## SPECIFIC PROCUREMENT NOTICE VOLTA RIVER AUTHORITY

REQUEST FOR EXPRESSION OF INTEREST

## CONSULTANCY SERVICES FOR THE RE-DEVELOPMENT OF AKOSOMBO TOWNSHIP INTO A MODEL GREEN SUSTAINABLE SMART CITY IN GHANA

## PACKAGE NO. GR/VRA/CS/0002/2020

The Volta River Authority intends to apply part of its Budgetary Allocation to cover payments under the contract for Consulting Services for the Re-development of Akosombo Township into a Model Green Sustainable Smart City in Ghana.

The scoping of the redevelopment of Akosombo into a Smart and Sustainable City includes Surveys/Studies and Development of a Complete programme and Development Concept Document for implementation of Smart Green City concept in Akosombo Township. The Framework Document shall address Key Programme Development Areas for smart city programme implementation including but not limited to detailed design and scope of works, programme schedule, expected budget and financing mechanism to implement the various programme components described in the specific tasks below. Specifically, the Consulting assignment shall include the following tasks:

- ✓ Collect and analyse information and initial plans developed by the Municipality related to their vision (Conceptualization of Smart City Concepts)
- ✓ Analyse the AMC's governance and planning capabilities (Municipal Development Plans, Urban plans, operational plans, amongst others)
- ✓ Analyse the status and potential of municipal services that could be improved using the Smart city technologies/concepts, identifying the critical challenges and opportunities for moving forward with the implementation of a Smart City Action Plan
- ✓ Identify synergies and strategic alliances with the public and private sectors (local, national and foreign) that could be harnessed in support of the transformation of the municipality into a Smart City
- ✓ Identify viable technological solutions for the territory to respond to challenges or opportunities identified
- ✓ Develop an Action Plan for transforming the municipality into a Smart City to improve the efficiency of municipal management to promote local economic development in a systematic and sustainable manner.
- ✓ Identify short, medium and long term action plans (and investment plans) for the municipality to facilitate its transformation, along with clear implementation methodologies, indicators and timelines
- ✓ Identify a portfolio of potential investment projects and potential resources for financing

The Consultant shall also have the following additional tasks:

**Task 1: Green Energy (Generation):** The consultant shall explore the possibility of the following alternative energy generation sources as well as waste management and reprocessing approach to be included in the smart city concept for Akosombo. The possible options include but not limited to the following:

• Rooftop solar power systems for institutional houses

- Implementation of Smart distribution systems in Akosombo for demand side management
- Solar powered Street lighting systems
- Energy storage systems
- Efficient heating and cooling systems
- Waste segregation and reprocessing

**Task 2: Mobility and Connectivity:** The consultant is expected to cover the following issues in its development plan with regards to mobility and connectivity.

- Accessible and well-connected transportation system that use biofuels or Electric Vehicles
- High Speed Internet Connectivity and mass information sharing
- Technology and innovation including electronic bill boards, real time information centres
- Integrated street monitoring camera systems to enhance security.

Task 3: Smart Tourism, Eco Park and Leisure City: Akosombo has a beautiful natural view combined with Hills, V- Valleys, and the Volta Lake. By developing Akosombo into smart green city, tourists will not only enjoy the nature, but also will take advantage of advanced ICT based services in the township for their convenience. The consultant is expected to develop the masterplan to cover inter alia potential tourism attractions sites in Akosombo, development of eco parks across the main asphalted road opposite the GCB Bank Limited at Akosombo, and leisure activities. In addition, the consulting works should cover possible ways of transforming commercial services provided in Akosombo (i.e. Volta Hotel, Financial Institutions, Public Services, etc) into smart services.

**Task 4: Innovative City**: The consultant as part of its work is expected to consider the possibility of developing Akosombo into a smart city with ICT based technology that enables a connected society with massive data and information transfer; where people and technology will be connected to improve quality of life. The consultant is also expected to identify business opportunities that can be created taking advantage of public data which will be made available as an outcome of the smart city implementation.

**Task 5: Public Health and Safety:** The consultant is expected to review and develop its masterplan to cover the following among others under health care and education.

- Implementation of Smart Medical Park considering the current services being provided at the Akosombo Hospital.
- Active surveillance, monitoring and alerts at vantage points in the township to provide the much required public safety for citizens by deployment of Cameras and Accessories
- Integration of advance educational technology platforms into the education system for AIS.
- On-demand availability of reliable emergency services such as Ambulance and Fire Tenders

**Task 6:** The consultant shall review or develop the following infrastructure issues and include in the programme development masterplan the implementation strategy, budget and possible financing mechanisms to address those infrastructure issues that have cost implications.

- o <u>Institutional Infrastructure</u> including administrative procedures to be revisited to achieve the programme and project objectives.
- <u>Physical Infrastructure</u> including energy system, information dissemination, water supply system, sewerage system, sanitation facilities, solid waste management system, drainage system, etc. to be integrated in the smart city concept through the use of technology.
- Social Infrastructure including developing human and social capital such as the education, healthcare, entertainment, etc.
- <u>Economic Infrastructure</u> for smart city concepts that can attract investments and create employment opportunities with special focus on the growing subsidiaries of VRA including AHL, VHSL, VLTC, VRA Schools, Hydro GEN, Business Incubation Centres, Skills Development Centres.

The Volta River Authority now invites eligible Consultants to indicate their interest in providing the services. Interested Consultants must provide information indicating that they are qualified to perform the services (Legal status of firm, Brochures, Description of similar assignments, Experience in similar Conditions and availability of Appropriate Skills among staff, valid SSNIT and GRA Clearance Certificate etc.). Consultants may associate to enhance their qualifications.

A Consultant will be selected in accordance with the procedures set out in the Public Procurement Act, 2003 (Act 663) of the Republic of Ghana and as amended by the Procurement Amendment Act, 2016 (Act 914) of the Republic of Ghana.

Interested Consultants may obtain further information at the address below between 9:00hrs - to 15:00hrs GMT each working day from <u>Tuesday</u>, <u>February 11</u>, <u>2020</u> till the closing day of submitting Proposals.

Expressions of Interest in Sealed Envelopes marked "CONSULTANCY SERVICES FOR THE RE-DEVELOPMENT OF AKOSOMBO TOWNSHIP INTO A MODEL GREEN SUSTAINABLE SMART CITY IN GHANA" must be delivered to the address below by 11:00hrs GMT on <u>Tuesday</u>, <u>March 10</u>, <u>2020</u>

## Address for obtaining further information and for submission of Expression of Interest

The Director, Engineering Services Department, P.O. Box 77, Akuse.

Tel: 03430 20620/ 03430 20705

E-mail: <a href="mailto:dengsd@vra.com">dengsd@vra.com</a>; <a href="mailto:sesd@vra.com">sesd@vra.com</a>;

**NB:** Only short-listed firms shall be issued with the Request for Proposal (RFP) Document.

