

Terms of reference (ToR) for the procurement of services below the EU threshold

CONFIDENTIAL

Terms of Reference for services to conduct a service coverage Assessment for upgraded piped Water Supply Systems in the refugee hosting districts of Yumbe, Terego and Madi-Okollo.

**Project number/
cost centre:**

G-011183-009

Tender number

7000025705

List of abbreviations	2
1.0 Context.....	3
1.1 Project Area	5
1.2 Target Audience	5
2.0 Tasks to be performed by the contractor	5
2.1 Objectives of the assignment.....	5
2.2 Tasks to be performed by the contractor	6
2.3 Milestones	10
3.0 Concept.....	11
3.1 Technical-methodological concept.....	11
3.2 Project management of the contractor	11
3.3 Further requirements	11
4.0 Personnel concept.....	13
4.1 Eligibility Criteria for firm.....	13
4.2 Requirements of the personnel concept	14
5.0 Costing requirements	18
5.1 Assignment of personnel and travel expenses	Error! Bookmark not defined.
5.2 Sustainability aspects for travel	Error! Bookmark not defined.
5.3 Alternative for contracts for works:.....	Error! Bookmark not defined.
5.4 Workshops, events and trainings.....	19
6.0 Inputs of GIZ or other actors.....	21
6.1 Inputs of other actors.....	21
6.2 GIZ inputs.....	21
7.0 Requirements on the format of the bid.....	21
8.0 Option.....	21
8.1 Equipment	21
8.2 Supplies (consumables)	22
8.3 Requirements on the format of the tender for the option	22
9.0 Outsourced processing of personal data	22
9.1 Profile of the Training Provider	22
10.0 Annexes	23

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List of abbreviations

AVB	General Terms and Conditions of Contract (AVB) for supplying services and work 2018
CRRF	Comprehensive Refugee Response Framework
CoC	Cost of Capital
DLGs	District Local Governments
DC	Development Cooperation
GIS	Geographical Information Systems
MWE	Ministry of Water and Environment
NUWS	Northern Umbrella of Water & Sanitation
OPM	Office of the Prime Minister
PRA	Participatory Rural Appraisal
ToR	Terms of Reference
UNHCR	United Nations High Commissioner for Refugees
UNWMZ	Upper Nile Water Management Zone
WatSSUP	Water Supply and Sanitation for Refugee settlements and Host Communities in Northern Uganda

1.0 Context

SDG 6.1 – universal and equitable access to safe, affordable drinking water – frames ‘access’ as the ability to obtain an adequate quantity and acceptable quality of water, alongside a level of water-related risk that is considered manageable. In post-conflict environments such as refugee settlements, piped water systems have become central to ensuring at least basic service levels. In Uganda, the Ministry of Water and Environment (MWE), mandated with managing water resources and supply sustainably, classifies piped water supply access as either on-premises (i.e., with a tap in the house or yard) or off-premises (e.g., from a public standpost).

Using this definition, refugee settlements in Northern Uganda (e.g., Bidi Bidi and Rhino Camp) have shown that piped networks can rapidly expand basic, off-premises water services during humanitarian or emergency phases. Yet, as service management transitions to public utilities like Northern Umbrella of Water and Sanitation (NUWS) in the post-emergency phase, reliance on public standposts becomes increasingly unsustainable. In contrast, individual household connections are widely seen as the benchmark for long-term service delivery by many public water utilities globally. Nevertheless, even where utilities strive to extend such coverage, communities in fragile settings (refugee settlements) may still experience water insecurities in uneven, and sometimes unexpected ways due to patterns of infrastructure expansion provision and multi-scalar social inequalities.

In line with Uganda’s Comprehensive Refugee Response Framework (CRRF), the German Development Cooperation is providing technical assistance and financial support to MWE under a joint programme called Water Supply and Sanitation for Refugee Settlements and Host Communities in Northern Uganda (WatSSUP). The main objective of this development programme is: *“In selected refugee hosting areas, measures to sustain water supply and sanitation services have been implemented in line with national and international refugee strategies.”* To advance this goal, WatSSUP, which started in 2019, at national level under Output A, strengthens MWE’s national coordination mechanisms with improved strategies, tools, and resources. Output B, through MWE’s decentralised units such as NUWS and the Upper Nile Water Management Zone (UNWMZ), focuses on enhancing regional capacity for service area management, maintenance, and outreach. Output C supports District Local Governments in West Nile, i.e. Yumbe, Terego and Madi Okollo, to strengthen communication, their support systems in planning to enable them to execute their mandate more effectively in respect to delivery and management of water supply services. Output D recognises the role of local actors, including vocational training institutes, hand pump mechanic associations, and spare parts suppliers, providing them with guidance and capacity support. Finally, Output E works directly with both settlement and host communities, delivering an array of initiatives to strengthen sanitation, hygiene, and resilience.

These Terms of Reference fall under **Output Area B**. In the initial phase of the programme, the Ministry of Water and Environment (MWE) formally gazetted the Northern Umbrella of Water and Sanitation (NUWS) as the responsible authority for managing and delivering water supply services in the refugee settlements of Bidi Bidi, Imvepi, and Rhino Camp. This decision created a critical entry point for WatSSUP to deepen institutional capacity, advance the

professionalisation of NUWS, and guide the transition from humanitarian-led service provision towards a structured, development-focused utility model. Within this process, 23 piped water supply schemes (listed in Annex 1) were rehabilitated to enhance operational reliability and extend access to improved service levels, including on-premises household connections.

During the second phase of implementation (2023–2025), WatSSUP played a facilitative role in securing a memorandum of understanding between UNHCR, the Office of the Prime Minister (OPM), and MWE. This agreement consolidated governance arrangements for financing, operations, and maintenance of water and sanitation services in refugee-hosting districts, while enabling more ambitious infrastructure optimisation and expansion initiatives across the West Nile settlements of Bidi Bidi, Rhino Camp, and Imvepi supported by other partners like KfW, World Bank, etc.

