quotations will be opened by the Purchaser's representatives immediately after the deadline for the submission of Quotations.

Evaluation of Quotations

- 6. Quotations will be evaluated to ensure compliance with the Terms Of references, Delivery and Completion Schedules and any other requirements of the RFQ.
- 7. "The comparison shall be on the basis of CIP (place of final destination) prices for Goods to be supplied from outside the Purchaser' country and EXW prices plus cost of inland transportation and insurance to place of destination, for Goods supplied from within the Borrower's country; together with prices for any required installation, training, commissioning and other services. The evaluation of prices shall not take into account custom duties and other taxes levied on imported goods quoted CIP and sales and similar taxes levied in connection with the sale or delivery of goods."] Not Applicable.
- 8. The lowest evaluated price will be determined after correcting any arithmetic errors and other specified adjustments, if any.
- 9. Quotation will be evaluated for the whole lot/package under this RFQ. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. An item not listed in the Price Schedule shall be assumed not included in the Quotation, and provided that the Quotation is substantially responsive, the average of the item price as quoted by substantially responsive Firms will be added to the Quoted Price and the equivalent total price of the Quotation so determined will be used for price comparison."
- 28. For evaluation and comparison purposes, the currency(ies) of the Quotations shall be converted into a single currency PKR. The currency that shall be used for comparison purposes to convert at the selling exchange rate(s) offered prices expressed in various currencies into a single currency is: PKR. The source of exchange rate shall be Stock Market exchanges of Pakistan. The date for the exchange rate shall be 7th September 2023.

Contract Award

- 29. The Contract will be awarded to the Firm/s who:
 - (a) is eligible and offers eligible Non-Consulting Services;
 - (b) offers the lowest evaluated price/s,
 - (c) technically compliant quotation, and
 - (d) guarantees delivery, in accordance with the delivery period/s.
- 30. The Purchaser shall invite by the quickest means the successful Firm/s for any discussion/ negotiation that may be needed to conclude the contract or otherwise for contract signature.
- 31. The Purchaser shall communicate by the quickest means with the other Firms on its contract award decision. An unsuccessful Firm may request clarifications as to why its quotation was not determined to be successful. The Purchaser will address this request within a reasonable time.
- 32. The Purchaser shall publish a contract award notice on its website with free access, if available, or in a newspaper of national circulation or UNDB online, within 15 days after award of contract. The information shall include the name of the successful Firm, the Contract Price, the Contract duration, summary of its scope and the names of the Firms and their quoted and evaluated prices.

On behalf of the Purchaser:
Signature:
Name: Mr.

Title/position:
Attachments:

Annex 1: Purchaser's Requirements

Annex 2: Quotation Form Annex 3: Contract Forms

ANNEX 1: Purchaser's Requirements

1.1 Terms of References (TORs)

Sindh Early Learning Enhancement through Classroom Transformation (SELECT)

Component II

Developing an effective and safe learning environment

Software Development for Monitoring of Civil Works – Terms of Reference

With outline on Execution workflow, stakeholder roles & details

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Background

Early Learning Enhancement through Classroom Transformation (SELECT) Project encompasses a multipronged approach towards improving the quality of both teaching and learning practices in primary education, with a particular emphasis on foundational reading in grades 1 through 5. The Project comprises a series of focused and flexible implementation strategies, targeted at the school and mesolevels (personnel and systems at the school, taluka and district levels). The Project supports improvements in the transition from primary to elementary school, as well as a reduction in dropouts through targeted student attendance redress procedures. Desired Project outcomes would eventually contribute to reductions in learning poverty and in the number of out-of-school children.

Project Objectives	The overall development objective of this Project is to improve the reading		
	skills of early grade primary students and increase student retention in		
	primary schools in selected districts.		
Project Cost	IDA: US\$100 million		
	15/11 00Q100 Hilling.		
	GPE ESPIG: US\$29.9875 million		
	6. 2 25. 16. 65¢25.3676 mmon		
	GPE MG: \$24.775 million		
	S. 2		
	Total: US\$154.7625 million		
Expected Project	August 2021 – April 2026		
Duration			
Component 1	Transforming teaching practices in the early grades		
	 <u>Subcomponent 1.1:</u> Implementation of a Continuous Professional 		
	Development (CPD) model for improved literacy skills in the early		
	grades		
	 <u>Subcomponent 1.2:</u> Behavioral nudges for improved learning 		
	■ Subcomponent 1.3: Technical Assistance (TA) for transforming teaching		
	practices		
	Under this component, a CPD model will be implemented with the aim of		
	improving literacy skills in early grades. Behavioral nudges will be utilized to		
	improve student wellbeing and mitigate potential risks of dropping out. TA will		
	also be provided for institutional capacity building and support.		
Component 2	Improving the physical learning environment in selected primary schools, and		
	upgrading them from grade 5 to grade 8, supporting the teaching and learning		
	aims set out in Component 1 and the student retention aims set out in		
	Component 3. Cost-effective and carbon-efficient technologies will be utilized		
	to introduce needed climate adaptations and mitigate climate risk.		
Component 3	Improving system capacity for effective school leadership and management		
	support <u>:</u>		
	■ <u>Subcomponent 3.1:</u> Establishing a technology-based student		
	attendance monitoring system		
	Subcomponent 3.2: TA and capacity building for school leadership and		
	local education office management to mitigate student dropout		

	A technology-based student attendance monitoring system will be established. TA will be provided, and capacity building will take place for school leadership and local education office management increase their ability to use school-level data in conjunction with Component 1 activities to mitigate student dropout.
Component 4	The Reform Support Unit (RSU) will monitor and evaluate the Project, monitor safeguards, oversee procurement and financial management, and will be responsible for overall management and coordination of the Project on behalf of the School Education and Literacy Department (SELD).
Geographic Scope	The Project will be implemented in twelve selected districts in Sindh: Badin, Ghotki, Jacobabad, Kambar-Shahdadkot, Kashmore, Mirpurkhas, Mitiari, Sanghar, Shikarpur, Sujjawal, Tando Muhammad Khan, and Thatta.

School upgradation to elementary schools. This component will upgrade about 600 primary schools (grade 1–5) to elementary level (grade 1–8) in selected districts as part of a holistic upgradation of learning environments through financing from the International Development Association (IDA) and the Global Partnership for Education (GPE). In addition, GoS will provide funding for the upgradation of 50 selected Schools from elementary to Secondary level.

Breakdown of the upgradation comprises of school rehabilitation through providing completely new infrastructure to upgrade 350 primaries to elementary schools, 200 primaries to elementary through refurbishing of existing classrooms and adding new classrooms, and 50 school with new infrastructure to be upgraded from Primary to Secondary level.

Activities will include school rehabilitation through refurbishing of existing classrooms and adding new classrooms to existing schools, provision of furniture, and adequate WASH facilities by actively pursuing eco-friendly materials and climate- responsive designs. Learner-friendly designs will be pursued by (a) design elements which utilize naturally regulated lighting and temperature control for improving learning conditions in the classroom, (b) use of color schemes and materials to increase visual stimulation for learning, and (c) flexible physical layouts and classroom furnishings for a variety of learning styles. Upgrades will also include the provision of new learning spaces such as reading corners that will entice and motivate students and teachers toward improved literacy. Where possible, the project will also utilize cost-effective carbon-efficient technology for climate risk mitigations, such as solar panels to generate electricity in schools, water harvesting and recycling systems, and heat-resistant buildings, and will ensure the rehabilitation activities are easy to maintain at low cost. In the flood-prone areas, an 'elevated school' design will be utilized where appropriate to increase disaster resilience against anticipated and regularly occurring flood risks. Provision of age-appropriate and child-friendly furniture and facilities for co- and extra-curricular activities are also supported.

Climate Responsive Indicators: The six "essential" CRI criteria are: (i) building orientation for natural/" passive" heating and lighting; (ii) thickness of walls; (iii) minimum height of classrooms; (iv) wind catchers—where applicable; (v) position, size, and number of windows; and (vi) greenery and plantation of trees. The two "advanced" CRI criteria, which will be piloted in a subset of schools are: (i) use of special rooftop and ceiling materials for heat reflection/capture; and (ii) selection and use of environment-friendly/energy efficient building materials.

Implementation Arrangement

The Project will be implemented by SELD of the Government of Sindh (GoS), through the Project Management and Implementation Unit (PMIU). This will be housed in the RSU, which will monitor overall implementation of Project activities with TA support. The RSU will be headed by the CPM (Chief Programme Manager) who will be responsible for providing overall Supervision.

The design, implementation planning and construction supervision activities for the Component will be managed through Design and Supervision (D&S) firms. The firms will be hired by the PMIU_SELECT and will be responsible for conducting needs assessment, preparing site specific master plans and detailed designs and drawings, construction supervision and quality assurance of the Project.

Following are the implementation arrangements

- Mobilization of Contractors at the site, and the execution of works will be carried out in accordance with the approve design and drawings.
- D&S Firm will continue to provide Project Management Services such as construction supervision and quality assurance, as well as process the Interim Payments of contractor's submitted bills.
- Near the completion of the school's construction works, the procurement of furniture and other goods will be initiated, and furniture will be supplied to various schools in phases according to the requirements.
- PMIU-SELECT will monitor the construction work for each school in the respective district, ensuring compliance with approved drawings, specifications, and the construction schedule (including the Gantt chart). This monitoring will be conducted through a D&S firm.
- Monitoring will be conducted to ensure that the construction works adhere to standard procedures of construction quality, including the testing of material brought the site and compliance with environmental and social parameters indemnifies in the instruments.
- Through the D&S firm, the PMIU-SELECT team shall conduct stability tests, assessing the strength of buildings categorized as dangerous or having low strength. D&S firms shall prepare a detail report for the client before commencing demolition or refurbishments activates. The disposal mechanism for demolishing material adhere to the applicable government procedures and environmental and social management plan ESMP, in addition to the prevision required under the ESF by the World Bank
- PMIU-SELECT shall ensure the construction works through D&S firm, that construction works are followed all protocol of construction supervision and compliance with environmental and social checklists
- D&S firms shall certify that the material brought at site by the contractor are in accordance with the approved specifications and are being tested in line with standard practices. Detailed testing reports shall be communicated to the PMIU-SELECT and will be a mandatory part of the interim payment certificates. D&S firms shall also ensure that the material testing is conducted through renowned and approved testing labs.
- PMIU-SELECT will monitor through D&S firms the progress of works systemically according to the construction methodology and schedule as per the contract agreement.

Certify the allocation of resources by the contractor and make suggestions for any necessary changes and recommendations to improve practices at the site and avoid any forecasted delays in the progress. The D&S firms shall also provide the client with weekly fortnightly, quarterly and yearly updates on physical progress, including sketches and pictures in all respects

 PMIU-SELECT shall have the access to the online dashboard (developed through this consultancy) for the remote monitoring of construction works.

