

## TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANT

<b>SECTION</b>	Education
<b>CONSULTANCY TITLE</b>	Review of School Improvement Grant Management Information System (SIGMIS)
<b>TYPE OF ENGAGEMENT</b>	<input checked="" type="checkbox"/> Individual Consultant
<b>PURPOSE OF THE ASSIGNMENT:</b> To review and modify the new SIGMIS and provide capacity building of MoPSE staff.	
<p><b>BACKGROUND:</b></p> <p>School Improvement Grant (SIG) payments are processed through an automated system that captures requests from schools and generates pay sheets that are encrypted and uploaded onto an online payment system which is then accessed by UNICEF for processing. Since SIG started in 2013, two SIGMIS were developed, one in 2013 and the other one in 2022. The 2013 SIGMIS is the one currently being used by MoPSE to capture paysheets, however, the MoPSE misplaced user manuals and a source code for the application and only established that in 2018 when the system developed a problem, hence the system cannot be modified or maintained in any way. Since then, the consultant who developed the SIGMIS had been called on adhoc basis to support the Grants Management Team (GMT) with fixing any challenges. Unfortunately, the individual consultant who developed the SIGMIS died in December 2022, therefore, there is no backup to the system. This poses a huge risk if the system develops a problem as previously experienced.</p> <p>In 2022, MoPSE requested for a new system as the 2013 system was exhibiting an unstable pattern ranging from inability to move over to the current year, failure to accept new schools and to generate the pay sheets. All the problems were attributed to the absence of user and technical documentation manuals as well as the source code which was misplaced. Based on this request, a new system was developed, however, the system had teething issues which were not resolved, and this included compatibility with UNICEF Banking platform. In addition, the contract of the consultant ended before the MoPSE team had been trained on the system to allow the MoPSE ICT to take over the management of the system and provide internal support whenever needed. The new system was only used to produce 2 paysheets in 2022, due to the teething issues it demonstrated, the system was shelved, and the GMT reverted to the old system to expedite the process of preparing pay sheets.</p> <p>There is still a need to move away from the old system to the new 2022 system which is more robust in meeting the user requirements.</p> <p>UNICEF Zimbabwe is seeking a consultant to support the Ministry of Primary and Secondary Education (MoPSE) with reviewing and modifying the system to address the issues raised by GMT and allow capturing of reports on expenditure, acknowledgements and reporting as well as capacity building of the Grants Management team and MoPSE ICT staff with the objective of transitioning to the new system for payments planned for 2024. Given that UNICEF has changed its bank, there is need for the consultant to work with MoPSE and the bank and ensure alignment.</p>	
<p><b>OBJECTIVES OF THE ASSIGNMENT;</b></p> <p>The main objective is to capture information of schools selected for payment of school improvement grants by MoPSE, generate an encrypted paysheet that is shared with the UNICEF house bank for the transfer of the funds to the targeted schools using an electronic system designed for this purpose.</p> <p>The other objectives are:</p> <ul style="list-style-type: none"> <li>■ To create an online platform accessible through internet and secured by https protocol that will assist school heads to receive school disbursement grants for the purposes of school infrastructure development and improved quality of education.</li> <li>■ Integration of the system to existing Education Management Information System (EMIS).</li> <li>■ To generate payment reports</li> <li>■ To upload acknowledgements and acquittals from districts</li> </ul>	

**ASSIGNMENTS:**

The consultant will be expected to work closely with MoPSE and UNICEF sections i.e., Education, Information Communication and Technology (ICT) and Finance for the following:

**1) Review the existing system that was developed in 2022** to see if it meets all the user requirements stipulated in the TORs for its development. If there is any of the specifications not met, include them in an incremental development.

**2) Integration of the system to the existing Education Management Information System (EMIS)**

- Creation of a field which captures the EMIS number of a school
- Resolving teething issues raised by GMT
- Ensure MIS security to maintain data integrity.

**3) Review and update a template that is used for capturing of**

- Grant requests
- Acknowledgments of receipt of SIG-Acquittals detailing type of expenditure
- Associated reporting

**4) Capacity building of Grants Management team (GMT)**

- Review the SIG MIS User Manual
- Trainings for User and System Administrator Trainings conducted

**5) Alignment of the SIGMIS with the UNICEF House bank platform**

- Review of the Stanbic Bank bulk payments system and ensuring compatibility of SIGMIS to the platform.
- Support the testing of data uploads to the Stanbic platform with the bank.

**6) Detailed reporting and backup functionalities – See Annexure A.**

**REASONS WHY CONSULTANCY CANNOT BE DONE BY STAFF:** The tasks in this consultancy require outside expertise, dedicated time and capacity which is not available within UNICEF hence the need to outsource the service.

