

TERMS OF REFERENCE FOR SERVICE CONTRACTING

Assignment	Provision of operation and maintenance services for Water and Wastewater Networks in Za’atari Camp
Location	Za’atari Refugee Camp
Duration	Initially for 12 months with possibility of extension for additional 12+12 months (extension to be annually based on needs for the services, contractor’s performance, and funds availability)
Start date	1-Dec-2025
Reporting to	UNICEF WASH Specialist/ Officer

1. JUSTIFICATION/BACKGROUND

Since 2012, UNICEF Jordan Country Office has played an integral role in the humanitarian response for Syrian refugees in Jordan. As WASH sector lead, UNICEF is leading the Water, Sanitation and Hygiene activities for refugees in camps and host communities, including schools and other institutions. Among the locations where UNICEF is providing water and sanitation services is Za’atari Refugee Camp which hosts around 70,000¹ refugees. UNICEF is managing the operation and maintenance of the water and wastewater systems in the camp through a local contractor while all hygiene promotion and community mobilization interventions are implemented through other WASH partners. In Za’atari camp, the water supply is between 3200 to 4500 m³ per day, covering the needs of the families, schools, health centres, and other institutions. This quantity of water is being provided from three internal boreholes, and complemented with external sources in the peak summertime, for a quantity of 300 to 1500 m³/day.

Za’atari camp is divided into 12 districts, and water is distributed using booster pumps to nine main distribution pump stations and then supplied to the districts based on a 6 to 7 days supply schedule according to assigned distribution zones. Each household and institution in the camp have a water connection, through which water is supplied to their storage tanks.

Wastewater is collected from clusters of 5 to 8 households connected to Precast-Reinforced Concrete (PRC) septic tanks with a capacity of 4 or 8 m³. Solid free wastewater flow from the PRC tanks by gravity to the main trunk sewer lines ending at the two main lifting stations (PS1 and PS2). Both lifting stations (PS1 and PS2) pump wastewater to a wastewater treatment plant which is managed outside of the scope of this contract, through two HDPE main pipelines. Pump station 2

¹ Estimated number of refugees as of April 2025.

collects wastewater from districts 8 and 9 while Pump station 1 collects wastewater from the rest of the camp. The wastewater is then conveyed to the wastewater treatment plant located between District 11 and District 12. A total amount of 1800 m³ to 2300 m³ is collected every day from the wastewater networks.

Given the need to continuously provide comprehensive water and sanitation services in the camp through the management, operation, and maintenance of all water and wastewater infrastructure and systems briefly described above, UNICEF is seeking the services of a highly qualified and experienced local contractor to operate and maintain the water supply and wastewater networks and systems in Za'atari camp, on a continuous basis for a period of 12 months (extendable subject to satisfactory performance).

2. OBJECTIVE AND TARGETS

This contract aims to ensure reliable daily water and sanitation services to refugees in Za'atari camp on an uninterrupted basis, seven days a week including public holidays. The specific objectives include:

- A. Ensure that all three internal boreholes and water treatment systems in the camp are efficiently and effectively operated and managed to supply the required daily amount of water and meet the network's demand without any interruptions.

- B. Ensure that all components of the water networks, including flow meters, valves, pump stations and other equipment and/or facilities) are operated, managed, and maintained in a satisfactory manner and as per the provided O&M manuals to meet the water demand without any interruptions. In case any components are not clearly described in the O&M manual, the Contractor is responsible to develop a specific SOP for such component and submit for approval of UNICEF within the first 2 months of the contract.

- C. Ensure that the quality of the supplied water is according to the national standards and regulations of Water Authority of Jordan (WAJ), Ministry of Water & Irrigation (MWI) and Ministry of Health (MOH) and following the approved Water Quality Plan of the camp.

- D. Ensure that the wastewater collection and conveyance network including PRC tanks, manholes, HDPE pipes, force mains, and pump stations are managed, operated, and monitored as per the O&M manuals to accommodate the flow of the generated wastewater, and pump it continuously to the treatment plant without any interruptions. In case any components are not clearly described in the O&M manual, the Contractor is responsible to develop a specific SOP for such component and submit for approval of UNICEF within the first 2 months of the contract. The scope of the contractor starts at the cleanout of each household and ends at the wastewater treatment plant, at the reception point of the equalization tanks. All parts and elements of the wastewater network from the household to the inlet of the wastewater treatment plant are under the responsibility of the contractor.

E. Ensure a reliable, efficient, and effective operation of the water and sanitation systems by conducting monthly performance analyses and providing informed recommendations. These recommendations will focus on optimizing system functionality, reducing inefficiencies, and enhancing overall service delivery.

This contract will target the operation and maintenance of the water and wastewater networks in Za'atari camp which has a population of around 70,000 residents and covering 12 districts. The population might increase or decrease during the contract period. Any implications on the operation and maintenance due to major changes on the population within the camp will be discussed with the operator during the implementation of the contract.

