

UNITED NATIONS DEVELOPMENT PROGRAMME TERMS OF REFERENCE

1. Consultancy Information

Consultancy: IT Programmers (2 positions, international)

Supervisor: Election ICT Specialist

Duration: 4 months Starting Date: April 2014

Duty Station: Dar es Salaam, with frequent travel to Zanzibar

Located at: DEP Project Office, Dar es Salaam

Full/part time: Full time

2. Organizational Context

Tanzania has held four credible general elections since the reintroduction of multi-party politics in 1992. Citizens and the government are eager to maintain this track record and to further strengthen democratic practice in Tanzania. Looking to the 2015 general election, government has undertaken early and comprehensive preparations for the electoral processes. Since receipt of official requests for UN assistance to the election cycle leading to the 2015 general election from the National Election Commission (NEC) and Zanzibar Electoral Commission (ZEC), a UN Needs Assessment Mission recommended the development of a project in support of the national efforts.

In addition, in 2014 the United Republic of Tanzania will likely conduct a first national referendum on a new constitution. The EMBs and other stakeholders in preparing for these critical events have requested the assistance of UNDP to provide technical support to the preparation and execution of this referendum.

To these ends, the Democratic Empowerment Project is a four year (2013-2016) UNDP, UN One Fund and other donor-funded project with the overall aim of contributing to Tanzania's UNDAP's Outcome 7: i.e. "Key institutions of democracy, (i.e. EMBs, etc.) effectively implement their election and political functions". UN Women and UNESCO are implementing partners in a One UN Country Team context.

Project Objectives

The Project seeks to promote democracy and contribute to the realization of the following four objectives:

- 1. Capacity of the key democratic institutions (EMBs, CRC, RPP, etc.) enhanced to support and promote legal and institutional reform in the context of the on-going constitutional reform process and beyond.
- 2. Capacity of the EMBs to conduct credible elections enhanced through strategic,

technical and operational support and improved EMB engagement with stakeholders (i.e. political parties, CSOs, and the media) to foster a democratic environment.

- 3. Inclusive participation in elections and politics enhanced through the empowerment of women, youth and PWDs.
- 4. National peace infrastructure enhanced to mitigate and prevent election-related conflicts.

Purpose of the assignment

Two international IT Programmers are required to provide support to NEC and ZEC to develop a number of IT solutions as part of preparations for the 2014 referendum and the 2015 general elections. During the 2010 election period, UNDP developed a number of election-related IT systems including a Results Management System (RMS), a Candidate Management System (CMS), Incidents Management System (IMS). In 2011, more functionalities were added to these systems, and they were repackaged in-easier-to-deploy configurations. The EMBs have continued to use the RMS and CMS over 2012 and 2013 and have requested specific modifications based on their experience using the systems.

The two IT Programmers are required to revise these existing IT systems with a view to improving their relevance and responsiveness to the needs of the two EMBs in preparing for the 2014 referendum and the 2015 general elections.

3. Scope of work

Reporting to the Chief Technical Adviser and working under daily supervision of the DEP Elections ICT Specialist, the incumbents will perform the following duties:

- 1. Responsible for the development of computer software and IT solutions as required by the EMBs;
- 2. Analyze existing IT systems and infrastructure of the two EMBs with the view to draw up pragmatic technical specifications for the software solutions to be developed;
- 3. Provide technical assistance and guidance to DEP and the EMBs on IT-related systems and infrastructure for elections;
- 4. Advise and assist the EMBs with deployment, implementation and coordination of all IT solutions and component which may come from different sources;
- 5. Develop training plans and materials for the EMBs and assist with in-house mentoring and coaching of the EMB IT personnel in order to ensure continued use and development of key IT solutions and product in the future;
- 6. Create user guides and documentation of in-house developed software.
- 7. Provide technical input into the upgrade of the EMBs existing IT Infrastructure and updating of existing software.
- 8. Any other task as might be reasonably required for the delivery of the assignment.

The above mentioned functions and responsibilities may need to be realigned according to the client's requirements.

