THE REPUBLIC OF UGANDA

MINISTRY OF ICT AND NATIONAL GUIDANCE

TERMS OF REFERENCE FOR CONSULTANCY SERVICES TO SUPPORT AND EVALUATE THE DEVELOPMENT OF SYSTEMS TO BE DEPLOYED IN GOVERNMENT UNDER THE NATIONAL ICT INITATIVES SUPPORT PROGRAM (NIISP)

[AUGUST,2019]

Background

Ministry of ICT and National Guidance has been at the forefront to guide successful implementation of ICT and related services across the country through e-government framework, National ICT Policy, Strategies and infrastructure development initiatives.

Government has placed ICT as one of the Key drivers of efficiency and effectiveness in service delivery, production and communication, reason why the Ministry of ICT was created in order to champion the uptake of ICTs across the country. One of the key drivers of implementation and uptake of ICT's is innovation. However, ICT innovation was not very well coordinated and harnessed.

The Ministry of ICT& NG in its efforts to support the ICT Innovation ecosystem designed the National ICT Initiatives Support Program (NIISP), whose main objective is to facilitate the development and deployment of local digital solutions and to create marketplace for these innovative digital products both in the public and private sector.

The program which staretd in 2017 has supported over 100 individual innovations and Innovation Hubs. To achieve the successful development, implementation and deployment of solutions developed by innovators within Government, the Ministry of ICT and National Guidance seeks to recruit an firm to support this process.

Objective of the Consultancy

The key objective of the assignment is to provide end to end Quality Assurance Services (QAS) for the entire process of Innovators' design, development, testing and roll-out of the solutions to be implemented in Government Ministries, Departments and Agencies (MDA's). The QAS shall happen at all the stages of the System Development Life Cycle (SDLC) and shall give the Ministry of ICT & National Guidance and therefore Government of Uganda (GOU) the full confidence that the systems and applications developed by the innovators meet international standards, best practices and all the relevant ICT parameters including cyber security, scalability, robustness, agility, etc.

The consultatant will ensure that developed solutions/systems meet and comply with defined quality, functional and technical specifications required by MDAs in meeting their goals for which the system will have been developed. The consultant shall provide technical assistance to the Ministry of ICT and National Guidance in supervision of the Software Development Projects including supervising the development, testing and implementation of the software systems.

Given the fact that application development is a continous iterative process that requires routine checks, the design, development and deployment of the solutions should

continuously meet the desired standards. Rather than only testing for quality after completion of the development, the consultant will be required to carry out the quality assurance tests for quality in each phase of development until the system is complete, deployed and maintained for periods to be agreed upon.

Scope of the Consultancy, duties & Responsibilities

The Consultant shall be directly supervised by the Permanent Secretary, Ministry of ICT and National Guidance.

The consultant shall liaise closely with the NIISP project team at the Ministry of ICT &National Guidance who will avail all the necessary information and the access to the innovators/innovation for all technical matters relating to efficient and succefful implementation of NIISP.

Specifically the Scope of the assignment shall include:

i. Review of innovations, the solution/ systems documentation, analyze information and make recommendation for improved development and deployment,

ii. Ensure that the system complies with required system-wide technical requirements as per MDA's needs.

iii. Critically examine the Innovators' systems/solutions to be deployed in GOU and propose improvement of the exisiting GOU processes to ensure that the systems are assisting government to be as efficient and effective as possible.

iv. Study the functional requirements, to ensure that the identified innovation meets the requirement for which the requirements were designed

v. Ensure that the systems and applications developed meet international standards, best practices and all the relevant parameters including cyber security, scalability, robustness, agility, etc.

vi. Examine usability of the solutions developed including evaluating the requirements based around user interface issues, e.g. issues such as ease of use, accessibility, interface aesthetics, and consistency within the user interface. Including access to the systems by Persons With Disabilty (PWD)

vii. Check the systems for openness and ability to integrate seamlessly with other systems/ platforms including platform independence. The developed systems should have provisions for easy interconnection to the existing GOU systems with Application Program Interfaces (API's) for new system connections.

viii. Work directly the software development team to develop the Software Release Roadmap in consultation with key stakeholders, including detailed functional requirements, feature sets and test cases/suites.

ix. Work with the software development team improve on the detailed project plans and milestones for the implementation of the systems, including modules required, resource allocations per module, timelines and expected outputs.

x. Monitor software development progress in line with agreed project plans/milestones.

xi. Carry out a full review of the existing software architecture, including software platforms, frameworks, databases, etc., and attendant proposed hardware infrastructure (i.e. hardware platforms, scalability, maintainability, etc.) and advise on necessary improvements/enhancements.

xii. Carry out periodic source code reviews to ensure a high quality of work output.

xiii. Supervise software testing process to ensure software output conforms to set international best practice and test suite standards.

xiv. Supervise the software development teams in preparation of end-user and technical documentation for the software, to ensure output documentation is of the highest standard.

xv. The consultant to carry out a comprehensive Short Term Post Implementation Review 3 months after the innovation system has been implemented

Timescale

The consultancy is valied for 12 months

Deliverables

i. The consultant shall submit an inception report two weeks after contract signing. This report will address in detail how the consultant intends to successfully complete all aspects of this assignment. The report will also contain full details of the consultant's work and supervisory methodology and associated staff man hours plan. The report will also include a risk and assurance register which will be maintained and kept up to date by the consultant throughout the duration of the assignment.

ii. Monthly Reports (including test reports) that shall summarize all relevant information considered pertinent to the deliverables and nature of this assignment. These reports will also act as a summary record of all the project reports, milestone, key recommendations, if and how the innovators met recommendations.

iii. Final Report on the implementation of all rolled out innovations and their satus at the end of the contract.

Minimum requirements

The team leader should have the following Qualifiations:

1. Bachelors Degree in Computer Science, Information Technology ,Information Systems or any other related field.

2. Masters Degree in Computer Science, Information Technology, Information Systems or any other related field.
3. Minimum of 15 years experience in Systems Design, Development, Analysis and management of IT systems and projects.
4. The team leader should possess demonstrable local and international expertise in the following areas as required for this assignment:
   - Systems and software Architecture, and Systems Infrastructure
   - Project Management and Assurance of large scale IT projects,
   - Quality Assurance of IT Systems and large scale IT projects
5. Possession of a Postgraduate qualification on Project Management shall be of added advantage.

Supervisory Arrangements

Ministry of ICT and National Guidance now invites eligible firms to indicate their interest in providing these services to submit their applications.

Interested firms must provide information indicating that they are qualified to perform the services (curriculum vitae, academic and professional certificates, description of similar assignments executed, experience of work undertaken in similar conditions, availability of appropriate skills, etc.).

Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with the PPDA Act.

The Consultant shall report to the **Permanent Secretary, Ministry of ICT and National Guidance**.