3. SCOPE OF THE WORK (WORK ASSIGNMENT)

The contractor is expected to manage and operate the water and wastewater network in Za'atari camp to ensure continuous and efficient provision of WASH services as per the following responsibilities:

Water supply.

- Operation, maintenance, recording, analysing, and monitoring of three internal boreholes including submersible pumps, riser pipes, header sets, electrical panels, storage tanks, chlorinators, sand filtration, data loggers, booster pumps, and all associated civil, mechanical, and electrical parts of each well. Contractor will have to report any trends, alarms, and take necessary actions in consultation with UNICEF officer.
- Operation, maintenance and monitoring of the nine distribution water pump stations and main ductile loop pipes (200mm, 150mm, 100mm, and 80mm) including all associated isolation, air release, and washout valves and chambers.
- Provision of preventive maintenance, monitoring, and needed repairs for all sections and parts of the water network including zones flow control chambers, flow meters, PE pipes from all diameters (25mm, 32mm, 63mm, 120mm, and 180mm), and all associated galvanized and polyethylene fittings, adaptors, saddles, pipes, to ensure efficient, and continuous supply of water to all households, including attention to specific repairs or actions identified as needed through the users complaint mechanism. The contractor has to apply preventive and maintenance plans and action to all parts and elements of the water networks including pipes, pump stations, and all related components.
- Record, monitor, analyse, all key trends and indicators in water and wastewater networks such as levels of water in boreholes, flow rates, Boreholes water quality, number of daily complaints, number of blockages and leaks, daily amounts of wastewater, all relevant parameters, and readings, and submit reports and data to UNICEF monthly.
- Regular testing, monitoring, and reporting for all water quality parameters on regular basis at the following levels, and as determined in the Water Quality Plan: borehole (raw water), post-chlorination, distribution pump stations, and household including third party testing twice per

month by an approved laboratory to ensure that water is supplied as per the approved water quality plan and according to the national standards of Ministry of Health and Water Authority of Jordan. - please refer to Annex C

- Operation, maintenance and monitoring of District 3 water pump station and the entering pipeline from Za'atari water pump station. The scope includes quality assurance, booster pumps, filling points, storage tanks, operation, repairs, and maintenance of the Za'atari pipeline
- In daily coordination with UNICEF Za'atari team, respond to the complaints from the hotline on water supply and any emergency repairs for the related pipelines, fittings, and stations without any delay. The supply cycle for each zone shouldn't be affected significantly by the repair works.
- Additional works which may be required for the rehabilitation, adjustment, improvement of the components of the water supply system in Za'atari, but not limited to civil, electromechanical and hydraulic works. UNICEF will request a technical and financial proposal for each of the additional works to be implemented during the implementation of the contract which will be executed upon UNICEF's approval.
- At the timer of tendering additional works may include the construction of a new pump station at the Eastern Gate where water will be received from external sources and pumped to the BH3 storage location - distance of 550 m. The contractor shall submit a financial and technical proposal for this item in accordance with Annex 1.

Wastewater conveyance

- Operation, maintenance, and monitoring of the wastewater network in the camp including Precast Reinforced Concrete (PRC) tanks, HDPE manholes, HDPE submains, trunk sewer lines, and provision of jetting and desludging services if needed to ensure that wastewater flows directly to the pump stations (PS1 and PS2) without any interruptions or blockages, including attention to specific repairs as identified by user's complaint mechanism.
- Operation and management of two main wastewater pump stations including submersible pumps, emergency tanks, aeration systems, SCADA system, HDPE force main pipes, and all associated civil, electrical, and mechanical parts and elements.
- The Contractor shall coordinate with the Water Authority of Jordan and its designated contractor responsible for operating the wastewater treatment plant, to ensure uninterrupted operation and to verify that the quality and quantity of the pumped wastewater are in compliance with the project requirements. This shall include regular monitoring and validation of data through the SCADA system.

Enhancement systems efficiency:

To ensure more reliable, efficient, and effective operation of water and sanitation systems in Za'atari camp to meet population needs, the Contractor should undertake monthly analysis of the systems' operations and provide recommendations on any necessary adjustments on the services

according to the updated camp population and their distribution across the 12 districts using the below step-by-step approach:

Step 1: Data Collection

Gather accurate and complete monthly data from all relevant sources, such as:

- Water production and consumption records
- Sanitation inflow/outflow data
- System downtime and maintenance logs
- Energy usage reports
- Water loss (leakage, non-revenue water)
- Refugees' complaints or service feedback
- Water quality test results
- Financial/operational costs

Step 2: Data Cleaning and Validation

- Check for missing, inconsistent, or inaccurate data
- Standardize formats (e.g., dates, units of measurement)
- Validate figures against source documents or system logs

Step 3: Performance Analysis

- Analyze key performance indicators (KPIs) monthly, such as:
 - Water loss percentage
 - System efficiency (output vs. input)
 - Energy consumption per volume of water treated
 - Frequency of service interruptions
 - Response time to breakdowns or complaints
- Compare current performance against targets of past months

Step 4: Identify Gaps and Issues

- Highlight trends or recurring problems (e.g., increasing on energy use, number of complaints, etc.)
- Locate inefficiencies in the system (e.g., underused capacity, overlapping tasks, others)
- Assess whether services meet community needs and standards.

