<u>**Terms of Reference**</u>

<u>**for Manager Monitoring & evaluation**</u>

Background

The Government of the Punjab developed the Education Sector Plan in 2019 and for the implementation of this plan, a grant was provided by the Global Partnership for Education (GPE). This grant is being implemented under the 'Transformation in Access, Learning, Equity and Education Management (TALEEM)' Programme with the assistance of UNICEF as Grant Agent. The Taleem Programme will focus on key thematic areas across the education sector. Under the programme, PMIU-PESRP is the project Secretariat and a Taleem Cell is established at PMIU-PESRP to implement the activities. Given the diverse areas of implementation of the programme, a robust Monitoring & Evaluation framework is required to ensure quality of service delivery and to maintain the timelines and enable smooth implementation of the programme. For this, a Manager for Monitoring and Evaluation is required to develop and implement the framework for M&E under the Taleem Programme.

<u>**TERMS OF REFERENCE**</u>

He/She will work in close coordination with the component managers under the TALEEM Cell and will report to Manager- Strategic Planning and Coordination. Responsibilities will include developing a monitoring framework for the Taleem Programme, creating monitoring linkages between components and departments. The Manager M&E will be working in close coordination with other component managers to ensure a cohesive reporting system for data collected using the monitoring framework. He/She will assist the other managers in gauging the impact of individual interventions and to ensure that the targets set in the Taleem Programme are being actively achieved. The Manager M&E will identify gaps in data collection in a timely manner and provide solutions. He/She will also analyze the data sets to identify trends and anomalies in order to robustly inform decisions of key stakeholders.

Scope of Functions
1. Develop the Monitoring and Evaluation Framework for the interventions under the Taleem Programme.
2. Oversee the development of Log-frames, Monitoring Plans and relevant data-collection processes, for tracking and monitoring of activities for Taleem Programme and provide recommendations to managers.
3. Identify key performance indicators in line with the objectives of the Taleem Programme and use those for developing monitoring tools and a systematic M&E dashboard/reporting mechanism.

4. Conceptualize the collection and use of data for project activities e.g. teacher training databases, identification of OOSC, linkages between SED, SpEd and LNFBE etc.
5. Develop mechanism to effectively communicate data to delivery teams and provide remedial strategiesin case of challenges
6. Manage regular monitoring visits to project districts to monitor the progress of the project, as and whenrequired.
7. Track progress of the Components under Taleem Programme as per work plans, identify lags and issues, and advise management on corrective actions needed to ensure timely achievement of milestones and deliverables.
8. Conduct primary and secondary data analysis and develop high quality reports to inform project leadsin timely manner on project delivery and progress
9. Responsible for the identification and documentation of lessons learnt from monitoring, routine data collection, short-term assessments and share those with the management and project team for accommodating necessary changes in the design of future interventions.
10. Responsible for the proposal design and project reporting related to research and monitoring and evaluation reporting requirements.
11. Oversee and supervise the development and execution of an M&E capacity building plan for the key staff at all supervisory and reporting levels.
12. Oversee the development of ToRs for procurement of consultancy services for surveys, assessments including Mid/End-Term evaluations, operations review (spot checks and process evaluation) as required.
13. Liaise effectively with other sub departments and entities within PMIU and SED to effectively meet timelines for project deadlines.
14. Participate in technical evaluation of bids including pre-bid and negotiations meetings for various procurement activities related to M&E functions.
15. Provide support to the wider Monitoring and Evaluation Team at PMIU (such as designing a robust monitoring mechanism, etc.) related to School Education in Punjab Province, as per need.
16. Set-up a collaboration and coordination mechanism with M&E wings of Implementing partners for Taleem Programme
17. Work in close coordination with all involved departments and sub-departments to ensure alignment, timely availability, and accuracy of data on all related indicators.
18. Perform any other task required for the successful implementation of the Taleem Programme, as assigned by the competent authority.

professional experience.

Experience
 ▪ Demonstrated experience in:

- o developing monitoring framework,
- o sampling design,
- o conducting assessments and surveys,
- o data quality assessments and oversight,
- o writing reports with quantitative analysis.

Skills

- ⬚ Demonstrated ability to analyze large volumes of data and draw inferences form it.
- ⬚ Ability to work in a team, develop synergies and establish effective working relations with variousstakeholders.
- ⬚ Strong interpersonal and communications skills, resourcefulness, initiative, tact and ability to copewith challenging situations.
- ⬚ Written and oral fluency in the English language.
- ⬚ Proficient in using MS Office (Word, Excel, & Power Point).
- ⬚ Proficient in statistical software packages: SQL/ STATA/ SPSS is a must.