In an environment where humanitarian aid is declining, development assistance faces competing priorities, and resources are increasingly constrained, MWE and government partners require monitoring of progress against global and national indicators of safe water access, including the World Bank and Sphere Standards 2018 indicator, which defines access as a household being within 200 meters of safe water source.

The need to generate empirical evidence on the cost-effectiveness of previous piped water investments, alongside clearly identifying underserved areas that would yield the greatest equity gains per unit of future investment is clear. However, quantifying the number of individuals served by piped water infrastructure within this context remains challenging for three reasons;

1. **Inconclusive or lack thereof of constructs** to define and provide measurable outcomes for physical access (distance) to piped water supply in either rural or refugee contexts in protracted phases of development.
2. **Sparsity of population spatial features** on density like settlement patterns and heterogeneity of socio-economic profiles to recurrent relocations (as illustrated by new arrivals in the recently established Zone 8 of Rhino Camp) makes the counting of those served with yard connections directly and the rest who rely on Public standposts (PsPs) with overlapping catchments difficult.
3. **Double counting:** In dense zones of the three settlements (Bidi Bidi, Imvepi and Rhino Camp), multiple PsPs' 200m service catchment radii intersect, leading to the risk of inflating reported beneficiary numbers.

To achieve the above, WatSSUP will collaborate with the Ministry of Water and Environment (MWE) to commission a **service coverage assessment**. The study will address the above challenges using a robust geospatially driven methodology to explicitly distinguish between populations served by yard connections and PsPs, allocate catchments without overlap and measure improvements to access before vs. after infrastructure improvements.

1.1 Project Area

The assignment will be implemented across the three refugee hosting districts (Terego, Yumbe, Madi Okollo) of West Nile region, Uganda. More specifically, the study will cover service areas covered by the 23 piped water supply infrastructure previously selected by NUWS and rehabilitated under the support of WatSSUP (See *annex 1 for full list*).

1.2 Target Audience

The study assignment will primarily focus on water users or defined water user groups rather than the current water supply service providers. The target audience for the study will encompass all customers currently served only by the 23 improved piped water systems in the three districts mentioned under section 2.1 above. Other subpopulations of interest during this assignment will comprise customers currently served by NUWS operated systems in *Zone 5 – Bidibidi* and (*Yelulu, Ocea, Odobu, Cinya, Eden, Gbuluku-Atuni, Ofua, Olujobo Tika* and *Omugo*) schemes in Rhino Camp.

Additionally, the contractor will interface with other audience groups primarily during the assignment, including WatSSUP and NUWS staff. The contractor will also have occasional interactions with other key stakeholders such as MWE, UNHCR, KfW, OPM, and DLGs.

2.0 Tasks to be performed by the contractor

2.1 Objectives of the assignment

The **main objective** of the assignment is to quantify changes in the number of people served by rehabilitated and expanded piped water supply systems across three refugee hosting districts in West Nile.

The **specific objectives** include:

- a. To establish that the water infrastructure (e.g. pipeline network, pumping station, water point) is functional and in permanent operation by the responsible operator (e.g. NUWS or NWSC).
- b. To estimate the number of people from refugee settlements and host communities who have gained improved access to the water supply including the categorization by gender (Male/Female), status (Refugee/hosting).
- c. To quantify (percentage/number of people) the adoption rate of water sector transition initiatives among stakeholders
- d. To establish that the water quality fulfils the requirements for 'improved water sources' according to MWE standards.
- e. To establish whether the supply range corresponds to a ratio of max. 250 people per water point or at least 20 litres per person per day with a household connection.

- f. To establish whether the distance to the nearest water point is ≤ 500 metres in rural areas in accordance with MWE specifications.
- g. To estimate the number of individuals served by yard connections, before (2020) and after rehabilitation/expansion (2026) interventions;
- h. To estimate the number of individuals served by public standposts within 200m access radii, before and after rehabilitation/expansion while minimizing double counting in overlapping catchments;
- i. To quantify the net gains in access pre-(2020) and post – rehabilitation (2026) interventions amongst population using both yard connections and public standposts;
- j. To develop spatial maps showing access improvements by overlapping population rasters with skeletonised piped water infrastructure networks (pre- (2020) and post-rehabilitation (2025));
- k. To develop a standardised, step-by-step monitoring protocol that enables stakeholders consistently estimate the number of people served by piped water systems;
- l. To determine the user fee collection rate for water services in designated refugee settlements

2.2 Tasks to be performed by the contractor

Overall, this assignment aims to generate critical spatial and other insights related to the measurement of access. These is envisaged to support standardise how impact attributed to improvements in physical access to piped water infrastructure within this humanitarian – development is measured. These tasks are intended to serve as the minimum requirements for the contractor to undertake the assignment. Additional tasks that contribute to a greater understanding of the key issues may be addressed, as deemed appropriate. To implement the objectives of this proposed study, the scope of work has been further subdivided into four component tasks, namely

1. Data Preparation and Baseline Development
2. Water Access Analysis
3. Mapping and Visualisation
4. Step-by-Step Monitoring Protocol

2.2.1. Data Preparation and Baseline Development

Beyond tackling the study objective under this scope, the contractor's team will work in close cooperation with a designated GIZ WatSSUP focal person and use both historical and existing asset inventory instruments to prepare datasets required to assess changes in water access. This shall involve compiling information on the piped water network infrastructure before (from

asset inventory instrument) and after rehabilitation asset network diagrams containing the following;

- a) exact locations of the public standposts (PsPs);
- b) the number and location of yard connections;
- c) the outlined layout of the distribution network;
- d) Percentage of people that have confirmed higher acceptance of transition process in water sector

Population spatial features related to density and settlement will equally be important, and these will be obtained from gridded population products such as **WorldPop** and **LandScan**, which provide high-resolution raster datasets for population distribution (*WorldPop, 2025; Lebakula, V. et al., 2023*).

The household family size will be fixed at an average of five persons, as reported in the most recent national population and housing census conducted by UBOS in 2024, which continues to be equal to what has been reported in past household survey studies done in the refugee settlements.