Step 5: Develop Recommendations

Based on the analysis:

- Suggest operational improvements (e.g., preventive maintenance, upgrading of equipment and infrastructure, changing operating conditions – pressure, flow, etc.- for the water and wastewater networks, etc.)
- Recommend technological upgrades (e.g., smart meters, SCADA systems,...)
- Prioritize actions based on impact, cost, and feasibility

Step 6: Reporting

- Prepare a clear and concise monthly report including:
 - Executive summary
 - Data overview and analysis

- Observations and performance gaps
- Actionable recommendations
- Graphs or visuals to support findings

Step 7: Implementation Follow-Up upon UNICEF approval and confirmation

- Work with relevant teams to implement approved recommendations.
- Set timelines and assign responsibilities
- Monitor progress and track improvements over time

Monitoring and reporting.

- Daily, weekly, and monthly monitoring and reporting of all needed data and information per the agreed reporting template, deliverables, and needs (A The contractor is responsible for submitting all reports on boreholes, data loggers, water quality, water supply operation, wastewater operation, and any other required report on time to meet the reporting standards and satisfaction of UNICEF, at a minimum as part of the monthly report. Quality of the data and reports is the responsibility of the contractor.

Other requirements:

- Compliance with all camps SoPs and regulations such as roles of permits, driving, recruitment and any other related requirements.
- UNICEF reserves the right to apply penalties indicated in this document and / or cancel the contract in case the contractor does not comply with the provisions of the indicated SoP

4. EXPECTED DELIVERABLES

The selected contractor is expected to:

- Prepare, review, and operate the water supply system, in coordination with the UNICEF team, and as per the water supply schedules according to the distribution zones and in reference to the water balance sheet, boreholes production capacity, network demand, and any operational or seasonal implications in collaboration with external trucking and community mobilization teams.
- Ensure that all preventive maintenance plans-ANNEX-K of the boreholes, pump station, pipes, storage tanks and all related civil, mechanical, and electrical elements are followed, and all malfunctioned parts are replaced immediately.
- Ensure that all preventive maintenance plans-ANNEX-L of the sewage lifting stations, sanitation holding tanks, sewage network, emergency tanks and all related civil, mechanical, and electrical elements are followed, and all malfunctioned parts are replaced immediately.
- Manage all wastewater systems and elements efficiently and in collaboration with the treatment plant’s operator and as per the approved O&M manuals.
- Plan and supply for all needed supplies such as chlorine, fuel, and consumable materials to ensure continuous and effective operation of water and wastewater systems. Further details and information on consumables will be provided in the specifications and technical guidelines.

- Following coordination and follow up with the hotline team, address all daily water and wastewater complaints, and reactive maintenance actions within the agreed timelines (not more than 24 hours) and without any delays. This includes arrangements to have standby water trucking, jetting trucks, deblocking tools, backhoe loaders, experienced manpower, reporting, close collaboration with the community mobilization team, and availability on 24 hours basis every day to address any complaint as per UNICEF team instructions.
- Provide and maintain all needed trucks, vehicles, equipment, and machinery such as jetting, desludging, pickups, cranes, backhoes and any tools or equipment that might be required to replace any parts or maintain any elements in the network and as per UNICEF team instructions. Further technical information will be included in the specifications and BOQ.
- Submit all weekly and monthly reports and data sheets of water production, supply, wastewater flow, wastewater pumping, SCADA records, minor repairs, spare parts, summaries of complaints, water quality reports, and all required data and information on time and to the highest standards of quality.
- Analyze the operational data of the water and sanitation systems on a monthly basis and prepare a report that includes:

Key Observations:

Summary of system performance, usage trends, inefficiencies, and any operational issues observed over the months.

System Assessment

Evaluation of the efficiency, reliability, and effectiveness of the current operations.

Recommendations:

Actionable suggestions to improve performance, enhance efficiency, reduce waste, and ensure the system operates more effectively.

- Follow the Za'atari Camp's roles, regulations, and Standard Operating Procedures (SOPs) for recruitment of staff and IBVs, permits, work with partners and community, driving vehicles and machineries and all agreed procedures in the camp.
- Through UNICEF focal points, arrange for all entry permits and government's approvals to ensure the continuity of the operation of the water and wastewater systems. Though UNICEF may facilitate the process, it is the Contractor's responsibility to send these permits requests within the indicated timelines and procedures.
- Develop / Update a contingency plan to maintain appropriate operation of water and wastewater systems during emergencies, such as storm and winter, and ensure appropriate resources are allocated in the required time to implement such response including teams, manpower, pumps, dewatering trucks, and machinery.
- All deliverables will have to be completed within the agreed timeframe with UNICEF and as per the technical specifications and O&M manuals.

