



## THE REPUBLIC OF UGANDA

### **TERMS OF REFERENCE FOR CONSULTANCY SERVICES TO DESIGN, DEVELOP, SUPPLY INSTALL AND TRAIN IN THE IMPLEMENTATION OF WEB AND MOBILE APP OF LAND VALUATION DATA BANK**

*(Land Values, compensations rates, Land acquisitions, Property indices, Rental values, Construction rates)*

## **1. Background**

The Government of Uganda through the Ministry of Lands, Housing and Urban Development has secured funding from the World Bank/USMID-AF to procure a consultant to Design, Develop, Supply and Implement a Web and Mobile App for the Land Valuation Data Bank.

The Office of the Chief Government Valuer (CGV) under the Ministry of Lands, Housing and Urban Development, is responsible for assessments of Stamp Duty, Capital Gains Tax, Probate, Premium, Ground Rent, Conversion, Property Tax, Assets Disposal, and Rental for Government property among others.

Government plans to undertake big portfolio projects under the NDPIII. Majority of projects require land acquisition. The projects include; planning and infrastructure development of the strategic cities, oil and pipeline, Mineral development, agro based industries, hydro and nuclear power, Parish Development model amongst

Consistent with Article 26 (b) (i) of the Constitution, the office is mandated to provide fair and adequate values which are tenable with availability of the appropriate Information Communication and Technology platform and Data. Data and ICT platform are a recipe for quality valuations for compensations, land acquisitions and assessments of Stamp Duty, Capital Gains Tax, Probate, Premium, Ground Rent, Conversion, Property Tax, Assets Disposal, and Rental for Government property.

The impact of availability of a scalable Information Technology, Data and information shall include; improved quality and quantity of valuations which will have a multiplier effect on revenue generation, cost saving, land Acquisition, efficiencies in project implementation among others.

Currently, the office of the Chief Government Valuer has no reliable Land Valuation Data Bank to facilitate usage of Information Communication and Technology, provide reliable data and information to facilitate the prompt and fair assessments as required by the Constitution and International Valuation Standards.

## 2. Problem Statement

The Uganda Vision 2040 is premised on the desire to “transform Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years”. By critical analysis of the Uganda Vision, it can be observed that 70-80% of the projects planned under 2040 vision require land Acquisition. However, to match the much needed portfolio and other demand for the valuation services, it calls for robust data and information systems to aid accurate valuations. Some of the data requirements include but not limited to scalable land values, Geographical information, Neighborhood analysis, Compensation rates, land acquisition, property indices, etc.

The absence of a Valuation databank for quality valuations has costed government a lot of revenue due to lack of data to inform assessments including; Stamp duty, capital gains, and compensations among others. It is estimated that government loses 30%-35% annually; arising from information asymmetry. Moreover, inadequacies of data-comparable abets moral hazards such as corruption tendencies, impunity, market distortions among others.

## 3. General Objective

To Design, Develop, Supply and Implement a Web and Mobile App for the Land Valuation Data Bank

## 4. Specific objectives

The specific objectives of the web and mobile app of the national land value database are;

- 1) To improve efficiency and effectiveness in valuation processes.
- 2) To improve the turnaround time and throughput in all valuations.
- 3) To reduce variances, errors of margin and contested valuations
- 4) To improve planning, budgeting and mitigate cost overruns during valuations
- 5) Improve data comparability, dependability and transparency in valuation
- 6) To provide an electronic platform for data collection, storage, processing and retrieval
- 7) To improve efficiency in revenue generation and reduce revenue loss to Government
- 8) Improve documentation and report management arising from valuations.

## 5. Scope of the Assignment

The consultant shall be required to undertake the following:

- i. Following the initial kick-off meeting, the firm will in the Inception report, describe the methodology detailing out necessary processes and steps required for various activities under the task as well as software specifications for the Web and Mobile App of the Land Valuation Data Bank, covering specific features/requirements as mentioned above.  
**Output:** Inception report that will include the methodology and processes in delivering the assignment.
- ii. Analyze requirements from the Office of the Chief Government Valuer and any other stakeholder, Design the information system fit for the purpose, having features such as user-friendly interface, high degree of data security, easy and faster data entry and retrieval, stringent data validation, easy adaptability and easy to upgrade.

**Output:** System Requirements Specification and Design document.

- iii. Develop and deploy a Web and Mobile App of the Land Valuation Data Bank as specified in the System Requirements Specification and design document.

**Output:** Implementation plan, and Web and Mobile app of the Land Valuation Databank deployed.

- iv. Prepare User Acceptance Test Plan and carryout testing, deployment and operationalization of the system. Undertake its testing and customization as per the user requirements and amend the system accordingly.

**Output:** User Acceptance Test Plan and Report

- v. Develop a user manual and Train end users and technical staff on the operations of the system. The firm will provide all the support needed by the Office of the Chief Government Valuer on a 24hour–7days (24/7) basis to ensure the successful set up and operationalization of the System. Once successfully implemented, the Consultant shall provide maintenance and support for a period of twenty-four (24) months.