Objectives of the Consultancy

The main objective of developing the Dashboard is to remotely monitor, track the various aspect of project life cycle from, initiation, planning, design, procurement, construction execution, monitoring control and handover & closure. Following objectives for the PMIU SELECT dashboard as under:

- **1. Project Monitoring and Tracking**: The dashboard aims to provide a centralized platform to monitor and track various aspects of construction projects, such as progress, schedules, budgets, and resources. It allows stakeholders to have real-time visibility into the project's performance and helps identify potential issues or delays.
- **2. Data Visualization**: The dashboard should present construction-related data in a visually appealing and easily understandable manner. It may include charts, graphs, and other visual representations that enable users to quickly grasp the project's status and key metrics without needing to delve into detailed reports.
- **3. Communication and Collaboration**: Effective communication and collaboration among project stakeholders are vital for successful construction management. The dashboard can facilitate communication by providing a shared space where team members can access and exchange information, documents, and updates. It promotes transparency and enhances collaboration between different parties involved in the project.
- **4. Risk Management**: Construction projects inherently involve risks, such as unforeseen delays, cost overruns, or safety issues. The dashboard can help in identifying and mitigating these risks by providing risk assessment tools, tracking potential hazards, and alerting stakeholders to potential problems. It allows for proactive risk management and decision-making based on accurate and up-to-date information.
- **5. Resource Allocation and Optimization**: dashboards can assist in optimizing the allocation of resources, including labor, equipment, and materials. By providing insights into resource utilization, schedule, and progress, the dashboard enables better resource planning and allocation, leading to improved efficiency and cost control.
- **6. Performance Evaluation**: The dashboard can serve as a tool for performance evaluation, enabling stakeholders to assess the performance of projects, contractors, or teams. Key performance indicators (KPIs) can be tracked and measured against predefined targets, facilitating continuous improvement and identifying areas for enhancement.
- **7. Reporting and Documentation**: Construction projects involve a significant amount of documentation, including contracts, permits, change orders, and progress reports. The dashboard can streamline the reporting process by automating data collection, generating standardized reports, and maintaining a centralized repository for documentation for each school and activity, ensuring easy access to project-related information.

Overall, the primary objectives of developing a dashboard are to enhance project monitoring, improve communication and collaboration, mitigate risks, optimize resource allocation, evaluate performance, and

streamline reporting processes. The dashboard aims to provide stakeholders with a comprehensive and real-time view of construction projects, enabling informed decision-making and proactive management.

Scope of Work

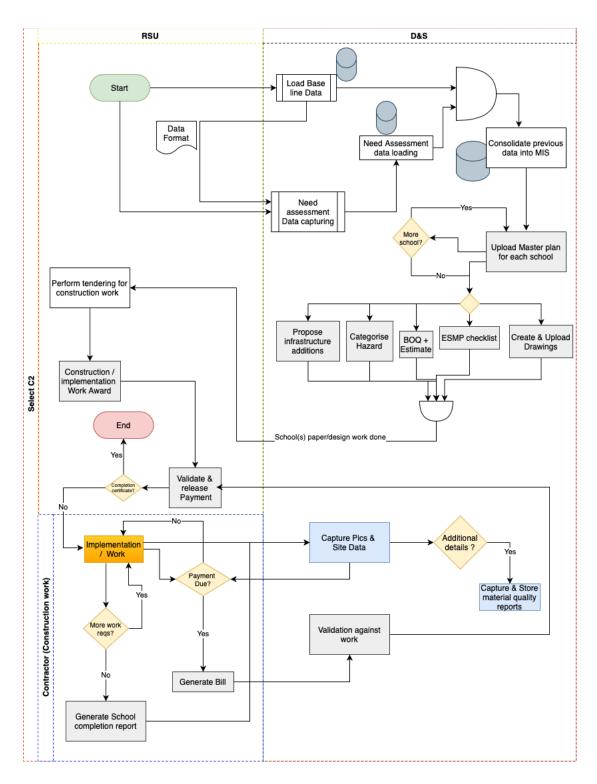
The firm is expected to develop and deploy a software system that captures the process flow defined in this document. The system will provide access to all involved stakeholders using web/mobile access according to their respective roles. The system has a workflow to capture field activities up to the site level and an information reporting mechanism for the management users of the program to monitor the overall progress & work done. The firm is also expected to pre-load the available project data into the system where identified (in this document). Once the system is developed and internally tested for deployment by the firm, a complete training cycle will be done, with the PMIU-SELECT identified resources, for end-to-end cycle.

The system development & software delivery is an interactive process between the software firm and PMIU-SELECT. Each deliverable by the firm has an associated feedback/acknowledgement cycle by the PMIU SELECT. Once the software is field deployment ready it is accepted by the PMIU-SELECT and shall be made live. The software firm shall provide services during the first phase of this software rollout/development in first set of schools, which is expected to last for 4 months and the support require for 8 months, the total tenure is for 12 months. Any bugs or minor adjustments identified shall be adjusted during the period.

Overall process workflow for C2

Below diagram represents the overall workflow & key execution level stakeholders and actions.

Each step of the diagram represents an activity in the system. Some of the activities are already done and some are to be done by the stakeholders. All the activities and related actions are defined in the subsequent sections of the document. The users involved in the activities are also identified.



Type of Users in the system

There are three execution level stakeholders for the work:

- 1) PMIU SELECT
- 2) Design & Supervision (D&S) firms
- 3) Construction / Implementation firm (the contractors)

- Construction/Implementation (the contractors) firm shall view its assigned schools only and all related D&S collected data and official documentation. The contractors are of two types (with visibility of respective data for assigned schools).
 - a) Construction workers
 - b) Goods suppliers
- PMIU SELECT shall be able to see all work & deliveries progress, with the option to comment.
- D&S shall be able to see only assigned schools related work only. The visibility will include all information from school & contractor its working with.

Additionally, there shall be additional stakeholders who are supervisory or supporting stakeholders. These users shall have view access to all content & reports for all schools in the system.

- 4) The World Bank team
- 5) SELD (School Education & Literacy Department)

The above two users (4 & 5) can add comment to any execution phase for any package / school. Those comments should be visible to content creator / approver.

Hierarchies defined in the system

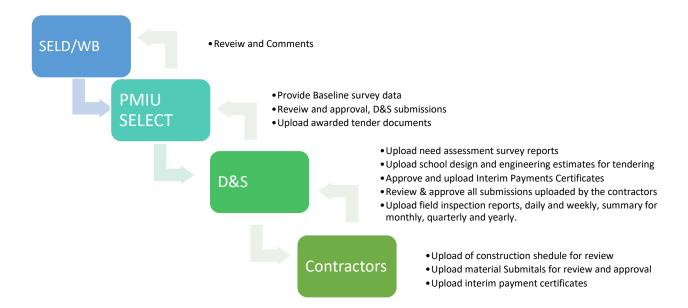
There are different execution & interaction hierarchies in the system for workflow & reporting.

- 1. Geographical hierarchy
 - Division > District > Tehsil > UC > Circle/village > School(s) Level of Filtration/reporting
- 2. Schools assignment / work categorization hierarchy
 - PMIU SELECT > D&S > Contractor (CW) > School(s)
 - PMIU SELECT > D&S > Contractor (Goods) > School(s)

The defined hierarchies are to be used for

- 1. All progress reporting & calculations for reporting dashboard
 - a. Construction Schedule upload by D&S firm or Contractors
 - b. Customized progress reports generation in system (Weekly, Monthly, Half Yearly)
 - c. Work completion against the stated stages
 - d. Total Payments made in real value & in percentage.
 - e. Total estimated quantities vs utilized Bill of quantities
- 2. Assigning respective user(s) to different stakeholders' categories for workflow management.

Workflow and reporting hierarchy



Using baseline data

- The baseline data of schools have already been collected and available. Base line data for each school is to be uploaded to database. Additionally consolidated baseline report is available and shall also be made part of the system, it'll be uploaded as a PDF for ready reference. The data as well as report is available with RSU. 732 short list of school data will be uploaded on dashboard
- Data analysis of 732 schools and its graphical represented on dashboard
- Data Filtration of division, districts, taluka and UCs

Needs Assessment data capturing

- The Needs Assessment exercise shall be performed by the D&S Firm.
- Data from the Needs Assessment Exercise will be made a part of the system for each school.
 Additionally, the report shall also be uploaded to the system for reference & visibility to all stakeholders.
- The D&S firm shall visit the school to perform the need assessment surveys of each school. Need
 assessment exercise shall assess the current state of the school's physical infrastructure to bring
 them at par to the required level. This assessment shall result into the proposed Master Plan for
 the school.
- A complete Master Plan will be prepared for each School. It'll be a drawing. A PDF and drawing file shall be uploaded for each school by D&S user.

Consolidate previous data into MIS

The Prerequisite of the working C2 MIS system is to consolidate & pre-load the already captured data from (i) the Baseline survey (school wise data); and (ii) the Need Assessment field work (school wise data)

into the system. The format of data & codes for "Needs Assessment field work" is consistent with already captured baseline data, so data sits on top of already collected data without mapping problems. The codes & geocodes from baseline are to be fed in to need assessment data capturing tool so there are no mistakes.

The subsequent field processes defined in this document shall be built on top these two data sources.

The data consolidation work is to be done by the software firm doing this consultancy.

Proposed Infrastructure

Following details shall be captured by D&S user(s) for each school.

- Number of New Rooms (with size)
- Number of rooms to be rehabilitated (with size)

Infrastructure shall fall into following three categories with approximate numbers:

- 350 New Construction School (up to Elementary Level)
- 50 New Construction Schools (up to Secondary Level)
- 200 Schools with New Construction of Rooms + Rehabilitation of existing rooms

Each school will have above information tagged to itself in the system. The entire field collected information should be geo tagged. The contextual school data is pre-loaded into the application, for each school, for ready reference in the field. The field mobile application(s) should be geo-locked, so data is collected on-site. The radius of geo-locking should be settable in the application by admin user.

Identify School Hazard Category (Assessment / Recommendations)

Each school shall also be assessed by the D&S Firm for hazard and marked accordingly into the system. Signed paper evidence is uploaded to the system.

 Hazard Prone (Coastal, Seismic, Floods and others)Non-Hazard Prone area (Normal Construction Plans)

Design & Drawings

10 to 20 Drawings per School are added in below categories. There may be multiple revisions of drawing/plans for each school. The latest drawing (accepted by the stakeholders) shall reflect actual implementation on site. Signed paper evidence is uploaded to the system in addition to soft copy.

Following drawings are specifically required for each school. These are to be time stamped, so sequencing is maintained.

Existing Plan

A PDF of existing plan is to be uploaded with the school.

Master Plan

A PDF of Master plan is to be uploaded with the school.

Design Parameters of Climate Resilient Indicators

A one pager (or more) report on indicators for each specific school is required to be uploaded onto the system.

Architecture Plans

A PDF of Architecture plan (s) is to be uploaded with the school.

Structure Drawings

A PDF of structure drawing(s) is to be uploaded with the school.

Mechanical, Electrical and Plumbing MEP Drawings

A PDF of existing MEP Drawings is to be uploaded with the school. The drawing & related BOQ (mechanical and electrical) material must be signed.

External Development Drawings

A PDF of external development drawing is to be uploaded with the school.

Other Drawings/ notes

Any other drawing or paper felt necessary by the stakeholders is to be uploaded against the school. The Other category shall have a description, title and actual file uploaded for a school.

Engineering Estimates

An estimated cost is to be assigned for each school by the D&S. Different parameters shall be considered to reach a rational cost. That shall be mentioned by D&S for each school.

The complete working & estimated cost is to be uploaded for each school in the system.

The estimates shall be based on detailed BOQ, also digitized into the system.

Approved BOQ

A PDF copy of signed bill of quantities (BoQs) for each proposed construction/school to be uploaded against the school for ready reference.

Item/material required for construction is mentioned in the BOQ.

The items/summarized items & categories they fall in is defined in the admin section of the system (refer Appendix III). The items & categories are visible for each school. These shall be used to digitize entire BOQ's (as applicable depending on school type/size). At each execution stage utilized/updated BOQ quantity shall be mentioned.

The latest quantities shall be reflected with every update into the system at each field execution stage by contractor & validated by D&S firm. The estimated BOQ developed by D&S firm shall not be visible to contractor firms.

BOQ for all items in respective heads should be defined in the system. It includes all work areas wood works, electrical, construction, plumbing, solar, etc.

A summary of the BoQ (below table) will be designed for each project, the items, cost, and physical progress (to be monitored at each stage) are subject to change in each project, a digital copy of the summary is required to be entered into the system, for validation and cross-check against the original contract documents PMIU-SELECT team will be responsible.