Support Consultant Implementation & Coordination

under TALEEM Programme at PMIU-PESRP

Objective & Background

The Punjab Education Sector Programme Implementation Grant (ESPIG), supported by the Global Partnership for Education (GPE), empowers the TALEEM Programme to revolutionize access, learning outcomes, equity, and education management. PMIU-PESRP serves as the secretariat and implementing agency for the TALEEM Programme, responsible for managing, monitoring, and ensuring the successful execution of this significant educational initiative in Punjab.

TALEEM Cell has been established and equipped with necessary human resource of Managers, Programme Officers, and Associates for successful implementation of the various components of TALEEM Programme. To further strengthen the HR capacity for smooth implementation of the Program, PMIU PESRP intends to engage the services of Support Consultant Implementation & Coordination.

Responsibilities:

The support Consultant Implementation & Coordination will work under the direct supervision of Manager I&C TALEEM and shall be responsible for;

- Assisting in coordination with Program Implementation Agencies, Field Offices and other stakeholders.
- Assisting in organization of meetings, taking minutes, managing invites and other related tasks

- Assisting in official communications & correspondence with the stakeholders, maintain and organize project files, records, and documentation, ensuring that all necessary materials are readily accessible.
- Prepare and generate reports on project or event status, milestones, and key performance indicators for management review.
- Any other task assigned by the management.

Requirements:

- At least two (02) years post-qualification experience in public or private sector.
- Experience with donor-funded or similar projects will be preferred.
- Proficiency in Microsoft Office.
- Strong organizational and communication skills, both written and verbal.
- Ability to multitask, prioritize, and adapt in a fast-paced environment.

Terms of Reference for Manager Network & Support

1. BACKGROUND INFORMATION

1.1. Beneficiary Country and Province

Islamic Republic of Pakistan, Punjab Province

1.2. Contracting Authority

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

1.3 Objective

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/ grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP). The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Manager Network & Support Supervises information technology (IT)

support staff; oversees computer system and software maintenance and repair; assists with computer equipment purchasing and installation; and maintains networks and connectivity for users. This resource will also assist in existing data and software migration from PITB Data Center including creation of inhouse Data Center.

1.4 Scope of work:

The key tasks and responsibilities to be accomplished by the Manager Network & Support are as follows:

Should be able to conducts trainings and orientation to new technology users so that they can acquaint themselves with the equipment and network

i. Ability to carry forward the team by mentoring them during the critical tasks and project assignment
ii. Must be a team player and also who can take decision and work independently if the situation demands
iii. Must be able to make cost analysis and budgets (OpEx / CapEx)
iv. Hands on experience of network management and network management tools including SNMP, OpenNMS, RANCID, Cacti, Nagios.
v. Knowledge of ISP systems, for example RADIUS, TR-069, DNS
vi. Working Knowledge of ISP systems, such as RADIUS, TR-069, DNS
vii. Knowledge of network design and architecture principles
viii. Knowledge of Internet governance and Internet organizations, including IANA, RIPE, IETF, ICANN and IEEE
ix. Exhibits Experience with some of the mainstream vendors - Redback, Juniper, Cisco, Brocade, MRV, A10

1.5 Key Deliverables:

1) Conducts training and orientation for new technology users, IT support and Call Center staff and helps them become familiar with equipment and networks
2) Participate and attend technology exhibitions, seminars and shows to stay at the top of new technologies (software / hardware) hitting the market
3) Ensures all users benefit from effective technology and efficient Internet access, and continually assesses needs and requirements
4) Oversight and management of technical resources involved with the design, implementation, documentation and support of Network Infrastructure (routers, firewalls, load balancers, monitoring tools, LAN, WAN, WiFi, hosting low latency infrastructure).
5) Organize support, troubleshooting, and repair for IT equipment and networks
6) Monitors online security for users and networks and takes appropriate steps to address security breaches if necessary

7) Manages departmental budget and tracks spending on equipment and staff
8) Develops and maintains emergency plans to address equipment, power, or security failure to ensure preservation of technology and data
9) Participation in projects. Ensure that project tasks are completed within the agreed timelines.
10) Responsible for the management of the organization's email accounts
11) Manage IP Multicast and associated protocols (IGMP, PIM, MBGP, MSDP).
12) Responsible for the management of the company's Internet and information technologies (IT) assets
13) Offers specialized expertise in IT demands for a particular industry, such as education, finance, or manufacturing
14) Maintenance of all information technology equipment
15) Manage the company's system firewall protection applications or software
16) Account for backup of systems and all data
17) Make recommendations for the improvement of the company's IT department
18) Handle the organization's hosting information
19) Responsible for the installation and configuration of software on computer systems
20) Handle diagnosis and troubleshooting of computers to discover and solve hardware and software faults
21) The Manager Network & Support will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

Terms of Reference for Senior Software Engineer (.NET)

1. **BACKGROUND INFORMATION**

1.3. Beneficiary Country and Province

Islamic Republic of Pakistan, Punjab Province

1.4. Contracting Authority

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

1.3 Objective

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens

and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Senior Software Engineer/.Net Developer will provide support in existing web based and desktop applications. Also involved in development of new .Net applications using C# and VB.net MVC. Assist in existing Systems/applications and data migration from PITB.