NB: GIZ shall furnish the contractor with the asset inventory containing the 23 No. Water systems network maps pre – rehabilitation and all files of same networks after rehabilitation.

2.2.2. Water Access Analysis

Specific activities under this component task are intended to guide the contractor in estimating the populations served by both yard connections and public standposts. The results will be integrated to produce a combined measure of service coverage. To achieve the above the contractor, shall separately quantify the population served through yard connections and that served by public standposts.

Estimation of population served by yard connections will be calculated by multiplying the number of recorded connections by the standard household family size of five persons. Both pre – rehabilitation (2020) and post – rehabilitation (2025) is to be analysed by the contractor to estimate the incremental number of people that gained access through new yard connections. This approach follows established practices in WASH monitoring where yard connections are considered direct service indicators.

Estimation of population served by PsPs will be conducted using geo-spatial analysis. Each standpost will be surrounded by a 200-meter buffer, following the World Bank and JMP service level definitions of access to safe water. These buffers will then be overlaid on gridded population raster datasets to identify the population living within the PsP service catchment. To minimise double counting in areas where buffers overlap, raster grid cells that fall within multiple service areas will be assigned to their nearest standpost using the contractor's proposed spatial allocation algorithm.

NB: The contractor within their technical proposal is required to recommend with justification their proposed algorithm to ensure that each person is uniquely assigned to a single PsP and that aggregated estimates are not inflated.

The contractor is expected to compare how the population served changed between the pre – rehabilitation and post – rehabilitation phases. We do ask that particular attention is given to unserved populations, and that the contractor’s technical – methodological statement should highlight both absolute numbers and percentages to ensure comparability with sector targets nationally (MWE) and globally (SDGs).

2.2.3. Mapping and Visualisation

Specific activities under this component task are intended to guide the contractor in developing spatial outputs that visually represent changes in access. Using open-source GIS options, the contractor is expected to generate maps showing the distribution of yard connections, the service catchments of public standposts of the skeletonized water supply networks both before and after rehabilitation.

These maps are expected to be overlaid with population raster data to illustrate the areas of coverage expansion and the corresponding number of additional people served.

2.2.4. Step-by-Step Monitoring Protocol

Specific activities under this component task are intended to guide the contractor in developing a thoroughly comprehensive monitoring protocol designed to institutionalise consistent, transparent and repeatable methodological approaches for estimating the population served by piped water supply systems in refugee settlements experiencing a humanitarian – development nexus change. The protocol is intended to address the challenges of overlapping service areas and double counting. The protocol is expected to include the following sections;

Technical Manual	Describing a step-by-step workflow for estimating populations served by yard connections and public standposts Data requirements (e.g., scheme networks, gridded population rasters etc) Preparation, data cleaning and standardisation formats Method for avoiding double counting or population allocation rules
GIS Workflow Package	A set of GIS scripts (developed in open-source software like R or QGIS) to automate key steps like buffer creation etc Example project files with sample datasets (demonstrating pre- and post-rehabilitation cases) Clear folder structure and naming conventions to ensure replicability
Reference Datasets	Processed population raster datasets at a resolution appropriate for settlement-level analysis

Network shapefiles (pre- and post-rehabilitation) with metadata stored either in *geojson* or *geopackage* formats.

Sample yard connections and standpost datasets (anonymized) for demonstration of methodology

Workflow Diagrams and Infographics	Visual diagrams showing the logic of data flows
Training and Capacity Building Package	Flow charts explaining how overlap correction is applied and how yard connection households are excluded from standpost coverage Training materials, incl. Powerpoint slides, handouts for staff A recorded video tutorial (screen capture) walking through the GIS workflow,
Validation Checklist	A standard checklist for data quality assurance, ensuring that datasets are complete, projections are correct, and overlap corrections have been applied

The contractor is responsible for providing the following services related to the assignment:

- (i) Prepare and attend a Kick-off meeting (1-2 hours) with GIZ Uganda upon contract signature, to agree on work plan, general approach and methodology for undertaking different assignment tasks, and coordination modalities between the contractor and GIZ-WatSSUP.
- (ii) Participate in virtual introductory meetings with MWE, NUWS, WatSSUP staff and key stakeholders (OPM, UNHCR and Refugee Engagement Forum)
- (iii) Undertake literature review of Design reports for rehabilitation of the 23No. WSS, or any other document as deemed relevant for the assignment.
- (iv) Review and customize existing data collection tools for quantitative data collection based on technical expertise of the contractor and guidance from the assignment technical working group.
- (v) Conduct key informant interviews with key stakeholders agreed upon during the inception phase.
- (vi) Conduct a series of trainings and on – job coaching on step-by-step monitoring protocol to designated officials by WatSSUP
- (vii) Prepare and submit to GIZ-WatSSUP, not later than two working days after each session meeting held, the minutes of the meetings.

2.3 Milestones

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at locations:

Milestone	Description	Deadline (Timeline after contract signing)
Assignment Kick-off meeting	Meeting minutes and work plan with detailed time bound outputs and deliverables	1 Weeks
Inception Report Final	Refined methodology incl. list of required datasets, stakeholder engagement plan	3 Weeks
Gridded Population Estimate & Baseline Infrastructure Data	Raster Maps harmonised with village / zone administrative boundaries, cleaned piped water infrastructure both before and after rehabilitation	Week 10
Access Estimation Analysis Report	Spatial Maps visualising population served	Week 14
Step – by – Step Monitoring Protocol	Written manual incl. Flow diagrams, training materials etc	Week 15
Final layered-out Report	Final layered-out report with feedback incorporated	Week 18

The Consultant is required to verify the suggestions and to determine additional milestones related to key activities of the technical proposal.

Estimated period of engagement: From December 2026 until May 2027 (6 months).

3.0 Concept

In the offer, the tenderer is required to review the ToR and submit a brief proposal of a, maximum 20 pages) showing your understanding of the objectives defined in section 2.1 and how the tasks above under section 2.4.1, 2.4.2, 2.4.3 and 2.4.4 can be achieved. In addition, the tenderer must describe the project management system for service provision.