5. REALISTIC DELIVERY DATES AND DETAILS ON HOW THE WORK MUST BE DELIVERED

The operation of water and wastewater networks shall be undertaken daily, seven days a week for the entire period of contract, including holidays. Contractor must ensure that sufficient staff and equipment are available on site to cover for emergency, including during night shifts / out of normal operation hours.

6. DESIRED QUALIFICATIONS, SPECIALIZED KNOWLEDGE OR EXPERIENCE

The bidder should have established credibility in working in the water sector, humanitarian and/or development context. The successful bidder will require the selection of key experts and may subcontract some components in agreement with UNICEF, ensuring that the resulting quality of work and services are maintained. Qualifications of key experts are identified under these Terms of References.

A joint venture arrangement is also possible where the lead entity/company/firm is locally registered. If a joint venture arrangement is opted and selected for award, UNICEF will award the contract to the joint venture, in the name of its designated lead entity. The lead will sign the contract for and on behalf of all other member entities and will be the responsible entity for all contractual obligations. Please refer to the RFP document, Part 11, Proposal Submission Process.

a. The bidder will have to provide enough evidence to prove the following requirements.

- A minimum of 5 years of experience in operation and maintenance of water and wastewater municipal networks including deep wells, pump stations, pipes, and all related electrical and mechanical components.
- Has operated and/or constructed water supply and wastewater networks for large populations including management of teams, procurement, documentation, supplies, information flow, inventory, safety, and quality assurance. Experience in both water and wastewater networks is mandatory.
- Has experience in working with the UN system, other humanitarian agencies or government in similar operations and ability to meet standards of international organizations and donors.

b. Institutional Classification.

Bidders must include a copy of the license as part of their technical proposal. Proposals that fail including these documents will not be considered.

- Legally registered and have a valid trade license from Ministry of Trade and Industry.
- Valid classification from Jordanian Contractors Association with First or Second Grade rating in construction or operation of water and wastewater networks or electro-mechanical works.
- Has completed or operated projects with a value of 2 million JD in the past two years.

7. KEY EXPERTS

The selected contractor shall hire and maintain key programme management and operations staff to ensure effective implementation of the project as per indicated below:

UNICEF will review and approve the profile and resume of the proposed Key Experts as part of the technical evaluation. Individual profiles will be assessed based on their compliance with the minimum academic and experience requirements and their additional experience for the required position. Bidders must include all documentary evidence to substantiate academic qualifications and experience of the proposed personnel.

In case any changes are needed within the contractual period, the proposed replacement must comply with the same qualifications and experience, and UNICEF will reserve the right to accept the proposed changes based on the re-assessment of the proposed profiles.

Project Manager:

The Project Manager should have at least a BSc Degree in Civil or Mechanical Engineering with at least 10 years of experience in construction, management, and operation and maintenance of water and wastewater municipal networks. The responsibilities of the Project Manager include:

- Coordination with UNICEF and all WASH stakeholders on all issues related to the provision of water and sanitation services including operation, maintenance, planning, reporting, on all elements and parts of the networks.
- Management of the operation team, engineers, and coordinating with suppliers, subcontractors, UNICEF engineers and officers to ensure efficient and effective provision of WASH services in the camp. Ability to mobilize and response rapidly to emergency situations.
- Submitting all weekly and monthly reports, data sheets, updates, summaries, invoices, quotations, procurement plans, layouts, and drawings on time and as per UNICEF's agreements, requirements, and approvals.
- Ensure proper communication and collaboration with all involved teams such as hotline, community mobilization, warehouse, bulk supply, field monitoring, and reporting.
- Ensure that all UNICEF and SoPs, rules, regulations in the camp, are applied in the operation and by all engineers, site supervisors, operators, workers, and subcontractors.
- Ensure that all resources and materials, including staff, equipment, supplies, etc. required by the contractor to perform the above indicated responsibilities as per the time and quality required are available and being efficiently utilized, in compliance with the performance indicators included in under section 8 of this Terms of Reference.