**Child Safeguarding** Is this project/assignment considered as "[Elevated Risk Role](#)" from a child safeguarding perspective? ☐ YES ☒ NO If YES, check all that apply:

**Direct contact role** ☐ YES ☒ NO If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:

**Child data role** ☐ YES ☒ NO If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the [Child Safeguarding SharePoint](#) and [Child Safeguarding FAQs and Updates](#)  
To successfully develop the platform the following milestones are critical to the delivery of the project:

Tasks/Milestone:	Deliverables/Outputs:	Timeline
1. Assignment kick-off, Initial Assessment of the existing system (Review with all stakeholders for the expectations and timelines and come up with an agreement of what needs to be done)	Inception report	10 Days
2. Architecture Design and Prototype Development	Proposed prototype agreed with all parties including the bank	10 Days
3. System Development and Deployment Testing	Completed Platform System	20 Days
4. User Acceptance Testing (UAT)	UAT Sign off	5 Days

5. Platform Stabilisation	Fix bugs after UATs + Sign off	10 Days			
6. Training for Super Users and Admins + Handover of system including source codes	Training + source code submission	5 Days			
7. User Trainings /Workshops/ User Manual	Training Documentations and User Manuals	10 Days			
8. Assignment Exit Sign-off	Exit report	Final product approved 100% invoice			
<b>Minimum Qualification required:</b> <input checked="" type="checkbox"/> Bachelors <input type="checkbox"/> Masters <input type="checkbox"/> PhD <input type="checkbox"/> Other <b>Enter Disciplines:</b>  <b>Education:</b> Bachelor's degree in Information Technology, Computer Science			<b>Knowledge/Expertise/Skills required:</b> <ul style="list-style-type: none"> <li>At least 5 years' experience working in Software Development</li> <li>Familiarity with Government of Zimbabwe procedures, and specifically Ministry of Primary and Secondary Education policies, systems and procedures.</li> <li>Advanced knowledge in vb.net software development, MySQL and SQL database engines.</li> <li>Advanced knowledge in database implementation, configuration, and troubleshooting of database instances.</li> <li>Familiarity with standard ICT industry best practices, with emphasis on</li> <li>Change control and contemporary system security methodologies.</li> <li>General knowledge of Education Management Information Systems</li> <li>Demonstrated project management experience of varying scope</li> <li>Commitment to accuracy</li> <li>Previous experience with NGO and Government related projects / track record is a plus</li> </ul>		
<b>Supervisor: Simplisio Rwezuva</b>		<b>Start Date:</b> 22 April 2024	<b>End date:</b> 21 Aug. 2024	<b>Total Working Days:</b> 70 Days	
<b>Budget Year &amp; Funding Information:</b>		<b><sup>1</sup>Estimated Budget: USD 11 200.00</b> <b>Funding Confirmed:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Funding does not expire before end of contract</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Included in Annual/Rolling Workplan:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, please justify:					
<b>Consultant Sourcing:</b> <input checked="" type="checkbox"/> National <input type="checkbox"/> International <input type="checkbox"/> Both		<b>Consultant Selection Method:</b> <input checked="" type="checkbox"/> Competitive Selection (Roster) <input type="checkbox"/> Competitive Selection (Advertisement/ Desk Review/Interview)			
<b>Payment</b>		<b><sup>2</sup>Lumpsum or monthly:</b> Payment will be done at the end of the assignment upon completion of full deliverables.			
<b>Special Contract requirement</b>		If any feature is discovered to not work as expected despite the UAT. The contractor should be committed to fix and support.			
<b>Intellectual Property</b>		The final product, all source code, intellectual property, documentation and all items specific to this product will be under the client's exclusive ownership.			

<sup>1</sup> Costs indicated are estimated. Final rate shall follow the "best value for money" principle, i.e., achieving the desired outcome at the lowest possible fee. Consultants will be asked to stipulate all-inclusive fees, including lump sum travel and subsistence costs, as applicable.

<sup>2</sup>

<b>Travel International (if applicable)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Travel Local (please include locations)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>DSA (if applicable)</b> Approximate number of days:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Administrative details:</b> Visa assistance required: <input type="checkbox"/> Transportation arranged by the office: <input type="checkbox"/> (For field trips)	<input checked="" type="checkbox"/> Home Based <input type="checkbox"/> Office Based: If office based, seating arrangement identified: <input type="checkbox"/> IT and Communication equipment required: <input type="checkbox"/> Internet access required: <input type="checkbox"/>
<b>Provide Justification for requesting Travel</b>	N/A
Guidance on Travel and Access to UNICEF email and Resources for consultants	<a href="#">Individual Contract types (sharepoint.com)</a>
<b>Application requirement</b>	<input checked="" type="checkbox"/> Technical Proposal <input checked="" type="checkbox"/> Financial Proposal

**Text to be added to all TORs:**

<sup>1</sup> Payment of professional fees will be based on submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.