SUMMARY OF BILL OF QUANTITIES

Bill No.	Items Description	Bid amount	Physical Progress Weightage
1	(Foundation to First Slab + Beam + B/Masonry) Ground Floor	40,985,295	29%
2	(Second Slab + Beam, Block Masonry) First Floor	13,326,944	9%

3	(Third Slab + Beam, Block Masonry, OHWT) Second Floor	16,246,832	11%
4	(Finishes Works, including plumbing Electrical) Ground Floor	26,377,125	18%
5	(Finishes Works, including plumbing Electrical) First Floor	15,376,700	11%
6	(Finishes Works, including plumbing Electrical) Second Floor	15,730,813	11%
7	External Development Works	10,586,272	7%
8	Rehabilitation Works	5,000,000	3%
		143,629,982	100%

ESMP (Environment and Social Management Plan Document / ESMP CHECKLIST

The Environmental & Social Management Plans (ESMP) will be prepared by D&S Firms at District Level and ESMP checklist should also be filled by D&S and uploaded into the system for each school.

Checklist PDF file as well as digital data should be inputted into the system.

Tender work

Tender work will be of the following types.

- 1) Civil /Construction work award and
- 2) Furniture & miscellaneous items delivery.
- 3) Alternate Power Supply to School Buildings (Solar Based System) PMIU-SELECT & D&S Firm will decide to tender this component with Civil Works or separately
- 4) Water Filtration Units and Coolers PMIU-SELECT & D&S (Design and supervision) Firm will decide to tender this component with Civil Works or separately

This shall be done for all the schools in the project. Schools may be clubbed together for a cumulative contract. However, each school in the system will have a unique presence and all documentation is required to be completed individually.

The tendering/procurement work shall be carried out by PMIU-SELECT staff.

Construction / Implementation work award

Once the tender work is complete and implementer / Civil Works Contractor is chosen. The work is awarded to the winning bidder. The award letter is formally handed over and is uploaded to the system.

- Work Award Letter with Date
- Contract Document with signed copy of BOQ

These are the two key official documents prepared and (scan) loaded into the system with award of work.

The construction firms as well as equipment delivery firms shall have system access, reviewing there related schools & documentation. The school shall be assigned to one construction company and separate equipment delivery firm(s). Each work on school shall be carried out by separate firms. The respective orders & related delivery / work progress shall be uniquely visible to respective firms.

- Construction/Implementation firm shall view its assigned schools only and related D&S collected data.
- RSU shall be able to see all works & deliveries progress. With option to comment.
- D&S shall be able to see assigned schools related work only.

Implementation work

Once the contract is awarded and mobilization advance is handed out the actual field work starts. The field work includes multiple phases. Each phase or multiple phases make up a certain payment. The completion of a phase or eligibility for a payment is judged by the D&S, on pre notified grounds; and different phases are marked as complete with site evidence & data.

Each captured data from field is geo-coded & geo-timed for accuracy and reference.

The work schedule & respective weightages are to be added to the system. The figures should be editable by the RSU admin user; those shall be fixed at the start of work. Following are example data for how workload is distributed amongst different stages.

Site work Execution percentage	%	School Finishes work stages	%
		§ Plaster	25
Site Preparation (Clearing of ground, mobilization of equipment		§ Doors & Windows	15
and HR)	5	§ Electrification	10
Laying of Foundation (Sub Structure)	10	§ Plumbing	10
Column Casting	10	§ Flooring	10
Beams and Roof (Floor Wise)	20	§ Paint Works	13
School Finishes	40		- 13
External Development	4	§ Water Tanks (UGWT, OHT)	7
Climate Resilient Indicators capturing	1	§ Utilities (Water Supply, Sewerage Disposal, Electrification	
Supply of Furniture, , Water Coolers Filters, Solar Power Energy	10	Connection)	10
	100		100

Note: above is tentative breakup of each stage, actual milestones will be provided by D&S firm.

The items/summarized items used from the BOQ, for each of the specific school, are recorded in the system by the implementation firm, at each work stage. These are validated by the D&S firm for correctness and confirmed into the system. In case of any disapprovals the field implementation firm shall be able to submit updated list.

A visiting monitoring user shall be able to record its own version of BOQ's, incase different from reported BOQ's, while reviewing the work for any stage & school.

The <u>material quality testing reports</u> (as prescribed in the contract); should also be uploaded into the system as required for each stage; alongside the other information captured into the system, at different work stage. In case, some reports become available later (ex: concrete composition or brick/block PSI) those should be added to the system referencing the previously captured data with a new date.

Material testing reports are pre-defined and are to be collected for different stages of work for schools. The reports have a scanned hardcopy as well as few key indicators to be digitized in the system. All material quality monitoring reports shall be uploaded into the system.

Following are different work stages that shall be captured for each school into the system. System should support additional/edited stages for different construction sites.

Site Preparation (Clearing of ground, mobilization of equipment and HR)

Information shall be collected by mobile-based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

The items/summarized items used from the BOQ, for the specific school, are recorded in the system.

Laying of Foundation (Sub Structure)

Information shall be collected by mobile-based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

The items/summarized items used from the BOQ, for the specific school, are recorded in the system.

Column Casting

Information shall be collected by android-based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

The items/summarized items used from the BOQ, for the specific school, are recorded in the system.

Beams and Roof (Floor Wise)

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III

School Finishes

This includes multiple stages and each stage is captured into the system using pictures & data forms. You may find details below:

1. Plaster

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III

2. Doors& Windows

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

3. Electrification

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

4. Plumbing

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

5. Flooring

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

6. Paint Works

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

7. Water Tanks (UGWT, OHT)

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

8. Utilities (Water Supply, Sewerage Disposal, Electrification Connection) Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

Water Supply Mechanism

(Ground Water, Surface Water, No water Available)

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

Sewerage Disposal

(Existing Municipal Line Disposal, Construction of Septic Tank and Soak Pit, others)

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

Power Supply

(Metered connection, Kunda Connection, No connection, Solar Powered, Hybrid System) Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

External Development

(Trees, Ground Leveling, Grassing, Pavers, Main Gate)

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

Climate Resilient Indicators capturing

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format will be provided by D&S firm

Supply of Furniture, , Water Coolers Filters, Solar Power Energy

Information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format is added here as appendix-III.

Capture Pictures & site data

As work progresses, D&S continuously visits the site for guidance & evidence-based information capturing from the field.

There can be multiple visits to each school site. Each visitation data is time stamped. Visits are mandatory to capture implementation milestone already described above and is due before bill approvals.

That information shall be collected by mobile based application. The information is captured on prescribed format for each phase. The format will be provided by D&S firm.

The stage of work is determined and recorded into the system. BOQ utilization is updated into the system for the specific work stage.

Capture additional site data

Additional details as requested by the RSU – during project execution - are to be captured by the D&S firm. The information is captured on signed paper as well as uploaded into the system.

Additional data also includes

- Deficit liability period details
- o Etc.

Generate Bill by Contractor

Once the contractor completes a milestone. It initiates the bill. The bill is uploaded into the system by the contractor. The bill indicates the completion stage & due payment.

Generally following are different payment stages for all schools/ packages.

The information is quantified into the system; in addition to keeping track of scanned signed hardcopies; at all the three stages of the payment workflow.

Payments	Activity Initiator	Validation -> Release
Mobilization Advance	Contractor (CW)	D&S, RSU
1st Bill (20 to 40%)	Contractor (CW)	D&S, RSU
2 nd Bill (21 to 60%)	Contractor (CW)	D&S, RSU
3 rd Bill (41 to 80%	Contractor (CW)	D&S, RSU
4 th Bill (70 to 90%)	Contractor (CW)	D&S, RSU
5 th Bill – Final Bill (10-15%)	Contractor (CW)	D&S, RSU

The routing of information shall allow resubmissions and corrections by initiating party.

System shall have reports identifying payments (Done/In process/Remaining) as a percentage and as an absolute value for different geographical & contractual hierarchies defined in the system.

Once generated; bill information is routed to D&S for further processing and onwards to RSU. The estimated BOQ's and BOQ's quantified in the system (as per relevant construction stage) are also visible alongside the generated Bill to RSU. The user has ready access to the signed uploaded documents as well as digitized information.

Validation against work by D&S firm

Once the bill is generated against the already prescribed work/delivery threshold by the civil works contractors. The work is validated by the D&S based on site visitation and actual progress on ground. Once

satisfied the D&S moves toward payment release. The D&S completes the required paperwork, sign & stamp it, and upload to the system. The information is routed to RSU for further actions.

Validate work & release payment by RSU.

RSU is the signatory authority on the release of funds at different stages of the procurement. It works on the recommendation of D&S on certain stages, internal validation and also based on contract agreement. All payments from mobilization advance; to payments against work delivery & up to completion/sign-off are covered here.

Generate School completion report

Once the contractor feels all the work is completed from their end, they shall initiate the completion report. The related evidence will be captured by D&S firm and added to the system. The evidence includes signed papers as well as site pictures and remarks. The information is captured on prescribed format will be provided by D&S firm.

Overall reporting & Dashboard

The project team will have access to a Dashboard that will be showing following reports visually and in textual forms, for all geographical hierarchical levels:

- 1. Total Schools vs total active school's vs completed schools
- 2. Total budget vs the budgets utilized made
- 3. Work award percentage to contractors
- 4. Work completion percentage (Progress of Work)
- 5. School profile with all indicators report downloadable in pdf format
- 6. School Graphical reports divisions/districts/taluka wise (downloadable in pdf format)

Delay in work or deliverables by different stakeholders will be highlighted against pre-set timeline in the system. The data will also be emailed to respective users.

Technical Requirements of the System

Software User Requirements

User requirements are defined in the scope of work under Annexure I.

System Architecture

The Architecture of the system should be component based where the components can be separated or integrated easily. The components must be well defined so that modules can be reused where and when required, with adoption of the Modular approach of design. The vendor must identify some of these modules and describe in his technical proposal document how this would be achieved.

System performance

System Performance, that is handling of data and all necessary database indexes should be well catered for by the development team. The database should be optimized and all reports should be running & returning as fast as technically possible. Materialized views should be implemented & automated as necessary.

Architecture should cater for high availability, and scalability.

Incremental backups & daily backups should be automated.

Audit Trails and complete data log

The audit trail feature would be available in the proposed system, which will inform when and who has created or modified the data. The system should also be able to keep record of all edited/deleted data too. Nothing shall be actually deleted in the system.

Platform and Technology

- i. The proposed system would run MariaDB version 10.6.x database server. The data will be stored into MariaDB database Server after necessary validation.
- ii. The proposed system must be a web-based system and with (online/offline) mobile based inter--faces to capture, review & edit field collected data both in real-time & offline mode, data is automatically synced when a network connection is found.
- iii. Mobile application should run on android (choice of programming language React-Native, Kotlin & Swift). Additionally provisioning of an iOS application will be a plus.
- iv. The choice of the front-end programming language and back-end platform will be php/Laravel / Node Js/Vue Js/javascript and MariaDB/MySql. The necessary inputs and the possible outputs that could be generated from the system should strictly conform to what has been outlined here, finalized in the SRS document and subsequently the prototype.
- v. The system must also make use of any popular front-end UI frameworks [such as Twitter Bootstrap, Foundation, Google Material Design, Material-UI, Semantic UI and etc]
- vi. The reporting will have to be done graphically as well as in text/tabular form. The report generation in the proposed system would have two categories, the standard reports and ad hoc reports. The standard reports will be designed and uploaded during the implementation and for ad hoc reports; the system will have a customized Query Builder feature. The data with all indicator or selected columns shall be downloadable as MS Excel Sheet, or csv file.

In case the vendor chooses to propose any third-party tool(s) for the solution for tuning performance, adding security features, or rapid application development, or any specific add-in software package required for analysis and processing data, full justifications and cost must be provided in the proposal.