Water Supply Engineer:

The Water Supply Engineer should have at least a BSc Degree in Civil or Mechanical Engineering and at least 5 years of experience in managing and operating water supply networks including deep wells, pump stations, SCADA systems, distribution networks, and household connections. The Water Supply Engineer will have the following responsibilities:

- Track the performance of all internal wells and follow up on all necessary preventive maintenance plans to avoid any malfunctions or interruptions in the production and operation of wells.
- Monitor and follow up on all reports and data related to the wells by having a tracking system for all records and trends from the data loggers, flow meters, power consumption, maintenance log sheets, and pump failures.
- Lead and manage all operators, technicians, and site supervisors at all water pump stations and all field monitors at all zones in the 12 districts.
- Based on the supply cycle, prepare water distribution schedules and communicate to UNICEF Community Engagement focal point, and monitor its implementation. Indicate in advance whenever there are needs for adjustment of such plan for further communication to users and report back on any differences between the plan and actual distribution.
- Prepare and track the weekly and monthly water supply reports and share necessary updates on water balance, buffer, storage, seasonal demand, complaints, and any other related operational matters.
- Liaise with the hotline team to analyse and close all water supply complaints in less than 24 hours and ensure proper feedback and reporting on the root causes of these complaints and measures to avoid repeating them.

Wastewater Engineer:

The Wastewater Engineer should have at least a BSc Degree in Civil or Mechanical Engineering and at least five years of experience in the operation and management of wastewater networks including lifting stations, gravity sewer lines, wastewater manholes, sludge management, septic tanks connections, and related SCADA systems. The Wastewater Engineer will have the following responsibilities:

- Track the performance of the two main pump stations and follow up on all necessary preventive maintenance plans to ensure continuity of pumping and to avoid any unexpected failures or shutdowns.
- Manage the operation of the wastewater network from household connections to pump stations including applying all preventive maintenance measures to ensure continuous flow of wastewater and minimum number of related complaints.

- Manage all wastewater pressurized and gravity main pipes, chambers, and connections to the existing treatment plant including SCADA, motorized valves, and all related civil, mechanical, and electrical parts.
- Monitor and follow up on all weekly and monthly reports, data sheets, operational trends, and updates related to the wastewater network including SCADA records, maintenance log sheets, complaints reports, and assets registers.
- Liaise with the hotline team to analyse, verify, and close all wastewater complaints in less than 24 hours and ensure proper feedback and reporting on the root causes of these complaints and measures to avoid repeating them.
- Communication / coordination with the operation of the wastewater treatment plant, to ensure both are aligned / synchronized and any adjustments needed are communicated in advance to avoid disruptions in the overall wastewater service collection service, including during emergency operations (storms, winterization).

Water & Wastewater Quality Officer:

The Water & Wastewater Quality Officer should have at least five years of experience in water quality testing, sampling, regulations, and analysis. He/she graduated as Environmental or civil engineer, Chemistry, Water Resources Engineering, Hydrology or any relevant field. The officer will be responsible for the following:

- Apply the Water Quality Plan to all parts of the water network from the water source to the distribution system and individual household / institutional connections including water quality testing within the indicated sampling locations in the camp daily, organizing water quality testing by a third party monthly, and coordination with government entities as required to ensure water monitoring requirements are fulfilled.
- Prepare and share reports, data log sheets, and lab results on testing water quality parameters as per the approved Water Quality Plan.
- In case of a contamination event is reported, follow, and apply the Water Quality Plan to investigate, report, and address the event and ensure that all sources of contamination are eliminated and implement actions required to ensure areas concerned are provided with alternative water sources. Coordinate with UNICEF team and MOH in such cases.
- Coordinate with UNICEF focal points and other WASH actors, such as community mobilization, external trucking, hotline, and operation engineer when needed.

Data and Analysis Officer – Water and Sanitation Systems

The Data and Analysis Officer should have at least a BSc Degree in Civil or Mechanical Engineering, Data science, Computer science, water resources management, or any relevant field and at least five years of experience, with:

- strong analytical skills and attention to detail
- Proficiency in data tools (e.g., Excel, Power BI)
- Understanding of water and sanitation operations
- Effective communication and reporting skills

The Data and Analysis Officer is responsible for collecting, validating, and analyzing monthly operational data related to water and sanitation systems. Their primary goal is to support improved system efficiency, reliability, and service delivery.

Key Responsibilities:

- Gather and manage operational data (e.g., water usage, system performance, energy use).
- Clean and validate data for accuracy and consistency.
- Analyze key performance indicators and identify trends or inefficiencies.
- Prepare clear monthly reports with findings and actionable recommendations.
- Support implementation and tracking of system improvements.
- Coordinate with UNICEF focal points and other WASH actors, such as community mobilization, external trucking, hotline, and operation engineer when needed.

Other essential staff.

The contractor should have at least the below minimum staff to manage the operation of the networks, other additional staff needed frequently:

- Environment and safeguarding officer / **monthly visits**

Responsible for implementing and monitoring all safety procedures in the field to ensure a safe working environment. Conducts inspections, risk assessments, and safety briefings for staff and contractors. Ensures compliance with national and organizational health and safety standards. Investigates incidents and recommends corrective actions to prevent recurrence. Prepares regular safety reports and maintains proper documentation of all field safety activities.

