

WATERAID NIGERIA

TERMS OF REFERENCE FOR DEPLOYMENT OF AUDIO HYGIENE MESSAGE PROMPT AND SEPTIC TANK MONITOR AT FARM SETTLEMENT FFT AND INSTALLATION OF PHONE CHARGING CONSOLE IN WATER KIOSKS UNDER THE MICROSOFT PERI-URBAN WATER AND SANITATION IMPROVEMENT PROJECT

Project title and reference	Lagos Peri Urban Water and Sanitation Improvement Project
Background /Justification	<p>WaterAid Nigeria is implementing the Peri-Urban water and sanitation improvement project in Lagos State with funding from Microsoft Inc. The project seeks to increase access to safe, affordable, sustainable, and equitable climate resilient WASH services for 21,475 people residing in Ikorodu North. The project will combine a mix of service delivery and systems strengthening measures to achieve the following objectives:</p> <ol style="list-style-type: none"> 1. Increase access to WASH services 2. Scale-up hygiene and sanitation behavioral change campaigns: 3. Strengthening government and community participation in WASH institutional governance <p>Over three years, WaterAid aims to reach 19,230 people with water supply services and 1,430 people with sanitation services in target locations of Ikorodu North</p> <p>Sustaining behaviours, service regulation improvement, and increasing sources of revenue for WASH facility maintenance requires the integration of innovative technologies in WASH service delivery aimed at maximising benefits of WASH access, supports sustainability drive, and improves data availability for planning purposes. This sits with WaterAid's systems strengthening approach around innovation and core value.</p> <p>At school sanitation facilities, children may still struggle to remember key hygiene messages around toilet use. Septic tanks evacuation are not properly structured to happen seamlessly by authorities, and water facility tariffs may not be adequate to cover all maintenance cost.</p> <p>To improve the potentials for positive outcomes of the three issues mentioned above, WaterAid intends to incorporate</p>

	<p>system technologies that will result in improvement in service delivery.</p> <p>Three key technology propositions have been identified to support the objective and include: infusion of an audio hygiene message prompt as part of the systems functionality of the Female Friendly Toilet being constructed in Farm Settlement Primary school that reminds the children to perform key behaviours while using the toilet; installation of monitoring sensor that alerts for evacuation of septic tank at the appropriate time; and installation of phone charging console in community water facilities at Agbede, Arobiona, and Irepodun communities.</p> <p>To achieve this objective, WaterAid seeks to engage a Tech service provider with special skills in electronics and microcontroller design to support the deployment of these technologies.</p>
Objectives	<p>The objectives of this activity are:</p> <ul style="list-style-type: none"> • Engage a Service provider to design and build electronic systems able to audio-prompt toilet users to perform the key hygiene behaviour, • Design and build an electronic system able to monitor septic tank to alert authorities for evacuation, • Design and build an electronic system able to charge multiple phones at water facilities in order to generate additional revenue from the water facility

Methodology/Scope	<p>The recruitment of the potential service provider will require virtual interview to get clarifications on how the vendor understands the project and the details of what the specific electronic hardware requirements to achieve this.</p> <p>The project will require intervention of the audio prompt and septic tank monitor at Farm Settlement Primary School, Odogunya. The charging facility intervention will be installed at Irepodun, Arobiona, and Agbede communities at Ikorodu North.</p> <p>The potential vendor will be required to provide clarity on the sustainability of the the technologies being deployed. They will work closely with the construction contractors to determine the best suitable layout positioning for these add-ons</p> <p>For the septic tank monitor, WaterAid will create linkage with Lagos State Wastewater Management Office to be able to receive the alert for action.</p>
Deliverables	<ul style="list-style-type: none"> • Design and build electronic systems able to audio-prompt toilet users to perform the key hygiene behaviour, • Design and build an electronic system able to monitor septic tank to alert authorities for evacuation, • Design and build an electronic system able to charge multiple phones at water facilities in order to generate additional revenue from the water facility
Communication strategy	Communications will be between the Programs, COMMs, FIT and SPEL, and POD departments
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