Security Features

The software must conform to ISO27001 data security standards. The following are also to be strictly complied by the firm.

- i. The system would ensure that the users follow two factor authentication login procedures [email/text].
- ii. The access to the database & functionality should be based on the user roles of the organization.
 - iii. A proper audit trail must be built within the proposed system. It should capture all logins and edits & views with timestamp and user trail.
 - iv. SSL Certificate should be installed covering all systems.

Concurrency, Browser Compatibility and Bandwidth Optimization

Since, bandwidth of the network through which the application is going to be used is low; the software developed must run optimally (page load time below 30 seconds) on a PC connected to a network with minimum network bandwidth of 56 kbps. The system including the database must support concurrent accesses.

The system developed must be compatible with

A Microsoft Internet Explorer 11 and above (compatible with Microsoft Edge)

- B Mozilla Firefox 50.0 and above
- C Google Chrome 55.0 and above
- D Safari.

The system must run on any screen sizes.

Development Methodology

Modular based approach based on prototyping model must be used for the design and development of the system.

- i. The Vendor will initially carry out a detailed requirement study alongside the given flow and develop a Software Requirement Specification (SRS) document, Software Design document and associated TO-BE workflows.
- ii. On acceptance of SRS, workflows and Design document by the client/procuring agency, the vendor will develop and present a non-functional prototype (HTML, CSS prototype) of the system to the client and obtain approval for each module. The prototype shall be developed for both:
 - Web application
 - ii. Mobile application

This will help in better user acceptance of the system.

- iii. After the development is over, the developed software will be first tested in the premises of the vendor by the testers from vendor's side. Any functionality bugs reported shall be fixed by vendor. The complete test case logs are part of deliverable of the project. Once internally okayed by the firm the software shall be tested for user acceptance by the RSU & identified users over a select group of schools.
- iv. The final testing of the software package with data will be done at the premises of the RSU and involved stakeholder's premises. After the user acceptance test succeeds, the software will be deployed for live operation at RSU; after configuring the base data. Any bugs identified/minor adjustments during the process; or subsequently for up to a year (post live) shall be fixed by the firm.
- iv. The bugs are classified into two categories: Critical and Non-Critical. The Critical bugs are those which freeze the system and the normal functioning of procuring agency or any other Agency is affected by the system's malfunction. Otherwise, it will be non-Critical. The vendor must give immediate attention to the Critical bugs and attend to them within 24 hours of receiving the complaint from the client in any form of media. The critical bugs must be fixed within 5 working days. However, in some exceptional cases, the vendor may negotiate for time extension if acceptable to the client. The Non-critical bugs should be fixed within two weeks.

Reporting & GIS

- All schools should be visible on map at assigned GPS coordinates.
- The different metrics associated with progress of work should be color coded for each school/hierarchical selection based on data in the system. In case of aggregated values use polygons on map for colored representation.
- The textual data on key figures shall also be displayed alongside
- A front-page dashboard with high level information represented through charts & textual data is to be developed covering key KPI's.
- Additional reporting interface with around two dozen custom defined reports shall be added. Those reports format shall be agreed before prototype approval.

- Tentative execution work plan (with different days required for each stage) depending
 on the size/category of the schools should be added to the system. There may be more
 than one plans because of the construction type & phases. The start data should also be
 mentioned in the system. That data shall be considered as a base data for the ready
 reference of actual execution on ground.
 - i. Those schools for which the contract has been initiated; they are marked for regular monitoring in the system.
 - ii. The schools whose execution progress; conforms to the given plan should be highlighted as normal or green.
 - iii. Those deviating from the tentative timeline with X amount of time (say 120% or more) shall be highlighted as yellow.
 - iv. Those deviating from the tentative timeline for say over Y (example 150% or more) of the suggested timelines shall be marked as red.
 - v. The alert list of all schools which falls in yellow or red category; shall be emailed (on defined schedule) to the RSU / D&S users for follow-up.

Network connectivity requirement

The proposed system shall be deployed over the provided hosting by the client & accessible through WAN in the field and to the involved stakeholders. The stakeholders should connect and communicate using mobile and/or web-based interfaces.

The client will be responsible for setting up of the Server and Database Server and providing connectivity to vendor for (UAT) test (after internal testing by the firm) & training deployment of the system. However, uploading of the system to live, maintenance of the server once the application is finalized will be done by the client; however, maintenance of system shall be done by vendor under the Warranty Support and maintenance contract thereafter on training/test environment.

Training of SELECT Users / Master Trainers

The vendor must provide comprehensive training to master trainers (Lead Project Engineer, Operational resources assigned by PMIU-SELECT to monitor / lead field implementation) who shall serve as trainers for subsequent trainings in the full rollout) in the operation of the information system. The training should be accompanied by training material which shall include:

- 1- User manuals of the system covering all features. Including functionality screen recorded video(s) with voice over.
- 2- System Administrative/configuration manual
- 3- Documented compliable source code.

Warranty, Support, Maintenance & Change Management

- The vendor must provide support for a period of one year from the time of acceptance of the software by RSU (Warranty support).
- During the above-mentioned warranty period, the vendor will be responsible for making changes/modification as well as to fix the bugs, if any.
- For the major changes, a separate change management contract will be agreed and signed between the client and the vendor.

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Backup and Recovery

- There will be one Main Web Server, one main Database Server and one third Server which will serve as the backup of both the Web and Database servers. The synchronization of the Databases will be scheduled, and a hot backup will be done on a daily basis.
- If any one or both of the servers fail, the backup server(s) should take charge within 2 hours of the failure of the main system.
- The problems other than hardware failure will be addressed by the vendor under warranty support after the user acceptance & go live.
- The vendor will also provide adequate training to the technical team from the PMIU SELECT so
 that routine checks and basic recovery can be handled in-house. In addition, the vendor must
 train (the in-house team) on the following during:
 - i. The backup of the database taken on daily and/or weekly incremental basis.
 - ii. Full back up of relational database and source code files taken on monthly basis whenever changes take place.
 - iii. A full (cold) backup should always be kept in a safe location.
 - iv. Implement appropriate security measures to protect backup data from unauthorized access.

Conformity with Standards

The to-be developed system should strictly adhere to the following standards:

- 1. Data security to ISO27001 standards.
- 2. Source code should be peer-reviewed and well commented. A standardized approach shall be followed.
- 3. Quality assurance of the software should be done in a standardized way. Complete test cases list should be prepared against the system specifications.
- 4. Training material should be complete & self-sufficient; and new users should be able to use that without external instructions (if needed).

Checklist of Project Deliverables

- 1. Software Requirement Specification Document (High level SRS and Low-level SRS)
- 2. Software Design Document (SDD)
- 3. Non-functional/Static HTML Prototype
- 4. Working and Tested Software with source code
- 5. User and Administrator Manuals for the system including Online Help
- 6. Setup and Release notes for each new release
- 7. Test Cases and validation/fixation Reports
- 8. All database scripts
- 9. Training of trainer's material
- 10. Any other relevant documents, supporting software/licenses, etc.

Use of Source Code Management Tools

The vendor must manage its source codes through a source code management tools like Subversion (SVN) and GIT or any other source code management tools, so that many programmers can work in parallel without duplication of work. It will also be a useful tool to track previous versions of the codes and will be useful for debugging purpose.

Ownership of Source Code and other Intellectual Property

The PMIU SELECT will be the rightful owners of the Source Code and all Intellectual Property associated with the system and they will have full rights over the ways they can use these resources. The management system so developed will be the sole property of the PMIU SELECT or any agencies designated by them. The Software Development Vendor (SDV) will have no right to commercially use or apply the software elsewhere.

CMMI certified company

The vendor must at least be a CMMI level 2 company with a valid active license for at least three years.

Naming Convention/standard

In order to keep source codes organized, vendor must strictly follow standards for forms, reports, database, triggers, views, stored procedures, coding etc. The standard should be mentioned as part of the proposal and should comply to a third-party standard.

Two factor authentication – login

All login in the system should be linked as two-factor authentication. Two factor may use email-ID or Phone number or authenticator app on phone. All users of the system should have an email ID.

Tentative Schedule of Delivery and Payment

The entire contract will last approximately 04 months for development & additional 08 months for support. The contract is expected to begin in 15th of October 2023 and will run until 12 months of contract signing. However, depending on operational requirements these dates may be revised.

	Deliverables	Timeline / deadline	Payment
1	Signing contract	As per given time ir	0%
		bidding documents(T)	
2	Inception Report	T+(1 WEEKS) (X)	10%
3	Initial documentation deliverable:	T + 3 weeks	10%
	a. Software Requirement Specification Documentb. Proposed system modules & integrations	T+2 weeks T + 3 weeks	
	c. Software Design Document (SDD)	. Yourgens	
4	System visuals deliverable:	T + 5 weeks	10%
	a. Non-functional HTML Prototype for Web		
	b. Prototype for Mobile applications.		
	PMIU Feedback accommodated / revisions on above	T+6 weeks	
5	Module wise deliverable:	T + 8 weeks	20%
		T + 10 weeks	
	a. Working and Tested Software with source code		

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		st Cases and validation/fixation Reports		
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6	Train	ing material deliverable:		
		or and Advisinistrator Namuals for the avertors including		
		er and Administrator Manuals for the system including		
		iline Help (Video tutorial)		10%
	D. Ira	aining of trainer's material	T + 13 weeks	
_	Tracin	in a matarial deliverable.		100/
7	1 rain	ing material deliverable:	T . 44	10%
		Training of trainer's	T + 14 weeks	
		Training of trainer's Run a complete project cycle mockup		
	D.	Run a complete project cycle mockup		
8	System	n material deliverable:		
	System	in material denverable.		
	1.	Complete database scripts	T + 16 weeks	10%
		Commented & peer reviewed source code	I TO WCCKS	10/0
		Bug fixing status report		
		Any other relevant documents, supporting		
		software/licenses, etc.		
	5.	Setup and Release notes with each new release		
	6.	MIS/technical team handover acknowledgement.		
	SUPPO	ORT PERIOD DELIVERABLES (Iterative)		
9	Syster	m material deliverable:		
	1	Updated database scripts		200/
		Updated database scripts Updated source code [Online check-in]	T . A a the	20%
		Updated relevant documents, supporting	T + 4 months	
]	software/licenses, etc.	to	
	4.	Updated Setup and Release notes with each new release	T + 12 months	
		MIS/technical team handover acknowledgement.		
	1		I .	1

Qualification and team composition

The minimum requirements for the Project Development Team from the vendor's side are:

- There must be 1 full time National Project Manager with sound technical knowledge of IS Project Management, one System Analysts/UI expert with sound knowledge of System and Database Architecture three Developers and a certified Quality assurance professional having thorough knowledge on systems & best practices.
- 2. The Project Manager, System Analyst, Developers, or any other technical member of the team must be involved in the project full time and shouldn't leave until the product is accepted by the

client, unless under unavoidable circumstances whereby permission to replace a particular resource may be sought in written form, from the client (RSU) on a condition that there would not be a major impact on the project. Thus, it is advisable for the bidder to have a bond signed with the personnel involved in the project at least for the period of the execution of the project.

The vendor may propose any additional professionals that may be required for the successful implementation of the project with proper justifications.

- The firm should have 5 years overall experience in (Software development & delivery in the field).
- Firm with prior experience in (Software development targeting construction sector) shall be preferred.
- The key staff team members should possess relevant qualification, experience, expertise, and skills to carry out assignments in areas covered in employer's requirement.
- The vendor must at least be a CMMI level 2 company with a valid active license for at least three years.

