**TERMS OF REFERENCE- Consultancy Service**

 **Summary**

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| Post Title | WASH ENGINEER URBAN or TEAM OF ENGINEERS |
| Proposed level | Service Contract  |
| Location | Gedaref |
| Duration | 3 to 6 Months  |
| Supervisor | Chief WASH/ Chief of Field Office  |
| Funding | TBD |
| Start Date | 1st April 2025 |

 **Background**

UNICEF Sudan is actively engaged in rehabilitating and maintaining Water, Sanitation, and Hygiene (WASH) facilities in Gedaref, and Kassala, in collaboration with the State Water Corporation and Water and Environmental Sanitation (WES) authorities. Since April 2023, the capacity of state-level partners to provide essential technical engineering support, such as design, Bills of Quantities (BoQs), cost estimates, and standard drawings, has been significantly compromised. This gap hinders the effective implementation of WASH projects, which are critical for ensuring access to safe water and sanitation services in these regions.

The ongoing humanitarian crisis, marked by widespread displacement and the destruction of infrastructure, has escalated the demand for robust WASH interventions. The anticipated reconstruction phase will further amplify the need for comprehensive engineering expertise to design and implement sustainable WASH solutions. Delays in addressing these needs could exacerbate public health risks, including the spread of waterborne diseases, and impede the recovery of affected communities.

The existing UNICEF WASH team has over-stretched personnel to meet the heightened demands of the current humanitarian response and the forthcoming reconstruction efforts. The shortage of in-house engineering expertise limits UNICEF's ability to provide timely and technically sound support to state partners and to oversee the quality and sustainability of WASH infrastructure projects. This constraint underscores the necessity for immediate surge support to bridge the capacity gap and ensure the effective delivery of WASH services.

In light of the diminished technical capacity of state partners and the pressing need for enhanced WASH infrastructure in Gedaref, and Kassala, the deployment of surge engineering support is both necessary and urgent. This intervention will enable UNICEF to fulfill its mandate of safeguarding public health and promoting resilience in communities affected by the ongoing crisis.

**Purpose**

UNICEF Sudan is undertaking critical projects in Gedaref and Kassala States to evaluate and rehabilitate essential water infrastructure, encompassing water treatment plants, well fields, water storage facilities, and distribution networks. The overarching goal is to enhance water quality and ensure the efficient and effective operation of these facilities.

The WASH Engineer (Urban) will be responsible for the strategic leadership and coordination of urban water, sanitation, and hygiene (WASH) initiatives within these states. This role involves close collaboration with government counterparts, local authorities, non-governmental organizations (NGOs), community stakeholders, UN sister agencies, and donors. The Engineer will work in conjunction with the section team to ensure the effective implementation of urban WASH projects, adhering to national policies and international standards, and focusing on strengthening water utilities.

The WASH Engineer (Urban) will play a crucial role in the oversight and coordination of WASH initiatives, with a particular emphasis on urban environments, institutional settings, and the empowerment of water utilities. Reporting directly to the Chief of Field Office, the incumbent will be responsible for the comprehensive planning, implementation, monitoring, and evaluation of urban WASH projects in River Nile and Northern States. This includes providing expert technical guidance and management support throughout all programming processes, facilitating the administration and achievement of WASH-related outputs within the country program, with a specific focus on Urban WASH

**Main duties & responsibilities**

**Scope of Work:**

Under the supervision of the chief of WASH and the Chief of the field and in close collaboration with the wider WASH team, other program sections, partners, and WASH authorities, the Engineer will be responsible for the following tasks:

* Review and revise the existing Bills of Quantities (BoQ) related to the water treatment processes improvement.
* Identify areas of improvement and recommend rehabilitation measures to enhance the plant's performance and water quality outputs.
* Produce detailed and focused engineering reports outlining the assessment findings, proposed rehabilitation measures, and implementation plans. This should include providing calculations and specifying the different electromechanical works required for the treatment plant's different sub-process rehabilitation
* Collaborate with the project team and stakeholders to ensure alignment and effective communication throughout the assessment and rehabilitation process.
* Develop and implement a comprehensive quality assurance plan for all stages of the project.
* The approval of Shop Drawings produced by the contractor (engineering documents)
* Inspection Requests Approval
* Request for Information replies.
* Collaborate with government counterparts, NGOs, community stakeholders, UN agencies, and donors to align urban WASH initiatives with broader development goals.
* Contribute to the formulation of strategic plans and policies that promote sustainable urban WASH services, considering factors such as climate resilience and inclusivity.
* Editing or minor amendments in the design ·
* Material sample inspections and approval.
* Develop and implement a robust monitoring and evaluation framework to track the performance and impact of urban WASH interventions.
* Prepare comprehensive reports detailing progress, challenges encountered, lessons learned, and recommendations for future programming.
* Material on site approval ·
* Monitoring the schedule, planned vs actual work done.
* Approval of measurement sheets by the contractor ·
* Comment on time and cost variations with recommendations (final approval from UNICEF) ·
* Management of the testing and commissioning stage, including tests and inspections at critical stages of rehabilitation work.
* Approval of operation and maintenance manuals from the contractor.
* Approval of As-Built Drawings from the contractor
* Conduct verification of key deliverables
* Ensure compliance with environmental and safety standards.
* Prepare and submit monthly progress reports

**Expected background and Experience**

Single engineer:

* Advanced university degree in any of the following: Water/Civil Engineering, water supply engineering, Sanitary engineering, hydrology, Geology -exclusively in the technical aspect of water supply (hardware component).
* Eight (8) years of progressively responsible professional work experience at national and international levels in Humanitarian WASH project management and coordination.
* Language Requirements: Fluency in English is required, and Arabic is strongly preferred.
* High level of awareness of environmental health issues as applied to emergency settings, with special attention to the needs of women and children.
* Communicates effectively to varied audiences, including during formal public speaking.
* Good writing skills and ability to speak fluently in English and Arabic.
* Experience in liaising with Government authorities.
* Able to work effectively in a multi-cultural environment.
* Sets high standards for quality of work and consistently achieves project goals.
* Translates strategic direction into plans and objectives.

Alternatively: a Team of engineers

* As a team, complying with the requirements of the single engineer
* Providing remote support combined with a number of field visits
* Multidisciplinary and able to adjust to changing needs
* Budget would be based on 3 to 6 man-months divided among the team members

**Duty Station and Curation of Service**

* Duty station will be in Gedaref with frequent travels to locations in Gedaref and Kassala
* Consultancy Duration is three months with the possibility of extension to six months