- Draft man/ **monthly visits**

Mandatory to submit updated as-built drawings on a monthly basis for all ongoing works. Prepares detailed technical drawings and schematics for all water, wastewater, and related infrastructure works and other. Ensures that all designs reflect actual site conditions and construction modifications. Coordinates closely with engineers and field teams to gather accurate data for drafting. Maintains a clear and organized archive of all drawings.

- Electrical and Mechanical Engineer/**as per needed**

To provide support to the water and wastewater engineers in monitoring and maintaining all electrical panels, pumping equipment and other related electro-mechanical parts and elements in the various locations within the water supply and wastewater system.

The contractor should arrange to have technicians, plumbers, field monitors, pumps operators, security guards, jetting truck operator, and data entries to ensure that operation, maintenance, and guarding services meet the highest quality standards and ensure that water supply and wastewater systems have no interruptions. Contractors are encouraged but not mandated to use Syrian refugee Incentive based volunteers (IBVs) from the camp.

8. PERFORMANCE INDICATORS FOR EVALUATION OF RESULTS

The Key Performance Indicators (KPI) summary below must be filled in by the contractor and assessed by UNICEF team at the end of each month. Performance will be reflected on evaluation categories for each month: poor, good, excellent. UNICEF reserves the right to apply financial and contractual implications if the contractor does not comply with the performance indicators below, including a penalty of 500JD will be deducted for each KPI that doesn't meet the target every month. UNICEF reserves the right to apply related penalties subject to the monthly evaluation rating.

Water Supply:

UNICEF will monitor the performance of the contractor through the below proposed key indicators. (See Table1). All targets in the table below will be considered only if the contractor was responsible for the non-compliance with the KPIs.

Table 1: Key Performance Indicators of Contractor on Water Supply.

KPI	Unit	Target
No. of Complaints on water supply assuming water balance sheet has no deficit.	<i>per day</i>	<i>less than 20</i>
Response Time to Complaints	<i>Hr</i>	<i>less than 24 hours</i>
Safety incidents that caused damage to the operation, workers, community, or any involved parties.	<i>No./month</i>	<i>0</i>
Delays in Water Supply per Schedule for more than 7 days assuming water amount is available.	<i>incidents/month</i>	<i>0</i>
Delays in Submitting Monthly Reports	<i>No./month</i>	<i>0</i>
Number of Reported Leaks or blockages per month	<i>No./month</i>	<i>less than 10</i>
Delay in closing preventive inspection comments	<i>No./month</i>	<i>All comments closed in less than a week.</i>
% of water quality tests non-compliant with minimum agreed standards	<i>%</i>	<i>0</i>
Incidents of water quality and contamination	<i>No./month</i>	<i>0</i>
Failure of pumps, tanks or any other main parts	<i>No./month</i>	<i>0</i>
Incidents related to PSEA, IBVS, permits procedures, or Complaints on IBVs hiring and payment	<i>No.</i>	<i>0</i>

% of clean and validated data submitted monthly	<i>No./Month</i>	<i>At least 90%</i>
Contribution to strategic planning or budgeting through data insights	<i>Quarterly</i>	<i>1</i>

Wastewater Management:

UNICEF will monitor the performance of the contractor in managing the wastewater network through the below proposed key indicators. (See Table 2).

Table 2; Key Performance Indicators of Contractor on Wastewater Management.

KPI	Unit	Target
Response Time to Complaints	<i>hr</i>	<i>less than 24 hours</i>
Safety incidents	<i>No./month</i>	<i>0</i>
Delays in Submitting Monthly Reports	<i>No./month</i>	<i>Reports will have to be submitted within 5 days from end of each month.</i>
Number of Reported Leaks or spillages per month	<i>No./month</i>	<i>less than 5</i>
Delay in closing preventive inspection comments	<i>No./month</i>	<i>Comments will have to be closed in less than a week.</i>
Failure of pumps, manholes or any other main parts if operator is taking necessary measures to avoid it.	<i>No./month</i>	<i>0</i>
Incidents related to PSEA, IBVS, permits procedures, or Complaints on IBVs hiring and payment	<i>No./month</i>	<i>0</i>
Keep the aeration systems running so that sludge does not form in the emergency tanks.	<i>No./month</i>	<i>0</i>

9. FREQUENCY OF PERFORMANCE REVIEWS.

Formal performance review meetings will be held with contractor management on a monthly basis to review O&M reports, performance indicators, technical and operational issues, and successes. The contract's key performance indicators (KPIs) will be considered as tool to assess the performance and effectiveness of the contractor.

10. CALL FOR PROPOSALS

The proposer shall follow the guidance on structuring the technical proposal as per the below sections.