3.1 Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) and GIZ and to promote scaling-up effects (1.5.2) under **learning and innovation**.

3.2 Project management of the contractor

The tenderer is required to explain its approach for coordination with the GIZ project. In particular, the project management requirements specified in Chapter 2 must be explained in detail.

The tenderer is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the tender; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

3.3 Further requirements

3.3.1 Other specific requirements

The contractor should ensure that a gender and vulnerability analysis shall be incorporated in each component of the study and approaches to accomplish this should be incorporated in the inception report and reflected in all subsequent reports. Regarding the programme area, women, children and Persons with Special Needs (PSNs) are more vulnerable than other

population groups. The contractor is expected to be cognisant and compliant with the general national frameworks that ensure protection of the vulnerable groups.

During the development of this assignment's methodological approach, the contractor will ensure the research process is in line with GIZ Data Protection Guidelines. Special measures should be put in place to ensure that the assessment process is ethical and that participants in the survey process can freely express their opinion. The sources of the information will be protected and known only to the contracted agency and GIZ WatSSUP. The contractor must ensure that it is clear to all subjects that their participation in the assessments is voluntary. All participants should be informed or advised of the context and purpose of the assessment, as well as the privacy and confidentiality of discussions.

The contractor is required to clearly identify any potential ethical issue, as well as the processes for ethical review and oversight of the research / data collection process in their proposal and inception report. To ensure quality and accountability in the evidence generation process, especially when it involves minors, UNHCR protection desk in Kampala (for refugees) and District Community Services office (for host communities) will be consulted on reviews and approval given on research methodologies and final study reports before any publication.

3.3.2 Alternative Reporting Requirements

In addition to the reports required by GIZ in accordance with AVB, the contractor will need to submit the following reports:

- Inception report
- Service coverage Assessment Report (max 40 pages)

The reports unless otherwise stipulated by GIZ will follow the outline below:

- Table of contents
- Abbreviations
- Executive Summary of methodology, limitation, key findings and recommendations
- Background Information (Project Context Update, Objectives, Research Questions)
- Literature Review
- Methodology: (Research Design, Data Collection Procedures, Analysis plan, Limitations of Study etc)
- Presentation of Research Findings with associated data presented (should be structured around main objectives / evaluation criteria and should cover all indicators)
- Discussion of Results in comparison to literature review to be done.
- List of References disaggregated by journals, Books, websites, Reports etc.

- Appendices, which include detailed research instruments. List of interviewees, terms of reference, Indicator Table showing all baseline indicator

The tenderer is required to draw up a personnel assignment plan with explanatory notes that lists all the experts proposed in the bid; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

4.0 Personnel concept

4.1.1 Eligibility Criteria for firm

- A technical proposal (shall include methodology, your understanding of TOR, workplan, proposed team & their credentials, previous similar contracts/ orders with details of client, contacts, brief scope, value, etc) as per terms of reference. Ensure that there is no mention of your financial proposal details in your technical proposal.
- Current and valid Tax Clearance Certificate addressed to GIZ Uganda (TIN: 1000030986), or its equivalent. Should relate to current tax period, and reference number should be visible for verification.
- Current valid Trading License or its equivalent.
- Be a legally registered entity. Copy of a URSB Certificate of Incorporation/ Registration, or its equivalent.
- Share evidence of a physical presence (registered permanent office).
- Registered URSB certificate of filing most recent Company Annual Returns, or its equivalent.
- URSB Registered powers of attorney authorizing signatory/representative of the firm to sign agreements / documents on behalf of the firm.
- Average annual turnover for the last three years. Tenderer to share audited books of accounts for the last 3 financial years.
- Share company organograms and profile showing average number of employees and managers for the last three years.

- Signed Bid validity Document Confirming that bid is valid for 120 working days. Vendor to write up, sign, submit with technical proposal.
- Signed Self-Declaration on EU Russia War sanctions. Attached in bid documents.
- The tenderer shall provide documented evidence of at least three (3) successfully completed projects of a similar scope, specifically encompassing geospatial assessments for WASH or civil infrastructure, service coverage mapping, or water network rehabilitation studies.
- The tenderer should have experience of minimum of 1 year working in Uganda or a country in Eastern Africa. One of the three reference projects mentioned should have been executed in Uganda or a country in Eastern Africa.

4.1.2 Technical eligibility criteria for firm

- At least 3 technical reference projects in Water Service Coverage Mapping & Geo-Spatial Assessment Studies in Uganda.
- 1. 5 years of demonstrated general experience in conducting water service coverage mapping & geo-spatial analysis assessments or similar studies.
- 2. 3 years of specific experience in design & implementation of geo-spatial and public infrastructure service coverage mapping in rural or refugee areas.
- Familiarity with GIZ or KfW implementation modalities & experience within the system will be an asset.
- Experience in dealing with large public geo-spatial datasets and analysis for water utilities will be an added asset.
- Demonstrated experience in development cooperation of at least one project in Eastern Africa.

4.2 Requirements of the personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, based on their CVs, the range of tasks involved and the required qualifications. The specified qualifications below represent the requirements to reach the maximum number of points during the evaluation of the bid proposal.