The (*minimum*) team of experts shall be as below:

Staffing Breakup / Person Months

Key Experts

Position	Type of Position	No	Estimated Man Months	Qualification	Experience
Team lead / Project Manager	Key Expert	1	4D+8S=12	Master's/Bachelor's degree (sixteen (16) years of education) in computer science, from a foreign or local university duly recognized by the Higher Education Commission (HEC) of Pakistan. Project management certification desirable.	At least 05 years of experience as Software Project manager. Overall, 8 years of Software related experience Skills: Project Management; System Analyst; Business Process Engineer; Deep Software & databases understanding, lead and manage project teams, Abilities: Result oriented, motivated & meet deadlines.
Software Engineer	Key Expert	3	2x4D+1x8S=16	Master's/Bachelor's degree (sixteen (16) years of education) in	At least 04 years of experience as Software Engineer.

				computer science, from a foreign or local university duly recognized by the Higher Education Commission (HEC) of Pakistan.	Skills: PHP/Laravel; JavaScript; NodeJs; MongoDB/SQL; Android(Java, React native, Kotlin, Swift); .NET; Technical documentation; Software Development; Databases configuration & SQL, Version Control and Collaboration Tools (e.g., Git)
					Abilities: Result oriented, motivated, complex technical problems, and propose effective solutions. & Passionate about coding.
Quality Assurance Engineer	Key Expert	1	1x4D+1x8S=11	Master's/Bachelor's degree (sixteen (16) years of education) in computer science, from a foreign or local university duly recognized by the Higher Education Commission (HEC) of Pakistan. Quality Assurance certification required.	At least 05 years of experience as Software Quality Engineer. Certified QA Engineer. Skills: Blackbox testing; Test cases documentation Abilities: Attention to detail; Result oriented & motivated.
User Interface expert / Documentation expert	Key Expert	1	1x2D+1x8S=10	Master's/Bachelor's degree (sixteen (16) years of education) in computer science, from a foreign or local university duly recognized by the Higher Education Commission (HEC) of Pakistan.	At least 04 years of experience as User Interface designer. At least 02 years of experience as business/system analyst. Skills:

			Certified UI desirable.	Software Documentation; mockups; Proficiency in UI design tools (e.g., Adobe XD, Sketch, Figma) and front-end web technologies (HTML, CSS, JavaScript). Understanding of responsive design principles and mobile UI patterns. Good understanding of Databases & software. Abilities: Attention to detail; Result oriented & motivated.
Total M	lan Months	49		

D=Development Stage, S=Support Stage

Details on man-months & its approximate requirement distribution over the two phases.

Position	Development Stage	Support Stage	Total Man Months
Team lead / Project Manager	1 resource x 4 months	1 resource x 8 months	12
Software Engineer	2 resources x 4 months	1 resources x 8 months	16
Quality Assurance Engineer	1 resource x 3 months	1 resources x 8 months	11
User Interface expert / Documentation expert	1 resource x 2 months	1 resources x 8 months	10
		Total	49

Selection Method

The firm will be selected through Request for Quotation (RFQ-Open National) in accordance with the procedures set out in the World Bank Procurement Regulations for IPF Borrowers, July 2016 (revised November 2017 and August 2018).

Appendix-I, Summarized steps & system users

Note: The monitoring and control of user actions and the permissions granted to them within a system. It involves tracking user interactions and managing their access to specific features or functionalities. This process ensures security, privacy, and efficient utilization of resources by allowing users to perform authorized actions while preventing unauthorized access or misuse. By implementing user-wise activity monitoring and module access/authentication, enhance accountability, protect sensitive information, and maintain a secure and structured environment for their users.

			ACTIVITY	ACTIVITY REVIEW &	ACCESS ON TABLET /mobile Application ACCESS ON			Web Port	tal				
			PERFORMED BY	APPROVAL BY		ACCESS (JN TABLET / Mobile Appl	lication		_ ^	ICCESS ON	Web Port	aı
tage of each school	Report / Drawing PDF, Punching Information	Description			RSU	D&S	Contractor (C&W)	W.B	SELD	RSU	D&S	W.B	SE
Number of expected users	Punching information				20	165	Package Wise (2 to 3 members) total 200 members	15	15	10	10	15	1
aseline Report	Report	Already carried out, data needs to be transferred to dashboard		RSU			200 members						
leed Assessment Report	Report	School wise Need Assessment Report	D&S	RSU									
Master Plan	DRAWING	A complete Master Plan will be prepared for each School	D&S	RSU									
roposed Infrastructure	Punching Information	New Construction (UPTO Elementary Level) New Construction Upto Secondary Level New					Applied to all						
		Construction of Rooms + Rehabilitaiton of existing rooms	D&S	RSU			activities which are merged. The						
dentify School Hazard ategory (Assessment /	Punching Information	Hazard Prone (Coastal, Seismic, Floods and others), non Hazard Prone area (Normal Construction Plans)					Contractor will be						
ecommendations)		(and a second a seco	D&S	RSU			provided to access all the activities of						
Proposed Infrastructure	Punching Information	Number of New Rooms	D&S	RSU			the Packages only						
	Punching Information	Number of rooms to be rehabilitated	D&S	RSU			awarded to a particular						
esign & Drawings		10 to 20 Drawings per School as per below folders	D&S	RSU			Contractors (We						-
	DRAWING (PDF)	Existing Plan	D&S	RSU			expect 100 Packages						+
	DRAWING (PDF)	Master Plan	D&S	RSU			so each package		_				+
	ONE PAGE REPORT DRAWING (PDF)	Design Parameters of Climate Resilient Indicators Architecture Plans	D&S	RSU			may have 02-03						-
	DRAWING (PDF)	Structure Drawings	D&S	RSU			Access)	0		2			-
	DRAWING (PDF)	MEP Drawings	D&S D&S	RSU RSU									+
	DRAWING (PDF)	MEP Drawings External Development Drawings	D&S D&S	RSU RSU									+
	DRAWING (PDF)	Revision of drawings design in case any changes at site required	D&S D&S	RSU									+
	DRAWING (FDF)	Others	D&S D&S	RSU									
gineering Estimates	REPORT (WORD/PDF)	An estimated cost of each school	D&S D&S	RSU		1				e e	1		+
oproved BOQ	REPORT (WORD/PDF) +	School Wise BOQ	U60	nou									
	Digitised BOQ		D&S	RSU									
MP / ESMP CHECKLIST	REPORT (WORD/PDF)	A School specific checklist for ESMP compliance	D&S	RSU									
D EVALUATION REPORT	REPORT (WORD/PDF)	Bid Evaluation Approved Report	RSU	RSU									
ogress Reports (Technical	REPORT (WORD/PDF)	Work Award Letter and Date	RSU	RSU									
d Financial)	REPORT (WORD/PDF)	Work Award Cost of School	RSU	RSU									
	REPORT (WORD/PDF)	Mobilization Letter and Date	Contractor (CW)	D&S									
	REPORT (WORD/PDF) + Punching key data	Material testing report of School work for different stages	RSU	RSU									
		Site Preparation (Clearing of ground, mobilization of equipment and HR)	Contractor (CW)	D&S			Applied to all						
		Laying of Foundation (Sub Structure)	Contractor (CW)	D&S			activities which are						Т
		Column Casting	Contractor (CW)	D&S			merged. The						т
		Beams and Roof (Floor Wise)	Contractor (CW)	D&S			Contractor will be						Т
		School Finishes	Contractor (CW)	D&S			provided to access						Т
		• Plaster	Contractor (CW)	D&S			all the activities of						
	EXCEL BASED	Doors & Windows	Contractor (CW)	D&S			the Packages only	2			1		
	PERFORMANCE SHEET +	Electrification	Contractor (CW)	D&S			awarded to a	1			1		Т
	SITE PROGRESS PICTURES	Plumbing	Contractor (CW)	D&S			Contractors (We						Т
	(STORAGE CAPACITY TO STORE 300 PICTURES OF	• Flooring	Contractor (CW)	D&S			expect 100 Packages						
	ONE SCHOOL FROM	Paint Works	Contractor (CW)	D&S			so each package		4	-			
	INCEPTION TO FINISHING) +	Water Tanks (UGWT, OHT)	Contractor (CW)	D&S			may have 02-03						
	BOQ consumption for the	 Utilities (Water Supply, Sewerage Disposal, Electrification Connection) 	Contractor (CW)	D&S			Access)						
	stage	Water Supply Mechanism (Ground Water, Surface Water, No water Available)	Contractor (CW)	D&S									
		Sewerage Disposal (Existing Municipal Line Disposal, Construction of Septic Tank and Soak Pit, others)	Contractor (CW)	D&S									
		Power Supply (Metered connection, Kunda Connection, No connection, Solar	CONTRACTOR (CVV)	545									t
		Powered, Hybrid System) External Development (Trees, Ground Leveling, Grassing, Pavers, Main Gate	Contractor (CW)	D&S		ļ							+
			Contractor (CW)	D&S									+
		Climate Resilient Indicators	Contractor (CW)	D&S									1
	REPORT WORD/PDF	Tender Preparation of School Furniture , Water Coolers Filters, Solar Power	10000	200									
		Energy	D&S	RSU			_						+
	REPORT WORD/PDF	Procurement Report of Furniture, , Water Coolers Filters, Solar Power Energy	RSU	RSU						-			1
	REPORT WORD/PDF	Furniture Bid Evaluation Report (Furniture, Water Filters, Solar)	RSU	RSU			Applicate						£
	REPORT WORD/PDF	Supply of Furniture, , Water Coolers Filters, Solar Power Energy	Contractor Goods	RSU			Applied to all activities which are						1
		BILL PROCESSING (Threshold)	D&S	RSU			merged. The						4
	Punching Information	Mobilization Advance	Contractor (CW)	D&S, RSU			Contractor will be						
	REPORT WORD/PDF	Ist Bill (20 to 40%)	Contractor (CW)	D&S, RSU			provided to access						
	REPORT WORD/PDF	2 nd Bill (21 to 60%)	Contractor (CW)	D&S, RSU			all the activities of						
	REPORT WORD/PDF	3"d Bill (41 to 80%	Contractor (CW)	D&S, RSU			the Packages only						T
	REPORT WORD/PDF	4 th Bill (70 to 90%)	Contractor (CW)	D&S, RSU			awarded to a particular				1		T
	REPORT WORD/PDF	5 th Bill – Final Bill (10-15%)		D&S, RSU			Contractors (We						t
	REPORT WORD/PDF	Deficit Liability Period Details	Contractor (CW) Contractor (CW)	D&S, RSU D&S, RSU			expect 100 Packages				1		+
		School Completion Report		1,000,000,000,000		1	so each package			8	8		+
	REPORT WORD/PDF	- Toronto	Contractor (CW)	D&S, RSU		1	may have 02-03						+
	REPORT WORD/PDF	Completion Certificate to the Contractors	D&S, RSU	RSU			Access)						1
	REPORT WORD/PDF	Inugration of School & Functional New Building	RSU	RSU									F
		Access to information, download and provide comments											T
		Can upload, change, correct, access, download and others											
		View and download only											
		No access and can not view	1										

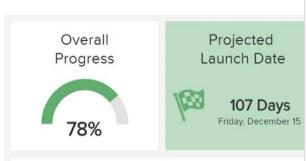
Appendix II – Sample dashboard indicators

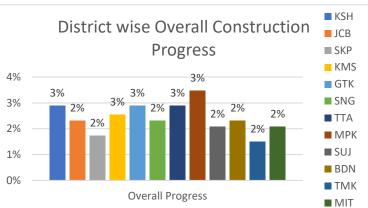
(a) Progress & Expenditure panel – dashboard front end

The progress panel will indicate the following representations of the progress

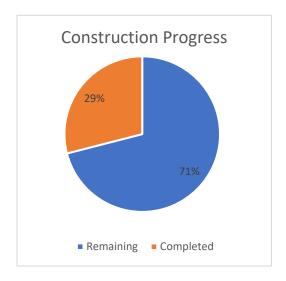
- (i) Bar Chart
- (ii) Pie Chart
- (iii) Gantt Chart
- (iv) Timeline Chart
- (v) Total payments vs pending payments

Sample charts









Appendix III

Note: the tentative format for the stage wise, schedule & weightages, the following templates may be used for calculating payments for each milestone, the actual will be based on the Bill of quantities, which will be furnished by D&S firm, after the design development phase as these bills of quantities varies from site-to-site condition. Items shows in each stage may be changed depending upon the site of school/ design etc, for every contract these items may varies, the data base will be developed and uploaded after the contract award to the contractor and similar data of BOQ items will be added/updated while creating/ making the payment certificates after the successful completion of each stage.