10.1 Guidance on Structuring Technical Proposal:

The technical proposal will have to follow the following structure:

- **Section 1: Human Resources.**

The bidder will have to include the management structure of the operation team as per the requirements in the TOR and to present the resumes and qualifications of the proposed team members. This section should include the resumes of the Project Manager, Water Supply Engineer, Wastewater Engineer, Water Quality Officer and data officer. The team structure will have to be also included indicating the number of field monitors, operators, guards, and technicians to run the water and wastewater systems. The contractor should ensure having minimum 2 field monitors for each district during summertime to follow up on water supply, tanks, violations, and over consumption.

- **Section 2: Methodology of Operation.**

The bidder will have to present the methodology of operation to manage the water supply and wastewater network as per the required documents in section 10.2. The methodology will have to include detailed plan for operating and maintaining the boreholes, pump stations and all related networks and elements. The Methodology of Operation should include the following:

- Description of the water supply operation including proposed control measures for over consumption and violations. Violations on the water supply network are any acts by the communities, institutions, and beneficiaries that lead to jeopardizing the system such as illegal connections, extra storage, using illegal pumps, and any other behaviours that result in violating the water supply regulations.
- Preventive maintenance plan for all elements of the water supply system, including boreholes, water pump stations, valves, distribution network and related equipment.
- Preventive maintenance plan for all elements of the wastewater networks and pump stations, including related equipment.
- Detailed plan to manage and address water and wastewater complaints.
- Detailed plan to manage for asset management, including tracking of spare parts, consumables, and other needs.

- **Section 3: Risk Assessment Matrix.**

The bidder will have to provide a detailed Risk Assessment Matrix indicating all associated risks with the operation and how to mitigate them as per section 10.3 B. The matrix will have to list all potential risks that are related to the operation and how to mitigate them.

- **Section 4: Quality Assurance Plan.**

The bidder will have to include a Quality Assurance Plan indicating quality of reporting, data management, documentation, delivering all services as per the TOR and quality standards, and to ensure having a system in place to regularly monitor and assess the quality of the operation.

- **Section 5: Health and Safety Plan.**

The bidder will have to include a detailed Health and Safety Plan to present the procedures and measure that will be taken to ensure health and safety of the operation team and community.

- **Section 6: Supply and Procurement Plan.**

The bidder will have to provide a detailed plan for Supply and Procurement of all necessary spare parts and needed materials to run the operation. The Plan should show process of procurement, time, and profiles of main suppliers.

- **Section 7: References.**

The proposer shall provide a minimum of three references to clients for whom the proposer has carried out similar scope of project. UNICEF may contact references for feedback on services provided by your institution in support similar projects. As part of the evaluation process, UNICEF may ask to meet the real people proposed for the assignment.

- Name and description of client organization
- Names of senior individuals in the client organization who were involved in the project who are knowledgeable
- Scope and scale of the previous projects

10.2 Tender Related Documents and Manuals.

The bidding document will include the following documents to guide the bidders on understanding the networks operation in Za'atari and to provide reasonable pricing accordingly. The documents will be included in annexes as follows:

- A) Operation and Maintenance Manual for Water Supply.
- B) Operation and Maintenance Manual for Wastewater Network.
- C) Water Quality Plan.

- D) Drawings of PRC tanks.
- E) WAJ water specifications 2007.
- F) WAJ sewage specifications 1995.
- G) Manual of T95 tanks.
- H) Camps Standard Operating Procedures-Incentives Based Volunteers\ (SoP
- I) SCADA manual for wastewater treatment
- J) Technical Specifications and General Guidelines for Water and Wastewater Network
- K) (1-2-3) Preventative & maintenance manual of water and sanitation systems

10.3 Site Visit for Bidders.

UNICEF will arrange with all interested bidders to visit the camp and see the main locations and components of the water and wastewater systems and their operation. Date of site visit will be communicated to all eligible bidders. A pre-bid meeting will be arranged in Za'atari camp with all bidders on the same day of site visit. A period of one week will be given to allow for questions and clarifications from the bidders.

Potential bidders must comply with all necessary documentations to allow permits to be issued for the site visit to Za'atari camp. Timeline of the field visit will be communicated to potential bidders during the tendering process.

10.4 Office and Accommodation.

UNICEF has already established four prefab units located in different sites, as indicated below. While UNICEF will provide the above units, it is the Contractor's responsibility to arrange for all necessary equipment, utilities and furniture to ensure an appropriate operation.

- One prefab unit, for offices, located at Borehole# 3.
- One prefab unit, for offices, located at each of the wastewater lifting stations.
- One prefab unit, as a SCADA control room, located at the wastewater at the treatment plant.

In addition, three concrete rooms located at Boreholes 1, 2, and 3 can be used as offices for the operators and field team.

As required, the Contractor will have to arrange for accommodation in the areas nearest to Za'atari camp.

11 UNICEF RECOURSE IN CASE OF UNSATISFACTORY PERFORMANCE

UNICEF will assess the performance of the contractor against the proposed key performance indicators monthly according to the classifications of: poor, good, and excellent. Having three performance indicators that don't meet the target will result in an overall poor evaluation for the month.