Team leader

(Section 2.1 of the assessment grid)

Tasks of the team leader

- Overall responsibility for the advisory packages of the contractor with an emphasis on quality and deadlines;

- Coordinating and ensuring communication with GIZ, partners and other parties involved in the project;
- Personnel management, identifying the need for short-term assignments within the available budget, as well as planning and steering assignments and supporting local and international short-term experts;
- Regular reporting in accordance with deadlines;
- Development of assignment research study designs and quality assurance protocols for the study assignment;
- Technical oversight on WASH policy alignment and utility operations;

Qualifications of the team leader

- Education/training (2.1.1): University qualification (Masters) in Economics, Finance, Statistics, Engineering or a related discipline;
- Language (2.1.2): Good business language skills in English;
- General professional experience (2.1.3): 10 years of demonstrated professional experience in planning and monitoring projects in the water, sanitation & environment sector;
- Specific professional experience (2.1.4): 3 successful project studies or publication references related to water security or geo-spatial related studies;
- Leadership/management experience (2.1.5): 2 years of management/leadership experience as project team leader or manager in a company;
- Regional experience (2.1.6): 8 years of experience in similar projects in Africa (region), of which 3 years in Uganda (country);
- Development Cooperation (DC) experience (2.1.7): 6 years of experience in DC 1 project at least;
- Demonstrated evidence of leading or participation in mentorship and coaching training;

Water Supply Engineer

(Section 2.2 of the assessment grid)

Tasks of Water Supply Engineer

- Assess piped water infrastructure (yard connections, public standpoints) data
- Skeletonize piped water networks (before and after rehabilitation)
- Support the development of service area maps by linking infrastructure with population datasets
- Provide technical input on service coverage changes and infrastructure performance

Qualifications of Social Assessment & Development Expert

- Education/training (2.2.1): University qualification (Bachelors) in Civil, Water, Environmental Engineering or a related discipline;
- Language (2.2.2): Good business language skills in English
- General professional experience (2.2.3): 7 years of demonstrated experience in urban / rural water supply design, operations or monitoring or piped water systems
- Specific professional experience (2.2.4): 5 years in design and/or implementation of water distribution systems and hydraulic modelling
- Regional experience (2.2.6): 5 years of experience in refugee related projects in Uganda (country), of which 3 years in projects in Northern Uganda (region)
- Development Cooperation (DC) experience (2.2.7): 2 years of experience in DC projects;

GIS Analyst

(Section 2.3 of the assessment grid)

Tasks of GIS Analyst

- Development of population rasters using public data & harmonise with administrative boundaries
- Create and analyse 200m buffers around public standposts
- Apply overlap correction techniques to minimise double counting
- Produce thematic maps showing pre- and post – rehabilitation access
- Train designated staff in updating GIS datasets for future monitoring

Qualifications of Data Analyst

- Education/training (2.2.1): University qualification (Bachelors) in data science, geography, geoinformatics or a related discipline
- Language (2.2.2): Good business language skills in English
- General professional experience (2.2.3): 4 years of professional experience in geo-spatial analysis and production of quality maps
- Specific professional experience (2.2.4): 1 year manipulating raster data and writing automation scripts.
- Domain Level Knowledge experience (2.2.8): 3-year familiarity with working with open-source GIS software like QGIS or related mapping packages in R or python

Data Analyst

(Section 2.4 of the assessment grid)

Tasks of Data Analyst

- Overall development of study's data analysis plan
- Design and implement the estimation models for populations served (yard connections and PsPs)
- Develop sensitivity analyses to test robustness of overlap correction assumptions
- Integrate GIS outputs with statistical results to support reporting

Qualifications of Data Analyst

- Education/training (2.2.1): University qualification (Masters) in data science, statistics, mathematics, quantitative economics, or a related discipline
- Language (2.2.2): Good business language skills in English
- General professional experience (2.2.3): 5 years of professional experience in statistical analysis for WASH or social infrastructure projects
- Specific professional experience (2.2.4): 1 explicit successful project handling gridded population datasets and large administrative datasets
- Domain Level Knowledge experience (2.2.8): 2-year familiarity with working within R or Python
- Regional experience (2.2.6): 5 years of experience in projects in sub-Saharan Africa (region), of which 3 years in projects in Uganda (country)
- Development Cooperation (DC) experience (2.2.7): 1 years of experience in DC projects

Public Health / Social Development Expert

(Section 2.5 of the assessment grid)

Tasks of Social Assessment & Development Expert

- Overall review and revision of socio-economic and health prevalence data;
- Support the integration of vulnerability indicators (e.g., poverty) into analytical models
- Contribute to the design of the Access Monitoring Protocol to ensure public health relevance

Qualifications of Social Assessment & Development Expert

- Education/training (2.2.1): University qualification (Masters) in Public Health, Demography, Sociology or a related discipline;
- Language (2.2.2): Good business language skills in English
- General professional experience (2.2.3): 8 years of demonstrated experience in health surveillance and environmental and gender studies.
- Specific professional experience (2.2.4): 5 years in design and/or implementation of household surveys, preferably for water and sanitation projects
- Regional experience (2.2.6): 5 years of experience in refugee related projects in Uganda (country), of which 3 years in projects in Northern Uganda (region)
- Development Cooperation (DC) experience (2.2.7): 2 years of experience in DC projects;

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

Short-term expert pool Enumerators with minimum 15, maximum members

(Section 2.6 of the assessment grid)

Tasks of the short-term expert pool

- Assist with ground-truthing of standpost locations and yard connection verification
- Collect GPS coordinates, photos, and household-level validation data.
- Overall responsibility in ensuring data integrity and confidentiality at field level

Qualifications of the short-term expert pool

- Education/training (2.6.1): All experts with high school qualification
- Language (2.6.2): All experts with very good language skills in Juba Arabic or Kakwa, good language skills in English required for all experts
- General professional experience (2.6.3): All experts with at least 1 year of experience in the research sector
- Specific professional experience (2.6.4): All experts with at least 8 months' prior experience in assignments related to this ToR.

- Regional experience (2.6.5): All experts with at least 1 year of experience in West Nile (region).

The tenderer is not required to provide individual qualifications for his proposed short-term experts.

5.0 Costing requirements

5.1.1 Assignment of personnel

While submitting the technical proposal, the tenderer is required to clearly indicate the expert days that each of the proposed expert will be deployed or assigned to the project giving clear details of the assignment location (harmonized with the tasks of this assignment in Chapter 2).