4. Deliverables

The contractors will work as part of a team to further develop the following IT system solutions:

- A.1. Update of Results Management System (RMS), to handle the 2014 referendum.
 - a. Update the Scanning Module to allow high speed scanning and add the capability to work with any scanner available.
 - b. Update Councilors Result Reporting and ability to report Presidential and Parliamentary result by Wards.
 - c. Integrate ICR Module in Result Capturing.
 - d. Integrate RMS and GIS.
 - e. Upgrade Result form printing module to be able to print Polling Station Result Forms (Form 21A, 21B, 21C).
- A.2. Update of Candidate Management System (CMS), including the auto-generation of electronic versions of related electoral material, to handle 2014 referendum and 2015 general elections (president, parliament, local)
- A.3. Improvements to the Incidents Management System (IMS).
 - a. Upgrade Incident Reporting Module to be able to capture incident details and photo, and capability to send these details to Central Data Centre.
 - b. Differentiate incidents with colors on the map.
 - c. Upgrade Rapid Response Module to be able to show location of incident, photo if available and suggest route.
 - d. Preparation of various incidents reports including statistics, histogram, pie chart, etc.
- A.4. Creation of an Observer Management System (OMS), including the auto-generation of electronic versions of Observer Accreditation Cards.

With reference to already developed software (e.g. RMS, CMS and IMS), the following will be provided:

- A.5. Updated documentation regarding System Installation, Configuration, Deployment and Usage.
- A.6. Updated training plans and training manuals for operators of RMS and CMS software.
- A.7. Provide additional functionality; more specifically, the following deliverables will be completed:
 - a. Create a new module in existing RMS to handle tallying of referendum results.
 - b. Create a new module in existing CMS to handle ballots, result slips for referendum.
 - c. Re-working of the process flow within the application to allow taking into account the needs of the EMBs to manage 2015 general elections.

With reference to already developed IMS, the following will be provided:

With reference to new software to be developed (OMS), the following will be provided:

- C.1. Source code, fully commented.
- C.2. Documentation regarding System Installation, Configuration, Deployment and Usage.
- C.3. Training plans and training manuals for operators of the OMS software.

Schedule of Deliverables and Related Payments:

Deliverables/ Outputs	Estimated duration	Target due dates	Related payments	Review and Approvals Required
Developer A: Technical input into the upgrade of EMBs' existing IT infrastructure & updating of existing software. Developer B: Review & technical input into improvements to the VIS. Technical input into the creation of new OMS	1 week	1 st week from start	1 st payment	 Review by ICT Election Specialist, CTA and PM Approval by PM
RMS and CMS – new functionality (deliverables B.3.a to B.3.c)	4 weeks	5 th week from start	2 nd payment	
RMS and CMS – Debugging, Tidying up of Source Code & Comments	2 weeks	7 th week from start		
RMS and CMS – Training Materials, User Guides & Documentation	1 week	8 th week from start		
OMS – new software. Source Code & Comments.	4 weeks	12 th week from start	3 rd payment	
OMS – Training Materials, User Guides & Documentation	2 weeks	14 th week from start		
Handover and Coaching of key EMB staff	1 weeks	16 th week from start		
Update of IMS	2 weeks	17 th week from start	4 th payment	

5. Competencies

Corporate competencies:

 Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability; • Highest standards of integrity, discretion and loyalty

Professionalism:

- Demonstrates professional competence and mastery of subject matter;
- Demonstrated ability to provide innovative technical leadership through the planning, development, and management of the project activities;
- Demonstrated ability to negotiate and apply good judgment;
- Shows pride in work and in achievements;
- Is conscientious and efficient in meeting commitments, observing deadlines and achieving results;
- Shows persistence when faced with difficult problems or challenges;

Planning & Organizing:

- Organises and accurately completes multiple tasks by establishing priorities while taking into consideration special assignments, frequent interruptions, deadlines, available resources and multiple reporting relationships.
- Plans, coordinates and organises workload while remaining aware of changing priorities and competing deadlines.
- Demonstrates ability to quickly shift from one task to another to meet multiple support needs.
- Establishes, builds and maintains effective working relationships with staff and clients to facilitate the provision of support.

Teamwork:

- Works collaboratively with project staff and EMB staff to achieve organizational goals;
- Solicits input by genuinely valuing others' ideas and expertise;
- Facilitates the development of individual and multi-cultural/team competencies;
- Ability to provide substantive training and mentoring, and manage teams;

6. Institutional arrangements

The contractors will work full time, based in the DEP project office in Upanga, Dar es Salaam, with intermittent presence at the UNDP Country Office. Office space and limited administrative and logistical support will be provided. The contractors will use their own laptop and cell phone. S/he will travel frequently to Zanzibar for short (2-4 day) missions.

The contractors will report to the DEP ICT Elections Specialist, who will review progress on a weekly basis, and will certify delivery of outputs following review by himself, the CTA and/or the PM. Technical guidance will also be provided by the relevant officials of both EMBs.