1.4 Scope of work:

The key tasks and responsibilities to be accomplished by the Senior Software Engineer are as follows:

i. Proven experience as a .NET Developer or Application Developer
ii. Familiarity with the ASP.NET framework, SQL Server and design/architectural patterns (e.g. Model-View-Controller (MVC))
iii. Knowledge of at least one of the .NET languages (e.g. C#, Visual Basic .NET) and HTML5/CSS3
iv. Strong expertise in development of scalable SOAP (XML) or RESTful API services for mobile application integration.
v. Strong understanding of object-oriented programming
vi. Skill for writing reusable libraries
vii. Familiar with various design and architectural patterns
viii. Knowledge of concurrency patterns
ix. Understanding of fundamental design principles for building a scalable application
x. Experience creating database schemas that represent and support business processes
xi. Basic understanding of Common Language Runtime (CLR), its limitations, weaknesses, and workarounds
xii. Experience implementing automated testing platforms and unit tests
xiii. Proficient understanding of code versioning tools Git, DevOps etc.
xiv. Experience with multi-tier architecture and distributed applications.
xv. At least worked on 3 large scale applications having large data source and user base, also available for a demonstration.
xvi. The Senior Software Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

Key   **Deliverables:**

1) Write clean, scalable code using .NET programming languages
2) Translate application storyboards and use cases into functional applications
3) Remain up to date with the terminology, concepts and best practices for coding responsive web applications
4) Develop technical interfaces, specifications, and architecture
5) Use and adapt existing web applications for application landscape improvement and upgradation.
6) Liaison with mobile application team for development and implementation of associate API requests.
7) Solve complex performance problems and architectural challenges
8) Integration of data storage solutions may include databases, key-value stores, blob stores, etc.
9) Create unit testcase and execute them on development completion of any module/requirement. Perform deployments using standard deployment procedures.
10) Create an understanding with existing applications and perform code revamp to achieve performance benchmarks.
11) Coordination with team members and project manager on new modules development and enhancements.
12) Use code repositories and branches for code backup and versioning.
13) Keep the project management tool updated so that a clear picture on work progress is always available for managerial review.
14) Keep the development related communication streamlines on project management tool for future reference and record.
15) Perform deployments using standard deployment procedures.
16) Any other deliverable based on the task assigned to the Senior Software Engineer by the Competent Authority.

Terms of Reference for Development Operations Engineer

1. **BACKGROUND INFORMATION**

1.5. Beneficiary Country and Province

Islamic Republic of Pakistan, Punjab Province

1.6. Contracting Authority

Under the TALEEM Programme and in agreement with Global Partnership for Education

(GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

1.3   <u>Objective</u>

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP). The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. DevOps engineer will ensure a smooth deployment process along with hardening the Linux environment with up to date security patching and upgrades. DevOps engineer will help in installation of software patches and server configuration for optimal performance. Assist in existing data migration from PITB Data Center.

1.4   Scope of work:

The key tasks and responsibilities to be accomplished by the DevOps Engineer are as follows:

i.   Strong proficiency in LAMP (Linux, Apache, MySQL and PHP) environment
ii.   Experience is web and email server configurations and setup.
iii.   Experience maintaining and deploying highly-available, fault-tolerant systems at scale.
iv.   Experience in automation script (e.g. scripting via Bash etc.)
v.   Practical experience with Docker containerization and clustering (Kubernetes/ECS)
vi.   Version control system experience (e.g. Git)
vii.   Experience implementing CI/CD (e.g. Jenkins etc.)
viii. The DevOps Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

Key Deliverables:

1) Deploy and maintain critical applications on multitier architecture.
2) Implement automation, effective monitoring, and infrastructure-as-code
3) Deploy and maintain CI/CD pipelines across multiple environments
4) Support and work alongside a cross-functional engineering team on the latest technologies
5) Iterate on best practices to increase the quality & velocity of deployments

6) Own the delivery, scalability, and reliability of the backend platform serving hundreds of thousands of concurrent users.
7) Writes specifications and documentation for the server-side features
8) Analyzes the technology currently in use and develops plans and processes for improvement and expansion. The DevOps engineer provides support for urgent analytical needs.
9) Builds, installs, configures, and maintains IT solutions.
10) Participates in project planning meetings to share their knowledge of system options, risk, impact, and costs vs. benefits. In addition, communicate operational requirements and development forecasts.
11) Tests code, processes, and deployments to identify ways to streamline and minimize errors.
12) Uses configuration management software to automatically deploy updates and fixes into the production environment.
13) Performs routine application maintenance to ensure the production environment runs smoothly. Develops maintenance requirements and procedures.
14) Any other deliverable based on the task assigned to the DevOps Engineer by the Competent Authority.