Table 1: List of Required Personnel with Estimated Time Inputs

Key Experts	No. Required (up to)	(man-days)
Team Leader	1	35
Expert 1: Water Supply Engineer	1	30
Expert 2: GIS Analyst	1	30
Expert 3: Data Analyst	1	30
Expert 4: Public Health / Social Development Expert	1	10
Short-term expert pool	1	10
Total		145
Other Costs (Reimbursable Costs)	No. / Qty Required (up to)	Remarks
Local Travel / Transportation		Total 20 Days
Overnight Accommodation.		Total 18 Nights
Per Diem – Total 20 Nights		Total 20 Nights
Workshops		5No. Workshops with 12 participants each. Within Kampala. Cost to cover conference package (include Hall hire, meals, stationary) All reimbursable costs to be repaid as per actuals with evidence of consumption.

In addition to this, the tenderer will provide a unit cost and the total cost for the above listed key personnel including any backstopping plans in his financial proposal.

The consultant will be required to assign drivers on a needs basis for achieving the objective of the assignment. The costs for drivers (per diem, accommodation) are to be accounted for under travel expenses.

5.4 Workshops, events and trainings

The tenderer will be required to conduct workshops and training organized physically and as such, the following should be taken into consideration.

Location of the workshops and training; The trainings will all be hosted in various locations as stipulated in the table 2 below.

- Number of participants for the training
- Workshop/training duration
- Accommodation costs
- Feeding costs
- Transport reimbursement.
- Stationery and printing costs.

The tenderer will train about 30 participants who will be facilitated with transport refund according to mileage travelled and mode of transport used. All the trainees will be facilitated with Perdiem (GIZ approved rate), and accommodation fees. Please describe in your concept how you implement GIZ's minimum standards for sustainable event management (see annexes to the terms of reference). The costs of the training workshops should be clearly stipulated/indicated in the financial proposal.

The contractor shall facilitate implement the following workshops//trainings:

Table 2: List of Proposed Types of Workshops

Task	Type of Workshop	No.	Proposed Locations	Workshop Output
Inception Meeting - Study	Meeting	1	Kampala	Work Plan
Enumerator Training	Technical training workshops (70 participants)	3	Yumbe, Terego & Madi Okollo	Skills attained on articulation on data collection tools
Dissemination Workshop – Access	Dissemination Workshop	1	Arua	

Estimation Analysis Report				
Dissemination Workshop – Step – by – Step Monitoring Protocol	Dissemination Workshop	1	Arua	
Dissemination Workshop – Final Report	Dissemination Workshop	1	Kampala	

The workshops and training sessions and local printing of the documents shall be organised by the contractor for this assignment.

Terms of reference (ToR) for the procurement of services below the EU threshold

6.0 Inputs of GIZ or other actors

6.1 Inputs of other actors

Other actors especially the district local governments, UNHCR and OPM will support with the provision of literature on past related surveys like the annual KAP surveys, Vulnerability and Essential Needs Assessments. NUWS will provide literature to provide information on various performance measurements like hours of service, etc.

6.2 GIZ inputs

GIZ are expected to make the following available:

- Nomination of a focal person(s) for steering and coordination of this project.

7.0 Requirements on the format of the bid

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) is to be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). It must be legible (font size 11 or larger) and clearly formulated. The bid is drawn up in English (language).

The complete bid shall not exceed 20 pages (excluding CVs).

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages. The CVs must clearly show the position and job the proposed person held in the reference project and for how long.

If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment.

Please calculate your price bid based exactly on the costing requirements. In the contract the contractor has no claim to fully exhaust the days/travel/workshops/ budgets. The number of days/travel/workshops and the budget amount shall be agreed in the contract as 'up to' amounts. The specifications for pricing are defined in the price schedule.

8.0 Option

8.1 Equipment

The consultant is required to provide their own equipment and software, suited for delivering the required outputs. This shall be included in the costing of the bid and enumerated as shown in the table above. The consultants will be required to fulfil all tax obligations and provisions related to Value Added Tax (VAT), Income tax, Withholding tax, etc.

8.2 Supplies (consumables)

The Consultant shall present their concept on travel and field trips in the technical offer. Travel expenditure for all experts shall be calculated by the tenderer and included in the financial proposal. In addition, the calculation shall include standard travel expenditures for all experts (per diem, overnight accommodation allowance, etc.) and any related cost for in country travel. These costs are to be borne by the consultant and must be included in the financial proposal. However, if the GIZ project accompanies the consultant on a field trip, the GIZ logistic support can be used, but should not be expected in the calculation of the offer.

The consultant can account for other costs like communication – printing and all other necessary costs classified as miscellaneous for the implementation of this assignment against the proof of evidence and the approval by the Head of Programme (AV).

8.3 Requirements on the format of the tender for the option

Please complete both spreadsheets in the price schedule, i.e. one for the main service and one for the optional service

9.0 Outsourced processing of personal data

N/A

9.1 Profile of the Training Provider

The Training Provider is expected to provide a Capability statement, including Curriculum Vitae, showing commitment for availability for the entire assignment, and demonstrate capacity to undertake the assignment. The Training Provider should submit a detailed statement on the proposed assignment, clearly stating the proposed methodology.