Consultants are an important temporary work force that contribute with their knowledge, skills and expertise in their respective fields of work.

The assignment of these contracts requires compliance with policy and guidelines and HR practitioners are best positioned to provide the assistance and advise to manager and hiring offices to ensure the effective and efficient use of this resource.

This page provides information regarding policy and guidelines, forms and documents required for the creation and management of contracts.

Please contact us at [nyhq.consultants@unicef.org](mailto:nyhq.consultants@unicef.org).

Contracts are delivery-based, i.e., the consultant is required to produce pre-determined, tangible, and measurable outputs/deliverables, aligned to the delivery schedule outlined in the Terms of Reference. Any single contract should not exceed 36 months duration to produce a single or set of deliverables under the same contract, to ensure best value for money based on periodic competitive reviews by the office.

Individuals engaged under a consultancy or individual contract will not be considered "staff members" under the Staff Regulations and Rules of the United Nations and UNICEF's policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.

## ANNEXURE A

### 1.0 Technical Requirements:

#### Overview of the proposed platform

The proposed system shall contain the following technical requirements/functionalities, but not limited to:

- Admin/Supervisor management module; a system that is user friendly; helps the admin/supervisor to oversee each clerk (Data Capturer) work; manage users, assign work to clerks; Alerts overdue work or any stale job, document tracking and view system reports etc.
- Clerk (Data Capturer) module; have a checklist on documents and processes required before capturing school forms, user friendly interface, alert potential errors, view work summary and alerts on overdue work.
- Accountant module; facilitating payments by running pay sheet, verification of pay sheets, following up on payment outcomes and generate reports on payments made, payment requests, payment outcomes as and when required; payments audit trail. List of schools paid per year
- Disbursement reports – select per school, district, province & national
- Data Manager; set amounts to be paid to schools, allocate resources and tasks, track requests and allocations, analyze each clerks work. Track status of each school (e.g. status of acknowledgement and acquittal) and obtain list of each status including, the list of rejected schools.
- Coordinator; overall supervision and monitoring of the processing of pay sheets. Accessing various reports for decision making. Approving pay sheets.
- Guest module; able to view only specific data reports generated by the system
- Integration; allow integration of existing EMIS data to SIG.
- Integration with the bank and compliance with platform to address bank complexity systems, allowing importing and exporting of files.
- Easy to use, intuitive user-experience and interface.
- Easy management of users and school information.
- Ability of a system to handle growth in data, users and modules.
- System should allow for easy administration of all components by the Super-User/Admin.
- Secure, using ISO standard security and encryption methods.
- Implement data validation for both client and server.
- Don't Repeat Yourself (DRY) principle in coding is recommended.
- Implement Search, Create, Read, Update and Delete (SCRUD) operations.
- Adopt Role-Based Access Control (RBAC) to authorize system resources allocation to users based on roles.
- Scalable and upgradeable as and when the number of users and content increases.
- Maintain and ensure that the solution supports maximum concurrent users.
- The system should run optimally on a networked environment
- Image and other content customization features should be inbuilt within the system to allow standard content sizes (e.g. standard image sizes for easy uploading and processing).
- The system should allow uploading of imagery (JPEG), PDF files, Excel, CSV, and FAT32 compression for storage and transmission of data.
- Provide user help functionality on major components.

### 2.0 Password policy

#### 2.1. Introduction

Username and passwords are utilized in order to access SIG. They also protect user data from unauthorized individuals, both internally (other staff) and externally (hackers).

#### 2.2. Password changes

System should ensure users change their passwords periodically. The Systems Administrator should select an appropriate time frame for changing passwords.

#### 2.3. Minimum password length

The length of passwords must always be checked automatically at the time that users construct or select them. The system must enforce passwords of at least eight (8) characters.

## 2.4. Complex passwords required

The system must enforce a password that contains at least:

- 1 lowercase and 1 uppercase letter.
- 1 special character (! @#\$%^&\*)
- 1 number (0–9)

## 2.5. Limit on consecutive unsuccessful attempts to enter a password

The system should be able to prevent password guessing attacks, the number of consecutive attempts to enter an incorrect password must be three (3) unsuccessful attempts. The involved user account must be suspended until reset by the Systems Administrator.

## 2.6. Encryption

Passwords must always be stored in an encrypted format in the database. Developer must use universally accepted encryption standards that helps protect against the threat of malicious activity by performing real- time encryption and decryption of the database.