Site Preparation (Clearing of ground, mobilization of equipment and HR)

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Clearing and grabbing of existing site	Sft	xxx	ууу	ZZZZ
2.	Layout of the existing site				
3.	Other items				
				Total	Α

Laying of Foundation (Sub Structure)

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Excavation for footings	CFT/Cubm	xxx	ууу	ZZZZ
2.	Lean concrete of	CFT/Cubm	VVV	2007	7777
	footing/plinth beam		XXX	ууу	ZZZZ
3.	RCC 3000 psi, for footings	CFT/Cubm	XXX	ууу	ZZZZ
4.	RCC 4000 psi, for short	CFT/Cubm	100	2007	
	column		XXX	ууу	ZZZZ
5.	Situ for external Plinth	CFT/Cubm	100	2007	
	Beam		XXX	ууу	ZZZZ
6.	RCC 3000 psi for plinth	CFT/Cubm	1001	100/	
	beam		XXX	ууу	ZZZZ
7.	Back filling of earth	CFT/Cubm	xxx	ууу	ZZZZ
8.	Stone solling	CFT/Cubm	xxx	ууу	ZZZZ
9.	Lean concrete for the sub	CFT/Cubm	1001	100/	7
	floor		XXX	ууу	Zzzz
				Total	В

Super structure Column Casting

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	RCC 4000 psi, for super	CFT/Cubm	VVV	100/	7777
	structure column		XXX	ууу	ZZZZ
2.	Block/Brick Masonry Work	CFT/Cubm	XXX	ууу	ZZZZ
3.				Total	C

Beams and Roof Slab Casting Floor wise

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	RCC 300 psi, for slab	CFT/Cubm	XXX	ууу	ZZZZ

2.	RCC 3000 psi for floor	CFT/Cubm	VVV	1007	7777
	Beams		XXX	ууу	ZZZZ
3.	Rough Electrical Works	Rft/R.M	2007	1007	7777
	Conduit etc		XXX	ууу	ZZZZ
4.	Rough Plumbing Works	Rft/R.M			
	(water and sewerage pipes		xxx	ууу	Zzzz
	etc)				
				Total	D

School Finishes/finishes Works

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Plaster work internal	Sft/Sqm	XXX	ууу	ZZZZ
2.	Plaster work external	Sft/Sqm	XXX	ууу	ZZZZ
				Total	Е

Doors and windows

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Providing and fixing of	Sft/Sqm	VAAV	1004	7777
	Wooden/Aluminum doors		XXX	ууу	ZZZZ
2.	Providing and fixing Door	Rft/Rm	VVV	1004	7777
	Frame		XXX	ууу	ZZZZ
3.	Providing and fixing of	Sft/Sqm			
	Wooden/Aluminum		xxx	ууу	ZZZZ
	windows				
4.	Providing and fixing	Rft/Rm	XXX	100/	ZZZZ
	windows Frame		AXX	ууу	7222
				Total	F

Plumbing works

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Providing and fixing of W/C pan and commode with accessories	Nos	xxx	ууу	ZZZZ
2.	Providing and fixing taps, piler cock, tee stop cock etc	Nos	xxx	ууу	ZZZZ
				Total	G

Electrification works

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Cabling from main supply	Rft/M	XXX	ууу	ZZZZ
2.	Providing and fixing of	Nos	VVV	\0.07	7777
	distribution borad		XXX	ууу	ZZZZ
3.	Internal wiring	Points/meter	XXX	ууу	ZZZZ
4.	Providing and fixing power	nos	VVV	\0.07	7777
	fittings fans etc		XXX	ууу	ZZZZ
5.	Providing and fixing light	nos	VVV	100/	7777
	fixtures etc.		XXX	ууу	ZZZZ

		Total	Н
		. • • • • •	

Flooring works

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Providing and fixing of marble tiles in room or corridors etc	Nos	xxx	ууу	ZZZZ
2.	Providing and fixing of bathroom tiles on floor and walls	Nos	xxx	ууу	ZZZZ
				Total	I

Paint works

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Providing and applying internal paints on ceiling, rooms, bathrooms, corridor etc	Sft/Sqm	xxx	ууу	ZZZZ
2.	Providing and applying internal paints on walls , rooms, bathrooms, corridor etc	its on walls ,		ууу	ZZZZ
3.	Providing and applying External paint on walls	Sft/Sqm	xxx	ууу	ZZZZ
				Total	J

Paint works

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Providing and applying internal paints on ceiling, rooms, bathrooms, corridor etc	Sft/Sqm	xxx	ууу	ZZZZ
2.	Providing and applying internal paints on walls , rooms, bathrooms, corridor etc	Sft/Sqm	xxx	ууу	ZZZZ
3.	Providing and applying External paint on walls	Sft/Sqm	xxx	ууу	ZZZZ
				Total	K

Water tank (UGWT, OHWT)

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.	Excavation for UGWT	CFT/Cubm xxx yyy		ZZZZ	
2.	Lean concrete of UGWT	CFT/Cubm	XXX	ууу	ZZZZ
3.	RCC 3000 psi, for tanks	CFT/Cubm	V00 /	100/	7777
	bottom slab (UGWT,OHWT)		XXX	ууу	ZZZZ

SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Resilient Indicator			1	<u> </u>
	Basilia di Ladia			Total	Q
	BLock				
5.	Paver works with Edge	Sft/Sqm	XXX	ууу	ZZZZ
4.	Flower plant etc	Nos	XXX	ууу	ZZZZ
3.	Tress plantation	Nos	XXX	ууу	ZZZZ
		М	XXX	ууу	ZZZZ
2.	leveling Supply of manure	M Cft/Cub			
1.	Sweet earth supplying and	Cft/Cub	XXX	ууу	ZZZZ
SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	development works				
				Total	Р
2.	Solar supply	KVA/Nos	XXX	ууу	ZZZZ
1.	WAPDA connections PMT	KVA/Nos	XXX	ууу	ZZZZ
SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Power s	upply	1		•	•
				Total	0
1.	Septic Tank ETC	Nos	XXX	ууу	ZZZZ
SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Sewerag	ge Disposal			1	<u>. I</u>
			w •	Total	N
2.	Filter Plant	Nos	XXX	ууу	ZZZZ
1.	Borehole for water supply	Nos	XXX	ууу	ZZZZ
SR.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Water s	upply mechanism	1		1	1 111
<u> </u>	Trace supply pipe injiiig		77//	Total	M
3.	Water supply pipe laying	Rft/Rm	XXX	ууу	ZZZZ
۷.	sewerage disposal	IN COMM			
2.	Sewerage pipe laying for	Rft/Rm	XXX	ууу	ZZZZ
1.	Excavation for pipes	CFT/Cubm			
SR.	(water supply, sewage dispose DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Litilities	lwater cumply sowage disper		nnoctions)]	Total	L
7.	Stone soling	CFT/Cubm	XXX	yyy	ZZZZ
6.	Back filling of earth	CFT/Cubm	XXX	ууу	ZZZZ
5.	Water stopper	RFT/RM			
	(UGWT,OHWT)	DET /DN4			
	bottom walls		XXX	ууу	ZZZZ
4.	RCC 3000 psi, for tanks	CFT/Cubm			
	T	, , , , , , , , , , , , , , , , , , , 		1	

1.	Roof treatment, heat	Sft/Sqm	VVV	2007	ZZZZ
	treatment/water proofing		XXX	ууу	2222
2.	External walls cladding	Sft/Sqm			
	works for heat insulation		XXX	ууу	ZZZZ
	(Brick/stone Block cladding)				
				Total	R

Supply of furniture's

SR.	DESCRIPTION UNIT QTY		RATE	AMOUNT		
1.	Supply of wooden/steel	Nos	XXX	VVV	7777	
	student benches		***	ууу	ZZZZ	
2.	Supply and fixing of wooden	Nos	2007	1007	7777	
	cabinets		XXX	ууу	ZZZZ	
3.	Supply of wooden/steel	Nos	NO.	100/		
	almirah		XXX	ууу	ZZZZ	
4.	4. Supply of teachers tables		XXX	ууу	ZZZZ	
5.	Supply of teachers chairs	Nos	XXX	ууу	ZZZZ	
			-	Total	S	

Summary of stages

Sr.No.	Description	Boq Amount	Executed amount
	Site Preparation (Clearing of ground, mobilization of equipment and HR)	un	A.
	Laying of Foundation (Sub Structure)	m	В.
	Super structure Column Casting	m	C.
	Beams and Roof Slab Casting Floor wise	m	D.
	School Finishes/finishes Works	m	E.
	Doors and windows	m	F.
	Plumbing works	m	G.
	Electrification works	m	H.
	Flooring works	m	I.
	Paint works	on	J.
	Paint works	m	K.
	Water tank (UGWT, OHWT)	on	L.
	Utilities (water supply, sewage disposal, electric connections)}	m	M.
	Water supply mechanism	un	N.
	Sewerage Disposal	m	0.
	Power supply	m	P.
	External development works	m	Q.
	Climate Resilient Indicator	m	R.
	Supply of furniture's	m	S.

Total mount of school		Total school cost
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Similar format is used for rehabilitation works/ but the items and stages may be changed

Delivery Schedule [to be used if phased delivery is planned] (Not Applicable)

				De	livery perio	od and minimum quantity requirements				
Line Ite m N°	Descriptio n of Goods	Physic al unit	Total Quantit y require	contract signature, advance navment (if		Period 2 [insert period 2, e.g. within 20 days from the end of period 1]		Period 3 (insert period 3, e.g. within 30 days from the end of period 2]		
			d	Minimu m acceptabl e quantity	Maximu m quantity required for period	Minimu m acceptabl e quantity	Maximu m quantity required for period	Minimu m acceptabl e quantity	Maximu m quantity required for period	

1.2 List of Related Services and Completion Schedule (Not Applicable)

Service	Description of Service	Quantity required	Physical Unit	Place where Services shall be performed	Completion Period of Services
---------	------------------------	-------------------	------------------	---	-------------------------------------

1.3 Technical Specifications

1.3.1 Summary of Technical Specifications.

The Non-Consulting Services shall comply with Technical Specifications and Standards mentioned in TORs in Annexure 1.