Terms of reference (ToR) for the procurement of services below the EU threshold

10.0 Annexes

Annex 1: List of 23 Piped Water Supply Systems Rehabilitated

Piped Name	WSS	Villages Served	Parish	Population Served
LOT 1				
Swinga 2		Zone2 – Village 1	Bidi Bidi, Kochi Sub County	3494
		Zone2 – Village 2	Bidi Bidi, Kochi Sub County	4315
		Zone 2 – Village 3	Bidi Bidi, Kochi Sub County	3112
		Zone 2 – village 6	Bidi Bidi, Kochi Sub County	7220
		Zone 2 - village 7	Bidi Bidi, Kochi Sub County	4280
		HC – chamanikua		452
		HC - Ikakaa		452
ADRA		Zone2 – village 3	Bidi Bidi, Kochi Sub County	3112
		Zone2 – village 4	Bidi Bidi, Kochi Sub County	6335
		Zone2 – village 5	Bidi Bidi, Kochi Sub County	3390
		Zone2 – village 8	Bidi Bidi, Kochi Sub County	4091
		HC – Invevea	Yayari	452
		HC – Lokopio	Yayari	452
		HC – Juba	Limidia	476
		HC – Batulu	Onoko	1322
Zone 1- village (14) World vision		Zone1 – Village 2	Bidi Bidi Romogi Sub - County	3314
		Zone1 – Village 3	Bidi Bidi Romogi Sub - County	2243
		Zone1 – Village 4	Bidi Bidi Romogi Sub - County	4608
		Zone1 – Village 5	Bidi Bidi Romogi Sub - County	2644
		Zone1 – Village 9	Bidi Bidi Romogi Sub - County	3189
		Zone1 – Village 10	Bidi Bidi Romogi Sub - County	1790
		Zone1 – Village 11	Bidi Bidi Romogi Sub - County	3101
		Zone1 – Village 12	Bidi Bidi Romogi Sub - County	2317
		Zone1 – Village 13	Bidi Bidi Romogi Sub - County	3614
		Zone1 – Village 14	Bidi Bidi Romogi Sub - County	1706
		HC – Ofonie	Iyete	1033
Iyete Zone 1		Zone 1 – Village 10	Bidi Bidi Romogi Sub - County	1790
		Zone 1 – Village 12	Bidi Bidi Romogi Sub - County	2317
		Zone 1-14	Bidi Bidi Romogi Sub - County	1706
		HC – Iyete	Iyete	1033
LOT 6				
ACF Village		Zone 2 – village 3	Bidi Bidi Kochi Sub - County	6223
		Zone 2 – village 4	Bidi Bidi Kochi Sub - County	6335

	Zone 2 – village 5	Bidi Bidi Kochi Sub - County	3390
	HC – Koro village		858
CRS Yangani	Zone 5 – Village 1	Bidi Bidi Odravu Sub - County	2185
	Zone 5 – Village 2	Bidi Bidi Odravu Sub - County	1026
	Zone 5 – Village 3	Bidi Bidi Odravu Sub - County	972
	Zone 5 – Village 4	Bidi Bidi Odravu Sub - County	1176
	Zone 5 – Village 7	Bidi Bidi Odravu Sub - County	2886
	Zone 5 – Village 10	Bidi Bidi Odravu Sub - County	1153
	Zone 5 – Village 12	Bidi Bidi Odravu Sub - County	1810
	HC – Odranga	Okuyo	1498
ACORD Ayivu	Zone 5 – village 14	Bidi Bidi Ariwa Sub - County	2792
	Zone 5 – village 15	Bidi Bidi Ariwa Sub - County	1751
	Zone 5 – village 16	Bidi Bidi Ariwa Sub - County	2708
	Zone 5 – village 17	Bidi Bidi Ariwa Sub - County	1558
	HC – Akinio	Akinio	758
	HC – Amuru	Maraju	758
LOT 2			
UNHCR Yoyo Scheme	Zone 3 – Village 2	Bidi Bidi Kululu Sub - County	4178
	Zone 3 – Village 3	Bidi Bidi Kululu Sub - County	3287
	Zone 3 – Village 4	Bidi Bidi Kululu Sub - County	3426
	Zone 3 – Village 5	Bidi Bidi Kululu Sub - County	4240
	Zone 3 – Village 6	Bidi Bidi Kululu Sub - County	5121
	Zone 3 – Village 7	Bidi Bidi Kululu Sub - County	2625
	HC – Limu	Komgbe	94
	HC – Luzira	Yoyo	159
	HC – Amibia	Logbodo	159
UNICEF	Zone 3 – Village 1		6126
	Zone 3 – Village 13		2975
	Zone 3 – Village 14		6344
	HC – Limu	Komgbe	94
	HC – Koro	Yoyo	229
CRS/ARS Yangani	Zone 5 – Village 1	Bidi Bidi Odravu Sub - County	1093
	Zone 5 – Village 2	Bidi Bidi Odravu Sub - County	513
	Zone 5 – Village 3	Bidi Bidi Odravu Sub - County	486
	Zone 5 – Village 4	Bidi Bidi Odravu Sub - County	1176
	Zone 5 – Village 5	Bidi Bidi Odravu Sub - County	1093

	Zone 5 – Village 6	Bidi Bidi Odravu Sub - County	682
	Zone 5 – Village 8	Bidi Bidi Odravu Sub - County	605
	Zone 5 – Village 9	Bidi Bidi Odravu Sub - County	439
	Zone 5 – Village 11	Bidi Bidi Odravu Sub - County	1350
	Zone 5 – Village 12	Bidi Bidi Odravu Sub - County	905
	HC – Odranga	Okuyo	1766
NRC Okubani	Zone 5 – Village 19	Bidi Bidi Ariwa Sub - County	3333
	Zone 5 – Village 22	Bidi Bidi Ariwa Sub - County	2083
	Zone 5 – Village 23	Bidi Bidi Ariwa Sub - County	1773
	Zone 5 – Village 24	Bidi Bidi Ariwa Sub - County	3524
	Zone 5 – Village 14	Bidi Bidi Ariwa Sub - County	1117
	Zone 5 – Village 15	Bidi Bidi Ariwa Sub - County	700
	Zone 5 – Village 16	Bidi Bidi Ariwa Sub - County	1083
	Zone 5 – Village 17	Bidi Bidi Ariwa Sub - County	623
	HC – Ayivu	Rigbonga	1092
	HC – Tifa	Rigbonga	1092
	HC – Kiranga	Rigbonga	1092
	HC – Bidi Bidi	Awinga	670
	HC – Gbiria	Awinga	670
	HC – Awinga	Awinga	670
	HC – Okubani	Awinga	670
	HC – Gbogbo	Awinga	670

Figure 1 below shows the location of the refugee settlements.

