PROJECT/ASSIGNMENT TITLE: Database Administrator, Ministry of Health Resource Centre
Level: GS7
Duty Station: MoH, Kampala, Uganda
Duration: 4 months, with possibility of extension

Scope of Work

This position will be required to strengthen the database management component of MoH Resource Centre programmes, which includes but are not limited to eHMIS (mTrac and DHIS2) , the Facility Health Management System (FHMS), National Health Record System, Mother Reminder System (MRS) and the Community Health Management System (CHMS), plus support to integration of additional modules as they are introduced.

General duties will include administration, management, design, documentation and evaluation of a variety of database management systems. In addition, the consultant will perform database and transaction log backups, as well as maintenance and monitoring of database server performance.

The consultant will also perform additional related duties, including:

- Information Systems and Database Management
- Administers a variety of database systems including Microsoft SQL Server, PostgreSQL, MySQL, MongoDB and MS Access
- Develops and enforces database administration and user standards and procedures; audits, modifies, and amends data in systems, and able to create data entry screens;
- Oversees the scheduling of database projects in consultation with the Program Manager National Health Records Program, database and transaction log backups, notifications, and database replication between multiple Database Servers and remote sites; supervises and manages multiple concurrent projects;
- Evaluates database server integrity and security
- Assists in the creation of SQL and Web-based databases and database systems
- Reviews technical designs, reports, documentation, and other materials produced by MoH/RC staff;
- Creates and maintains high-level reporting systems using products such as Jasper Reports
- Researches and implements new database and online technology.
- Directly participates in the Data warehousing and Business Intelligence Projects
- Training and support supervision at both national and district level
- Provision of monthly, quarterly and annual performance reports for MoH and Districts (league tables, score cards, other related performance measurements as may be requested)

3. Areas to be Considered

Consultant will serve as a secondee to the MoH, filling a position within the eHealth TWG endorsed draft HR organogram for the proposed MoH Department of Health Information upgraded from the current Resource Centre. While efforts are underway to formally create these positions within MoH structures, it is expected to take at least 3-5 years, with HDP support required in the interim.

4.. Expected Deliverables and time frame

The consultant will be expected to produce very brief activity reports, every two weeks, stating major outputs achieved and planned outputs for the following two weeks. These should be sent via email by Friday to the supervising managers at both MoH/RC and UNICEF.

The consultant shall – on a quarterly basis – provide an updated work plan for review and approval by the MoH and UNICEF.

Monthly deliverables should be first reviewed by the Assistant Commissioner, Ministry of Health Resource Centre, no later than 2 weeks after the due date, before submission to UNICEF for final review and approval. Deliverables should include a cover letter indicating the month, deliverable and fee being invoiced; a copy of the actual deliverable (ie report); and a copy of the contract, with the month being invoiced against highlighted. The consultant shall receive a monthly payment after approval from UNICEF supervisor.

The contract shall run from 15 July 2015 to 15 January 2016 (126 days). Efforts will be made in the interim to transition full ownership of the contract to the MoH HR Department; a progress review will be conducted by 1 October 2015 and a decision made by UNICEF senior management whether the MoH is on track and able to take over the contract by 1 January 2016. In the case this is not possible, alternative modalities will be explored so as to ensure continuity of programme assistance.

5. Tasks	End Products/ Deliverables	Time Frame
1. Assess, develop roadmap and optimize MoH Resource Centre Data Warehouse hardware and disaster recovery procedures.	1. Draft 3 – 5 page report on the set-up and performance of hardware at the MoH Resource Centre Data Warehouse and other off-site locations as recommended, including recommendations on how to optimize the configuration and plan for fail-over / disaster recovery, a roadmap for implementing proposed changes, and activities already conducted.	15 August 2015
2. Analyze data base performance of eHMIS and CHMS, and optimize as necessary.	2. Draft 3 – 5 page overview analyzing the set-up and performance of the MoH eHMIS (mTrac and DHIS2) and CHMS software, and provide recommendations to optimize the systems and a work plan for implementing proposed changes.	15 September 2015
3. Based on MoH's Technology Framework, assess upgrades and integration of key systems and databases, and reconfigure / optimize as necessary.	3. Draft 3 – 5 page recommendations, proposed roadmap and activities already completed for the upgrade of various eHMIS Platforms as the case maybe with a focus on implications for hosting at the MoH, integration of key systems (including DHIS2 and iHRIS), and changes required to the various databases.	15 October 2015