1.3.3 Drawings (Not Applicable)

List of Drawings			
Drawing Nr.	Drawing Name	Purpose	

1.3.4 Inspection and Tests (Applicable)

The following inspections and tests shall be performed at the Showroom of local manufacturers or at the premises of the PMIU-SELECT:

- During the delivery and inspection process, the Non-Consulting Services, PMIU-SELECT will only accept Non-Consulting Services that have been successfully verified by our Technical Experts.
- Detail checking of technical parts of equipment and all parts/accessories.
- The Firm shall at its own expense and at no cost to the Purchaser carry out the tests and/or inspections of the Non-Consulting Services s as are specified in the TORs.
- The inspections and tests may be conducted on the premises of the Firm or its Subcontractor, at point of delivery, and/or at the Non-Consulting Services' final destination, or in any other location, as specified in the TORs. Subject to CC 17.3, if conducted on the premises of the Firm or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
- The Purchaser or its designated representative shall be entitled to attend the tests and/or
 inspections referred to in CC 17.2, provided that the Purchaser bear all of its own costs and
 expenses incurred in connection with such attendance including, but not limited to, all traveling
 and board and lodging expenses.
- Whenever the Firm is ready to carry out any such test and inspection, it shall give a reasonable
 advance notice, including the place and time, to the Purchaser. The Firm shall obtain from any
 relevant third party or manufacturer any necessary permission or consent to enable the
 Purchaser or its designated representative to attend the test and/or inspection.
- In accordance with CC 31, the Purchaser may require the Firm to carry out any test and/or
 inspection not required by the Contract but deemed necessary to verify that the characteristics
 and performance of the dashobard (Non-Consulting Services)comply with the TORs and
 standards under the Contract.
- The Firm shall provide the Purchaser with a report of the results of any such test and/or inspection.
- The Purchaser may reject any Non-Consulting Services or any part thereof that fail to pass any
 test and/or inspection or do not conform to the specifications. The Firm shall either rectify or
 replace such rejected Goods or parts thereof or make alterations necessary to meet the
 specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost
 to the Purchaser, upon giving a notice pursuant to CC 17.5.
- The Firm agrees that neither the execution of a test and/or inspection of the dashorbad (Non-Consulting Services) or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to CC 17.7, shall release the Firm from any warranties or other obligations under the Contract

ANNEX 2: Quotation Forms

Firm Quotation Form

From:	[Insert Firm's name]
Firm's Representative:	[Insert name of Firm's Representative]
Title/Position:	[Insert Representatives title or position]
Address:	[Insert Firm's address]
Email:	[Insert Firm's email address]

То:	[Insert Purchaser's name]
Purchaser's Representative:	[Insert name of Purchaser's Representative]
Title/Position:	[Insert Representatives title or position]
Address :	[Insert Purchaser's address, including email]
RFQ Ref No.:	
Date of Quotation:	

Dear [insert name of Purchaser's Representative]:

SUBMISSION OF QUOTATION

1. Conformity and no reservations

In response to the above named RFQ we offer to Deliver the Non-Consulting Services, and the Related Services, as per this Quotation and in conformity with the RFQ, Delivery and Completion Schedules and Technical Specifications mentioned in TORs in Annex 1. We confirm that we have examined and have no reservations to the RFQ, including the Contract.

2. Eligibility

We meet the eligibility requirements and have no conflict of interest, in accordance with the Request for Quotations.

3. Suspension and Debarment

We, along with any of our subcontractors, Firms, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Purchaser's Country laws or official regulations or pursuant to a decision of the United Nations Security Council.

4. Quotation Price

The total price of our offer is

5. Quotation Validity (120 days)

Our Quotation shall be valid until the date specified in the RFQ, and it shall remain binding upon us and may be accepted at any time before it expires.

6. Performance Security N/A

If we are awarded the Contract, we commit to obtain a Performance Security in accordance with the RFQ. N/A

7. Commissions, gratuities, fees

We have paid, or will pay the following commissions, gratuities, or fees with respect to this Quotation

Name of Recipient	Address	Reason	Amount
None			

8. Not Bound to Accept

We understand that you reserve the right to:

- **a.** accept or reject any Quotation and are not bound to accept the lowest evaluated cost Quotation, or any other Quotation that you may receive, and
- **b.** annul the RFQ process at any time prior to the award of the Contract without incurring any liability to Firms.

9. Fraud and Corruption

We hereby certify that we have taken steps to ensure that no person acting for us, or on our behalf, engages in any type of Fraud and Corruption.

On behalf of the Firm:

Name of the person duly authorized to sign the Quotation on behalf of the Firm: [insert complete name of person duly authorized to sign the Quotation]

Title of the person signing the Quotation: [insert complete title of the person signing the Quotation]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] day of [insert month], [insert year]

Price Schedules

Quotation for Goods: Price Schedule 1

For Goods to be supplied from outside the Purchaser' country

Not Applicable

1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP [insert place of destination]	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination specified in RFQ	Total Price per Line item (Col. 7+8)
[insert numbe r of the item]	[insert name of good]	[insert country of origin of the Good]	[insert quoted Delivery Date quoted phased Delivery periods if applicable]	[insert number of units to be supplied and name of the physical unit]	[insert unit price CIP per unit]	[insert total CIP price per line item]	[insert the corresponding price per line item]	[insert total price of the line item]
	1	<u>I</u>	1	<u> </u>	1		Quotation Price	

Quotation for Goods: Price Schedule 2 For Goods to be supplied from within the Purchaser' country (Not Applicable)

1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Delivery Date as defined by Incoterms	Quantit y and physica I unit	Unit price EXW	Total EXW price per line item (Col. 4×5)	[IF REQUIRED] Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination, specified in RFQ	[if known] Sales and other taxes payable per line item if Contract is awarded	Total Price per line item (Col. 6+7)
[insert numbe r of the item]	[insert name of Good]	[insert quoted Delivery Date/ quoted phased Delivery dates if applicable]	[insert number of units to be supplie d and name of the physical unit]	[insert EXW unit price]	[insert total EXW price per line item]	[insert the corresponding price per line item]	[insert sales and other taxes payable per line item if Contract is awarded]	[insert total price per item]
							Quotation Price	

Quotation for Related Services: Price Schedule 3 (Not Applicable)

1		2	3	4	5	6	7
Item No.	Item description	Description of Services (excludes inland transportation and other services required in the Purchaser's Country to convey the goods to their final destination)	Country of Origin	Completion Period at place of Final destination	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6 or estimate)
[insert number of the item]		[insert name of Services]	[insert country of origin of the Services]	[insert Delivery Period at place of final destination per Service]	[insert number of items to be supplied and name of the physical unit]	[insert unit price per item]	[insert total price per item]

Total Quotation: Price Schedule 4 (Not Applicable)

The total price for the supply and delivery of the Goods, and related Services is as follows:

Price Schedule	Amount
Goods: Price Schedule 1	
Goods: Price Schedule 2	
Related Services: Price Schedule 3 [if applicable]	
Total Quotation	

Manufacturer's Authorization (Not Applicable)

[The Firm shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]

Date: [insert date (as day, month and year) of Quotation submission]
RFQ No.: [insert number of RFQ process]

To: [insert complete name of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of the Firm] to submit a quotation the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 20 of the Conditions of Contract, with respect to the Goods offered by the above firm.

We confirm that we do not engage or employ (i) forced labor or persons subject to trafficking in accordance with Clause 27 or (ii) child labor in accordance with Clause 28, of the Conditions of Contract. We also confirm that we comply with applicable health and safety obligations in accordance with Clause 29 of the Conditions of Contract.

Signed. [msert signa	ture(s) of unimorized	a representative(s)	of the Managactarery
Name: [insert compl	ete name(s) of auth	norized representat	ive(s) of the Manufacturer]
Title: [insert title]			
Dated on	day of		[insert date of signing]

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

ANNEX 3: Contract Forms

Contract Agreement

THIS AGREEMENT is made the [insert: number] day of [insert: month], [insert: year].

BETWEEN

- (1) [insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of of the Government of { insert name of Country of Purchaser }, or corporation incorporated under the laws of { insert name of Country of Purchaser }] and having its principal place of business at [insert address of Purchaser] (hereinafter called "the Purchaser"), of the one part, and
- (2) [insert name of Firm], a corporation incorporated under the laws of [insert: country of Firm] and having its principal place of business at [insert: address of Firm] (hereinafter called "the Firm"), of the other part:

WHEREAS the Purchaser invited quotations for certain Non-Consulting Services and ancillary services, [Hiring of IT Firm to develop dashboard for C-2] and has accepted a quotation by the Firm for the delivery of those Non-Consulting Services.

The Purchaser and the Firm agree as follows:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (a) the Letter of Award of Contract
 - (b) the Firm's quotation
 - (c) Conditions of Contract
 - (d) the Purchaser's Requirements (TORs)
 - (e) the completed Schedules (including Price Schedules)
 - (f) any other document listed as forming part of the Contract
- 3. In consideration of the payments to be made by the Purchaser to the Firm as specified in this Agreement, the Firm hereby covenants with the Purchaser to provide the Non-Consulting Services if applicable and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Purchaser hereby covenants to pay the Firm in consideration of the provision of the Non-Consulting Services if applicable and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of [the Purchaser's country, unless agreed otherwise] on the day, month and year indicated above.

[To facilitate this emergency procurement, if acceptable to the Purchaser and the Firm, electronic signature of the Contract Agreement such as using DocuSign is recommended.]

For and on behalf of the Purchaser:

Signed: [insert signature]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

For and on behalf of the Firm:

Signed: [insert signature of authorized representative(s) of the Firm]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

Conditions of Contract

1. Definitions

- 1.1 The following words and expressions shall have the meanings hereby assigned to them:
 - (a) "Bank" means the World Bank and refers to the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
 - (b) "CC" means the Conditions of Contract.
 - (c) "Contract" means the Contract Agreement entered into between the Purchaser and the Firm, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
 - (d) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
 - (e) "Contract Price" means the price payable to the Firm as specified in CC 8.1, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
 - (f) "Day" means calendar day.
 - (g) "Completion" means the fulfillment of the Related Services, as applicable, by the Firm in accordance with the terms and conditions set forth in the Contract.
 - (h) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Firm is required to supply to the Purchaser under the Contract.
 - (i) "Party" means the Purchaser or the Firm, as the context requires, and "Parties" means both of them.
 - (j) "Purchaser" means the entity purchasing the Goods and Related Services as applicable, as specified in CC 2.
 - (k) "Purchaser's Country" is the country specified in the CC 2.
 - (I) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Firm under the Contract, as applicable.
 - (m) "Subcontractor" means any person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Firm.
 - (n) "Firm" means the person, private or government entity, or a combination of the above, whose Quotation to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
 - (o) "The Project Site," where applicable, means the place named CC 2.

2.	Purchaser, Purchaser's Country, Project Site/Final Destination	The Purchaser is: Sindh Early Learning Enhancement through Classroom Transformation SELECT Sindh Early Learning Enhancement through Classroom Transformation (SELECT), School Education & Literacy Department Govt Of Sindh 2.1 The Purchaser's Country is: Pakistan 2.2 The Project Site(s)/Final Destination(s) is: Project Coordinator office for Sindh Early Learning Enhancement through Classroom Transformation SELECT AT Reform Support Unit 47-E/1, Street No. 48, PECHS Block-6, Near Nursery Furniture Market, Shahrah-e-Faisal, Karachi.
3.	Incoterms	3.1 The edition of Incoterms that shall apply is: 2022 (CIP))Not Applicable)
4.	Notices and Addresses for notices	 4.1 Any notice given by one Party to the other pursuant to the Contract shall be in writing to the address hereafter using the quickest available method such as electronic mail with proof of receipt. A notice shall be effective when delivered or on the notice's effective date, whichever is later.
		Address for notices to the Purchaser:
		Name: Junaid Hameed Samoo
		Title/position: CPM-RUS & Project Director -SELECT
		Address: Sindh Early Learning Enhancement through Classroom Transformation SELECT AT Reform Support Unit 47-E/1, Street No. 48, PECHS Block-6, Near Nursery Furniture Market, Shahrah-e-Faisal, Karachi.
		Electronic mail address: cpm.rsu@rsu-sindh.gov.pk
		Address for notices to the Firm:
5.	Governing Law	 5.1 The Contract shall be governed by and interpreted in accordance with the laws of [state: "the Purchaser's Country", unless any other law shall apply]. 5.2 Throughout the execution of the Contract, the Firm shall comply with the
		import of goods and services prohibitions in the Purchaser's Country when:
		 (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or
		(b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations the Borrower's Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.
6.	Settlement of Disputes	6.1 (a) Contract with foreign Firm:

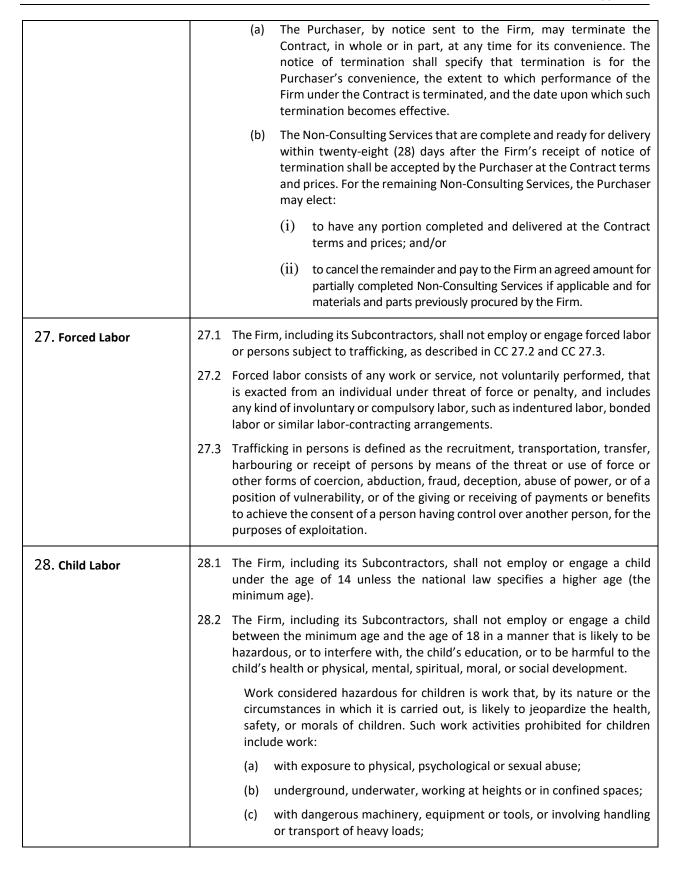
	All disputes arising out of or in connection with the present contract shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules. Or Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.		
	(b) Contracts with Firm national of the Purchaser's Country:		
	In the case of a dispute between the Purchaser and a Firm who is a national of the Purchaser's Country, the dispute shall be referred to adjudication or arbitration in accordance with the laws of the Purchaser's Country. Pakistan Arbitration Act 1940.		
7. Shipping and other documents to be provided	Applicabel. The Procuring Agency requires all shipping documents to be submitted by the bidder at the time of delivery.		
8. Contract Price	8.1 The Contract Price is specified in ANNEX 2: Quotation Forms.		
	8.2 Subject to CC 31 and 32, the prices charged by the Firm for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Firm and accepted by the Purchaser.		
9. Terms of payment	9.1 The method and conditions of payment to be made to the Firm under this Contract shall be as follows:		
	(i) Advance Payment: N/A		
	(ii) Payment shall be made as per the Tentative Schedule of Delivery and Payment in TORs		
	Note: Payment shall be made to Firm as mentioned in TORs or may be released on the direction of Focal person of C-2.		
10. Taxes and Duties	10.1 The Firm shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Non-Conuslting Services		
	10.2 If any tax exemptions, reductions, allowances or privileges may be available to the Firm in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Firm to benefit from any such tax savings to the maximum allowable extent.		
11. Performance Security	Not Applicable		
12. Subcontractors	12.1 The Firm shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Quotation. Such notification, in the original Quotation or later shall not relieve the Firm from any of its obligations, duties, responsibilities, or liability under the Contract.		

13. Specifications and	13.1	The Non-Conusiting Services applicable delivered under this Contract shall
Standards		conform to the technical specifications and standards mentioned in the TORs and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
14. Packing, marking and documentation	14.1	The Firm shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit. Not Applicable
	14.2	The packing, marking and documentation within and outside the packages shall be: Not Applicable
15. Insurance cover		N/A
16. Transportation	16.1	Responsibility for transportation of the Goods shall be as specified in the Incoterms. Not Applicable
		If not in accordance with Incoterms, responsibility for transportations shall be as follows: "The Firm is required under the Contract to transport the Goods to a specified place of final destination within the Purchaser's Country, defined as the Project Site. Transport to such place of destination in the Purchaser's Country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Firm, and related costs shall be included in the Contract Price
		Not Applicable
17. Inspections and Tests		
	17.1	Every Step shall be tested of dashbord During the delivery and process.
	17.2	The Firm shall at its own expense and at no cost to the Purchaser carry out the tests and/or inspections of the Non-Conuslting Services as are specified in the TORs.
	17.3	The inspections and tests may be conducted on the premises of the Firm or its Subcontractor, at point of delivery, and/or at the final destination, or in any other location, as specified in the TORs. Subject to CC 17.3, if conducted on the premises of the Firm or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
	17.4	The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in CC 17.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such

		attendance including, but not limited to, all traveling and board and lodging
	175	expenses. Whenever the Firm is ready to carry out any such test and inspection, it shall
	17.3	give a reasonable advance notice, including the place and time, to the Purchaser. The Firm shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
	17.6	In accordance with CC 31, the Purchaser may require the Firm to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract.
	17.7	The Firm shall provide the Purchaser with a report of the results of any such test and/or inspection.
	17.8	The Purchaser may reject anything or any part thereof that fail to pass any test and/or inspection or do not conform to the TORs. The Firm shall either rectify or replace such rejected Non-Consulting or parts thereof or make alterations necessary to meet the TORs at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to CC 17.5.
	17.9	The Firm agrees that neither the execution of a test and/or inspection of the Non-Conuslting Services or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to CC 17.7, shall release the Firm from any warranties or other obligations under the Contract
18. Delivery Date and Completion Date	18.1	The Delivery Date of the Non-Conusiting Services shall be delivered within 365 days from the date of sgining of contract.
19. Liquidated damages and bonuses	19.1	The liquidated damage shall be 0.1% of the price of the delayed unperformed Services mentioned in TORs (<u>Tentative Schedule of Delivery and Payment</u>) for each week or part thereof of delay until actual delivery or performance.
		The maximum amount of liquidated damages shall be 10% of the Contract Price. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to CC 26.
20. Warranty		Not Applicable
	20.1	The Firm warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
	20.2	The Firm further warrants that the Goods shall be free from defects arising from any act or omission of the Firm or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
	20.3	The warranty shall remain valid for [insert number] months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination, or for [insert number] months after the date

		of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
	20.4	The period for repair or replacement after being notified of the defect by the Purchaser shall be 7 days.
	20.5	If having been notified, the Firm fails to remedy the defect within the period specified in CC 20.4, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Firm's risk and expense and without prejudice to any other rights which the Purchaser may have against the Firm under the Contract.
	20.6	For purposes of the warranty, the place(s) of final destination(s) shall be: Karachi
21. Copyright	21.1	The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Firm herein shall remain vested in the Firm, or, if they are furnished to the Purchaser directly or through the Firm by any third party, including Firms of materials, the copyright in such materials shall remain vested in such third party.
22. Fraud and Corruption	22.1	The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Attachment A to the Conditions of Contract.
	22.2	The Purchaser requires the Firm to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the request for quotations or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.
23. Inspections and Audit by the Bank	23.1	Pursuant to paragraph 2.2 e. of the attachment to the Conditions of Contract, the Firm shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, Firms, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the request for quotations process and/or execution of Contract. The Firm's and its subcontractors attention is drawn to CC 22.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
24. Limitation of Liability	24.1	Except in cases of criminal negligence or willful misconduct,
		(a) the Firm shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Firm to pay liquidated damages to the Purchaser and
		(b) the aggregate liability of the Firm to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract

	Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Firm to indemnify the Purchaser with respect to patent infringement.
25. Force Majeure	25.1 The Firm shall not be liable for forfeiture of its Performance Security (if required), liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
	25.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Firm that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Firm. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, and freight embargoes.
	25.3 If a Force Majeure situation arises, the Firm shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Firm shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
	25.4 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the currency of the Contract, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other Party.
26. Termination	26.1 Termination for Default
	The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Firm, may terminate the Contract in whole or in part:
	 if the Firm fails to deliver any or all of the Non-Consulting Services within the period specified in the Contract, or within any extension thereof granted by the Purchaser;
	(ii) if the Firm fails to perform any other obligation under the Contract; or
	(iii) if the Firm, in the judgment of the Purchaser has engaged in Fraud and Corruption, in competing for or in executing the Contract.
	In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services if applicable similar to those undelivered or not performed, and the Firm shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services if applicable. However, the Firm shall continue performance of the Contract to the extent not terminated.
	26.2 Termination for Convenience



	(d) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or
	(e) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.
29. Health and safety obligations	29.1 The Firm shall comply, and shall require its Subcontractors if any to comply, with all applicable health and safety regulations, laws, guidelines, and any other requirement stated in the Technical Specifications.
30. Patent Indemnity	30.1 The Firm shall, subject to the Purchaser's compliance with CC 30.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:
	a) the installation of the Goods by the Firm or the use of the Goods in the country where the Site is located; and (Not Applicable)
	b) the sale in any country of the products produced by the Goods. (Not Applicable)
	Such indemnity shall not cover any use of the Non-Consulting Services or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Non-Consulting Services or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Firm, pursuant to the Contract.
	30.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in CC 30.1, the Purchaser shall promptly give the Firm a notice thereof, and the Firm may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
	30.3 If the Firm fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.
	30.4 The Purchaser shall, at the Firm's request, afford all available assistance to the Firm in conducting such proceedings or claim, and shall be reimbursed by the Firm for all reasonable expenses incurred in so doing.
	30.5 The Purchaser shall indemnify and hold harmless the Firm and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Firm may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing,

		specification, or other documents or materials provided or designed by or on behalf of the Purchaser.
31. Change Orders and Contract Amendments	31.1	The Purchaser may at any time order the Firm through notice in accordance CC 4.1, to make changes within the general scope of the Contract in any one or more of the following:
		(a) drawings, designs, or specifications as mentioned in TORs, where Non- Consulting Services to be furnished under the Contract are to be specifically manufactured/delivered/prepared for the Purchaser;
		(b) the method of shipment or packing; Not Applicable
		(c) changes in the scope of non-Consulting services. Minus 0r Plus 15%
		(d) the place of delivery; Office of Project Coordinator SELECT, Reform Support Unit School Education & Literacy Department Government of Sindh
		47-E/1, Street No. 48, PECHS Block-6, Near Nursery Furniture Market, Shahrah-e-Faisal, Karachi.
		Tel: 021-34304441 E-mail: <u>PMIUSELECT.SELD@gmail.com</u>
		(e) any test and/or inspection not required by the Contract but deemed necessary, pursuant to CC 17.5; and
		$ (f) \qquad \hbox{the Related Services to be provided by the Firm.} $
	31.2	If any such change causes an increase or decrease in the cost of, or the time required for, the Firm's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Firm for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Firm's receipt of the Purchaser's change order.
	31.3	Prices to be charged by the Firm for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Firm for similar services.
	31.4	Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
32. Change in Laws and Regulations	32.1	Unless otherwise specified in the Contract, if after the date of submission of Quotation, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of the Purchaser's Country where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Firm has thereby been affected in the performance of any of its obligations under the Contract.

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Attachment A to the Conditions of Contract

Fraud and Corruption

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and Firms; any sub-contractors, sub-consultants, service providers or Firms; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, Firms and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring mis procurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or Firm, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and Firms, and their sub-contractors, sub-consultants, service providers, Firms, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated subcontractor, nominated consultant, nominated manufacturer or Firm, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

A nominated sub-contractor, nominated consultant, nominated manufacturer or Firm, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its prequalification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.