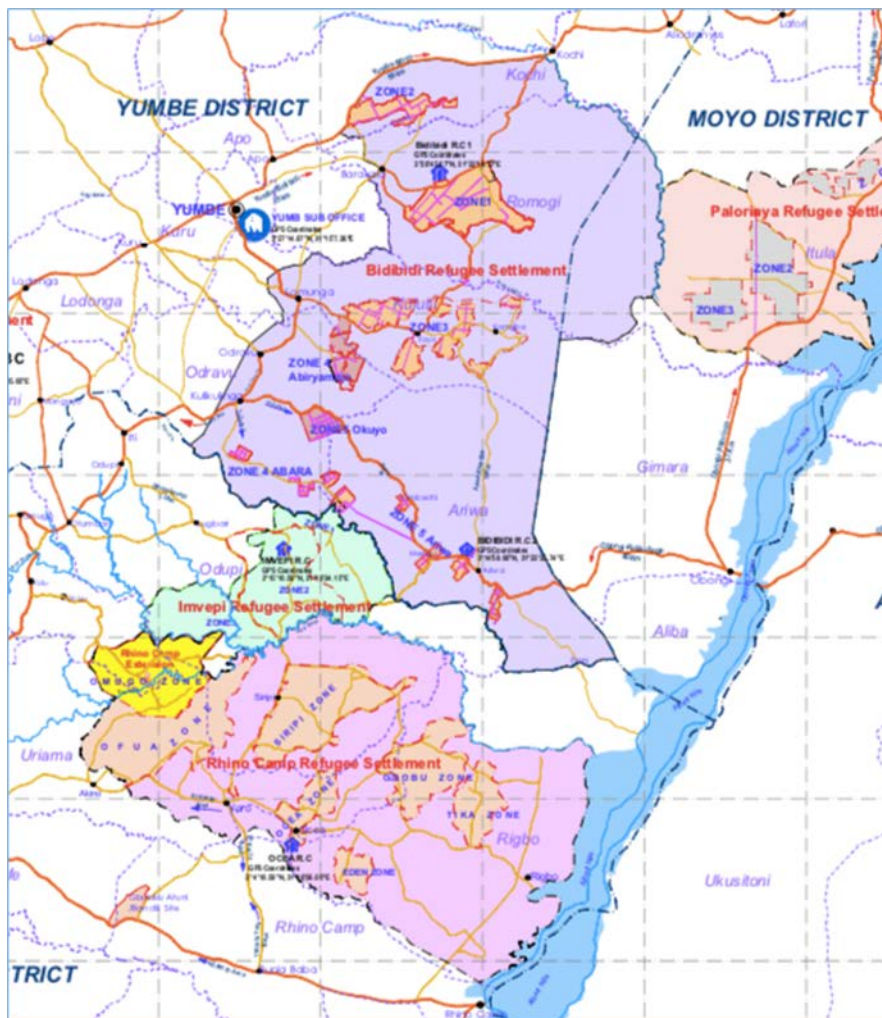


Figure 1: Location of refugee hosting areas: Imvepi, Rhino Camp and Bidibidi refugee settlements (adapted from UNHCR)

Piped Name	WSS	Villages Served	Parish	Population Served
LOT 1				
Swinga 2		Zone2 – Village 1	Bidi Bidi, Kochi Sub County	3494
		Zone2 – Village 2	Bidi Bidi, Kochi Sub County	4315
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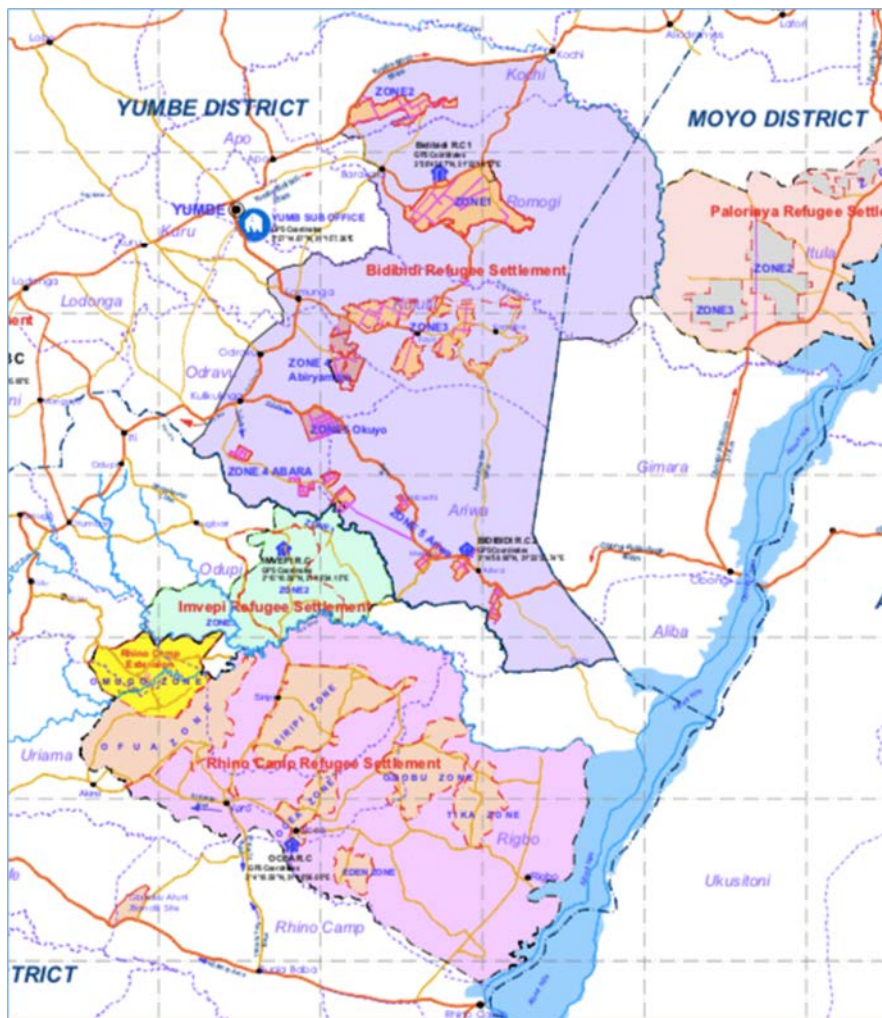


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