**Output:** Training Plan and Training Report.

## **6. Qualification and Experience of the firm and the Personnel.**

### **6.1 Qualification and Experience of the firm**

1. The bidder shall furnish documentary evidence that they meet the following requirements;
  - a) Shall have developed and implemented at least two projects of a similar nature and scope in the last 10 years.
  - b) The Bidder shall submit a detailed description of the functional and technical features of the referenced systems, a copy of each referenced contract, a Letter of Confirmation for each of the referenced assignments (from clients or certified auditors) and contact information (i.e. telephone and e-mail addresses) of the respective clients to support the claims of previous experience;
  - c) Shall have a minimum of 10 years of experience in ICT systems design, and implementation in the public sector
  - d) Experience in developing mobile applications in Lands or Real estate sector.
  - e) Experience in using mobile applications for surveying land parcels and collecting land data.
  - f) Shall provide evidence for establishment of internationally recognized or home-grown quality process in software development.
  - g) Must demonstrate average annual turnover of at least twice the bid price over the

past three years, i.e. (2020, 2019 and 2018);

- h) Shall demonstrate local presence in Uganda to provide timely post implementation support.
- i) Must provide a certificate of engagement and proof of availability of all the proposed staff for the project signed by the staff (Bidders will be required to use the sample form to be provided in the bidding document).
- j) Experience in developing GIS web applications using Open-source software and databases that require no annual renewal fees
- k) Experience in using open-source Mobile Data Collection (MDC) for mobile data collection working in online and offline modes and automatically synchronizing data with centralized database.

### 6.2 Personnel specification:

The following are the proposed key personnel. The Consultant should provide for other technical, non-technical and administrative support staff required to execute the assignment as per the proposed technical proposal.

S/N	Expert	No.	Minimum Qualifications and Experience
1.	Project Manager/Team leader	01	<ul style="list-style-type: none"> <li>• A Master’s degree in Information Technology, Information Systems, Computer Science, Information Science or other relevant qualifications.</li> <li>• Must possess at least 5years of working experience in managing government projects involving implementation of Information Systems in the Lands sector.</li> <li>• Certification in PMP/Prince2 will be an added advantage.</li> </ul>
2.	Database Specialists	02	<ul style="list-style-type: none"> <li>• A Bachelor’s degree in Software engineering, computer science or Information Technology.</li> <li>• At least 5 years of experience in developing and administering open-source relational databases such as PostgreSQL</li> <li>• At least 5 years of proven experience in Spatial/cadastral database design, development and management.</li> </ul>
3.	Software developers	02	<ul style="list-style-type: none"> <li>• A Bachelor’s Degree in Software engineering or computer science.</li> <li>• At least 5 years of experience in developing and administering web-based systems using ASP.NET, Java (J2EE), PHP, C#, etc.</li> <li>• At least 5 years of proven experience in developing and deploying open-source MDC and mobile applications.</li> </ul>
4.	Business Analyst	01	<ul style="list-style-type: none"> <li>• A Bachelor of Arts/Science degree in a relevant field.</li> <li>• At least 3 years’ experience in generating requirements</li> </ul>

S/N	Expert	No.	Minimum Qualifications and Experience
			<p>specifications, use cases, process flow diagrams, user interface designs, user manuals, training materials, and other system documentation.</p> <ul style="list-style-type: none"> <li>• Certification in Business Analysis such as IIBA, ECBA, CCBA, CBAP etc. will be an added advantage.</li> </ul>
5.	Land Information systems Expert	01	<ul style="list-style-type: none"> <li>• Minimum of a Bachelor's degree in Land surveying,</li> <li>• Spatial/cadastral database design and management</li> <li>• Demonstrated experience in the use of land information system(s) for collection and management of land information data in Uganda for a large project.</li> </ul>
6.	Valuation expert	01	<ul style="list-style-type: none"> <li>• Minimum of a Bachelor's Degree in Land Economics, Real estate or related fields.</li> <li>• Valid practicing certificate from Surveyor's Registration Board (SRB)</li> <li>• 5 years of proven professional experience including exposure in statutory valuations in Uganda.</li> <li>• Proven experience in conducting RAPs.</li> <li>• Ability to analyse property market values.</li> </ul>
7.	Quantity Surveyor	01	<ul style="list-style-type: none"> <li>• Bachelor's degree in Quantity Surveying, Engineering or related fields.</li> <li>• 5 years of proven experience in determination of Construction rates.</li> <li>• Valid practicing certificate from Surveyor's Registration Board (SRB)</li> </ul>
8.	Physical Planning Expert	01	<ul style="list-style-type: none"> <li>• Bachelor's Degree in any of the following fields; Geography or Physical Planning or Spatial Planning or Urban Planning or Urban and Regional Planning or Land Use Planning or Town and Country Planning.</li> <li>• 5 years of proven experience working with GIS</li> </ul>
9.	GIS expert	01	<ul style="list-style-type: none"> <li>• Minimum of Bachelor's Degree in; Geo-informatics, Remote Sensing and Geospatial Science, Geographic Information Science (GISc) Remote Sensing, Geoscience or other related fields.</li> </ul>
10.	Forestry expert	01	<ul style="list-style-type: none"> <li>• Minimum of a Bachelor's degree in Forestry, Environment Science or any other related field.</li> <li>• Minimum of five years' experience in Forestry valuation</li> </ul>
11.	Agronomist/ Agricultural Economists	01	<ul style="list-style-type: none"> <li>• Minimum of a Bachelor's degree in Agriculture, Agricultural economics or any other related field.</li> <li>• Minimum of 5 years' Experience in crop valuation</li> </ul>

## 7. Deliverables (Outputs)

The outputs expected from the consultancy services include the following;

- 1) Inception Report
- 2) Approved System Requirements Specification and Design document (web and Mobile App)

- 3) Database development, data migration and conversion and deployment
- 4) Approved version after user acceptance testing
- 5) Training and system commissioning
- 6) Operational acceptance (2 months after system commissioning)
- 7) System user manual