### The developer shall also adhere to following security requirements:

- Information Security which is based on the following elements:
  - **Confidentiality** - ensuring that information is only accessible to those with authorized access.
  - **Integrity** - safeguarding the accuracy and completeness of information and processing methods.
  - **Availability** - ensuring that authorized users have access to information when required.
  - **Compliant use** - ensuring that the platform meets all legal and contractual obligations.
  - **Responsible use** - ensure appropriate controls are in place to enforce ethical and law-abiding behavior, conservation of common resources, and respect for other users within the system.
  - **Auto Backups** – the system should allow the administrator to create time frames for system auto backups or select an appropriate time frame for creating a backup when need arises.
  - **Manual Backups** – Functionality required
  - **External Data** - the system should allow exporting and importing of data using database tools such excel, text file, XML file, PDF or XPS, email and MS Access
  - **EMIS integration** – should allow synching of information from EMIS through APIs.
- The software should provide audit trails and logs mechanism for content changes performed by system users.
- Maintain time series data so that certain information is not lost with passage of time and repeated updating.
- Handle session hijacking and session replay.
- Input validation to prevent attacks such as buffer over -flow, cross-site scripting and SQL Injection.

## 3.0 Responsibility

### 3.1 User

User refer to MoPSE officials:

- Shall ensure bi-weekly updates are reviewed and comprehensive requirement specifications are provided within review period.
- Shall maintain the delay register and notify the developer of all delays in writing; shall appoint the point of contact or project focal person(s).
- Inform the stakeholders and arrange for joint sessions with developers.

### 3.2 Developer

- Shall provide the management information system acceptable to user.

- Shall provide all details regarding licenses if required (based on selected solution).
- Shall maintain the delay register and inform the user on the delays.
- Shall appoint a project manager who shall be the point of contact; and
- Shall recommend suitable hosting environment (server specifications and similar) to host the portal safely and efficiently if necessary.
- Shall provide the system source code for the system as part of hand over – take over to the Ministry

#### 4.0 Downstream Work: Warranty

Provide a two-year warranty after the user acceptance signoff. During this period, the developer is responsible for the following technical support:

- Update patches,
- Fix bugs,
- Make post-deployment changes to the system based on feedback from user experience.

#### 5.0 Install the SIG system and train Ministry's staff

The consultant will install the system and train Ministry's staff in using the software. Training will be conducted at MoPSE head office. The consultant will be responsible for preparing training materials and conducting the training.

##### 5.1 Install and test the Admin Module

The consultant will install the System and databases on the network, test and verify its proper operation and train the system administrator on major functionalities of the system.

#### 6.0 Inception Report

The developer will assess the requirements and develop the inception report with time frames and requirements on financial payment modalities. The consultant will work closely with the MoPSE technical team to determine information to be stored, security arrangements; establish audit trails, data entry approaches, reporting requirements etc.

##### 6.1 Provide System maintenance services

The developer will maintain the System and databases and upgrade as necessary, including providing troubleshooting services during the pilot run. This will include modifying the existing components and modules as and when required. This service will be required on an ongoing basis and immediately when errors are detected.

##### 6.2 Computer hardware/software selection/installation/training

The developer will assist the MoPSE technical team in procuring and installing new hardware and software where necessary and in training MoPSE staff in using such software and hardware. The consultant will develop a reliable information security system including secure procedures for data entry, data storage and backup, and establishing data entry/change audit trails.

#### 7.0 SYSTEM REQUIREMENT SPECIFICATION

- **Database**

The database should be normalized. The system must encrypt user data, usernames and password stored in the database using Advanced Encryption Standards (AES).

- **Backup & Recovery**

Backup of information is fundamental to the reliability and recoverability of the system. A documented backup plan which defines the backup routines of the system shall be provided. A backup plan aims at ensuring that information in backups is complete and sufficient.

The system should automatically perform regular backups of all critical items including; user data, system logs, reports and the database in an encrypted format. The backups shall be stored in an off- site storage location or preferably a secure cloud storage. The backups will regularly be tested to ensure integrity of the backups

- **Technology Transfer**

The developer needs to engage with the ministry technical team during the project period and avail the system source code so as to harness the transfer of technology as minor corrections and support will be done in house.

- **Deployment of the system**

The developer is required to come up with a schedule of activities highlighting milestones and expected deliverables such as; signing of contract, collecting user requirements, the different phases of system development, deployment and roll out. The developer should also support user in terms of stabilization and making the system acceptable by the end users.

- **Training**

The developer is required to provide training to the users on the management and administration of the system including basic system maintenance. This is to provide an understanding of the system, its database and infrastructure configurations used during the implementation of the system. Training on basic maintenance is for the purpose of sustainability so that the system can be managed when the warranty expires.

- **Documentation**

Content Design Document (high level design, data model), user manuals (including screenshots) and any other documentation of the assignment have to be completed and handed over to the user.

- **Technical Support**

The developer shall render all support activities related to the following up until the warranty period expires:

- Troubleshooting at both application level and user level,
- Assist focal official/client in operation of the portal,
- Fixation of bugs, incorporation of minor changes, etc.