7. Qualifications of the Successful Individual Contractor			
Qualifications:	 Master of Science degree (or higher) in Computer Science, Information Systems, Information Management or related discipline. CISCO certified ICT specialist. A proven track record of 5 years or more post-degree software development experience within a Microsoft Windows .NET environment. Applicants with Bachelor degrees (in a relevant discipline, as stated above) and with at least 8 years' experience will also be considered provided they have demonstrable software development experience, and the professional qualifications as required above. 		
Technical Experience:	 Essential: Expert Programmer with demonstrated high level technical skills in C# or VB.NET and ADO.NET. Knowledge of VBA, SQL, Visual Studio.NET and Microsoft.NET 3.0/3.5. Knowledge of web developments tools (HTML, ASP, PHP). Able to write clear, concise, well-commented code. Understanding of internet technologies and development of distributed systems. Knowledge of System Design; Applications Development and Client Server systems. Knowledge of SQL Server and Oracle. 		
	 Desirable: Track record of progressively higher responsibility within a software development role. Experience in relevant areas, in particular electoral projects. Knowledge of at least one report generation program (such as Crystal Reports or Microsoft Reporting Services). Some knowledge of cryptographic systems is beneficial. At the very least knowledge of how to use cryptographic modules to secure internet based communications is desired. 		
Other desirable experience & skills:	 Skilled in liaising with clients so as to understand their needs and developing design specifications in collaboration with client so as to secure buy-in of planned concept. An understanding of how to create robust, easy-to-use applications with a user-friendly interface is essential Working experience on projects in developing countries with nationwide coverage and limited technological infrastructure is preferred. Ability to integrate quickly into, and work effectively and 		

	 sensitively in a cross-cultural work setting. Deliver expected results under limited supervision, and the resilience to overcome obstacles without becoming discouraged. Experience in an election-related IT environment is a plus. Knowledge of electoral processes is not mandatory. Ability to quickly reach agreement with colleagues on division of responsibilities, and obtain consensus on design specifications and secure sign-off.
Language requirements:	A high level of written and spoken English is essential.Knowledge of Kiswahili an asset.

8. How to apply

Please submit both a Technical proposal and a Financial proposal. These proposals must be submitted separately, as outlined in the following two sections.

9. Technical proposal

- **I. Technical proposal** comprising of the following:
 - 1. Letter of Confirmation of Interest and Availability using the template provided by UNDP.
 - 2. **Personal CV or P11**, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and three (3) professional references.
 - 3. **Brief description** (max. ½ page) of why you consider yourself as the most suitable for the assignment, and a **methodology** (max. 1 page) for how you will approach and complete the assignment.

10. Financial Proposal

The financial proposal must be expressed as an all-inclusive total contract price in USD, supported by a breakdown of costs, presented in the following template:

	Unit cost (USD)	No.	Total
a) Professional fee:			
b) Daily living allowance:			
c) Travel to/from Duty			
Station:			
d) Other costs (specify):			
	Total (lui	mp sum):	

Notes:

- The information in the breakdown of the offered lump sum amount provided by the Offeror will be used as the basis for determining best value for money, and as reference for any amendments of the contract.
- 2. The agreed contract amount will remain fixed regardless of any factors causing an increase in the cost of any of the components in the breakdown that are not directly attributable to UNDP.
- 3. Approved local travel related to this assignment will be arranged & paid by UNDP Tanzania.
- 4. Employment visa will be arranged & paid by UNDP Tanzania.
- 5. The Contractor is responsible for arranging and meeting the cost of their vaccinations and medical/life insurance.

11. Criteria for Selection of the Best Offer

Offers received will be evaluated using a Combined Scoring method, where the qualifications and proposed methodology will be weighted 70%, and combined with the price offer, which will be weighted 30%.

Criteria to be used for rating the qualifications and methodology:

Technical evaluation criteria (total 70 points):

- Relevant software development knowledge and experience [20 marks].
- Evidence of high level technical skills as an expert programmer [20 marks].
- Experience on similar assignments liaising with public sector clients in developing countries [10 marks].
- Proposed methodology [20 marks].

Only candidates obtaining a minimum of 49 points in the Technical Evaluation will be considered for the Financial Evaluation.

Financial evaluation (total 30 points):

All technically qualified proposals will be scored out 30 based on the formula provided below. The maximum points (30) will be assigned to the lowest financial proposal. All other proposals receive points according to the following formula:

$$p = y (\mu/z)$$

where:

- p = points for the financial proposal being evaluated
- y = maximum number of points for the financial proposal
- μ = price of the lowest priced proposal
- z = price of the proposal being evaluated.

Approval

This TOR is approved by:

Signature:	
Name:	Titus Osundina
Designation:	Deputy Country Director (Programmes, a.i.), UNDP Tanzania
Date:	