4. Review and update documentation for all MoH hardware, database, maintenance and back-up/ recovery procedures.	4. Update documentation for all MoH existing database technologies, maintenance processes and backup/recovery procedures, and draft internal documentation system, preferably on a wiki, for MoH intranet server including server inventory, data models, and step-by-step maintenance procedures.	15 November 2015
5. Conduct Q3 – Q4 2015 performance update of eHMIS, apply recommended changes.	5. Provide 2 – 3 page report covering all optimization activities completed for eHMIS.	15 December 2015
6. Review and assess interoperability and integration of new software tools on the MoH's 2015-2018 Roadmap based on the MoH Technology Framework.	6. Draft 3 – 5 page SWOT analysis and assessment of integration within existing Health Information System ecosystem for new software tools proposed by the MoH Resource Centre.	15 January 2016

6. Desired background qualification and experience and competencies

It is required that the consultant has:
- A Diploma in Computer Science, Statistics, Engineering or Mathematics that demonstrates the ability to perform the duties and responsibilities as described.
- At least 7 years' experience in Database Management Systems (DBMS) administration, and maintenance, database design, analysis, and management, 3 of which are in administration and maintenance of management information systems, and / or server hardware and software technologies (including Linux and Windows NT-based servers), standard computer hardware and software, and Internet connectivity and technology.
- Fluency in at least two of PostgreSQL, MySQL, MS SQL Database Systems
- Fluency with at least two Object Oriented Programming languages, including Java, PHP5 and Python

Recommended - Knowledge of:
- Data communications and networked system
- Database integration on the Web (web platforms in the cloud)
- Understanding of eHMIS databases especially DHIS2 and mTrac databases.

Skill and Ability to:
- Communicate effectively in both oral and written forms; interact with users and office staff in non-technical, clear terms.
- Assist staff with difficult technical tasks
- Work independently and as a team member.
- Set priorities and organize work to meet strict deadlines.
- Make decisions on a variety of complex matters
- Establish and maintain cooperative working relationships with those contracted during the course of work.

	• Research and evaluate computer applications and database server hardware and software.
	• Manage hardware/software configurations including set-up, maintenance, and back-up.
	• Ability to adapt to changes in technology.
	Good knowledge of statistical packages.
5.	Conditions
	• It is expected that the Consultant will already reside in Uganda, and will not be eligible for an airline ticket or DSA upon start of the contract.
	• The consultant will be seconded to the MoH, and as such, will not work from the UNICEF Office or require a computer, access to phone lines, etc.
	• Consultant is responsible for his/her own health insurance. Consultant will be required to sign the health statement for consultants/individual contractor prior to taking up the assignment, and to document that they have appropriate health insurance, if applicable.
	• This consultancy will likely require significant travel within Uganda. Consultant will receive standard DSA for any in- or out-of-country travel, and is authorized to take UNICEF transport if the Supervisor approves travel.
	• The consultancy will not commence unless a contract is signed by both UNICEF and the consultant.
	• Consultant will not have supervisory responsibility within UNICEF, nor responsibilities on UNICEF budget and other resources.
	• Consultant will arrange her/his own accommodation when needed.
	• Consultant is not entitled to payment of overtime. All remuneration must be within the contract agreement.
	• It is expected that Consultant will be available in Uganda for the entire consultancy period. This position should be considered a full-time assignment. A month is defined as 21 working days, and fees are prorated accordingly. Consultants are not paid additional fees for work on weekends or public holidays.
	• The consultant is expected to adhere to standard MoH working hours.
	How to Apply
	• Applicants interested in the above position should send their Applications accompanied by a resume and P11 Form Via email to: ugderecruit@unicef.org, clearly indicating the position applied for and using the specified order to name attachments (Firstname_Lastname followed by document e.g. First name_Last Name P11 or First name_Last Name CV or First name_Last Name Application.
	• ONLY Ugandan Nationals will be considered for this Assignment
	• UNICEF is committed to gender equality in its mandate and its staff; qualified female candidates are strongly encouraged to apply.
	• UNICEF is a smoke free environment.
	• Only short listed candidates will be contacted.
	Closing date for applications is 26 August 2015.