UNICEF reserve the right to withhold payment and consolidated output until the contractor provide satisfactory quality output as reviewed by the project manager / supervisor.

The contractor will receive an official notification if the performance is poor for any operational month. Having poor performance for more than three months will result in financial and contractual implications, including termination of the contract.

12 PROVISIONAL SUM

UNICEF will keep an amount of Provisional Sum in the contract for any contingency or emergency works. This amount will be activated only by UNICEF for any emergency needs. The Provisional Sum will be included in the BOQ for pricing.

13 CONTRACT MANAGEMENT

UNICEF will appoint a focal point (WASH Specialist/Officer) to exercise the management of the contract. Overall management and supervision of the contract will be provided by the Chief of WASH. On the Contractor side, the contract should assign a project manager for the Management of the contract.

14 REQUEST FOR PROPOSAL EVALUATION AND WEIGHTING CRITERIA

A two stages procedure shall be utilized in assessing the proposals, with assessment of the technical proposal being completed prior to any price proposal being compared.

Submitted proposals will be assessed using the Cumulative Analysis Method. All requests for proposals will be weighed according to the technical (70%) and financial considerations (30%).

Financial proposals will be opened only for those applications that attained 49 points or above (out of 70) on the technical part. The proposal obtaining the highest overall score after adding the scores for the technical and financial proposals together, that offers the best value for money will be recommended for award of the contract.

Applicants shall prepare a proposal as an overall response to ToR ensuring that the purpose, objectives, and deliverables of the assignments are addressed.

A. Technical Proposal.

The Technical section of the proposal should be submitted in English languages. All other sections should be annexed. All sections (components) of the proposal will be evaluated, any omissions in the documents or content will be considered missing parts.

The evaluation criteria will be as per the below categories and points.

Category	Points
<p><u>Experience:</u> <i>Minimum 5 years of experience in construction, management, and operation and maintenance of water and wastewater networks.</i> Experience for 1-2 Years (1) Experience for 3-4 Years (3) Experience for 5 Years and above (5)</p>	5
<p><u>Human Resources</u> <i>Project Manager (2)</i> <i>Water supply engineer (2)</i> <i>Wastewater Engineer (2)</i> <i>WQ engineer (1)</i> <i>Data officer (1)</i> <i>Other field and office support team (2)</i></p>	10
<p><u>Methodology of Operation</u> <i>Water supply operation including control measures on violations and supply cycles.(5)</i> <i>Preventive maintenance plans water/Wastewater (4)</i> <i>Plan to manage complaints (4)</i> <i>Plan to manage assets and inventory (2)</i> <i>Plan for Enhancement systems efficiency (5)</i></p>	20
<p><u>Risk Assessment Matrix</u> <i>Risk analysis matrix (4)</i> <i>Comprehensive risk management plan (4)</i></p>	8
<p><u>Quality Assurance Plan</u> <i>Quality assurance plan- reporting, data management documentations (5)</i> <i>Monitoring mechanism to assess quality of operation (5)</i></p>	10
<p><u>Health and Safety Plan</u> <i>Health and safety plan including team safety plan (3)</i> <i>Community health and safety (3)</i></p>	6
<p><u>Supply and Procurement Plan</u> <i>Detail of suppliers/profile (4)</i> <i>Detail procurement and supply plan (4)</i></p>	8

<u>References</u>	3
<i>Two references from previous employers provided (3)</i>	
Total	70

Only bidders who obtain a minimum of **49 out of the 70 points** will pass the evaluation of the technical proposal, and have their financial proposals opened.

No financial information should be contained in the Technical Proposal, otherwise will be rejected.

B. Financial Offer.

Financial score will be calculated using this equation:

Score of proposal A = (Max. score for price proposal) * (lowest price) / price of proposal A

- A separate Financial Offer detailing all requirements should be submitted under this section.
- The financial offer should be submitted through the proposed Bill of Quantities (BOQ) and in reference to the specification and O&M manuals.
- The Financial Proposal shall be submitted in a separate file, clearly named Financial Proposal.
- The Financial Proposal shall include breakdown for some items as required in the BOQ table.
- **For any requested additional works as contingency (not included in BoQs), contractor should declare clear overhead percentage within his financial offer.**
- No financial information should be contained in the Technical Proposal.

15 CONDITIONS

- The contractor shall be responsible and accountable to ensure that the behaviour of its employees (including truck drivers, sub-contractors etc) on site will be always is in line with Jordanian laws and agreed rules and regulations for working in Za'atari Refugee camp and are in full compliance with the UNICEF code of conduct, the roles and regulations in the camp including all agreed SOPs.

- The contractor must provide a list of staff names, contact numbers, and copy of their identification cards upon signing the contract. Any changes in the contractor's staff have to be communicated to UNICEF 7 days in advance.
- The contractor should submit a performance bond to UNICEF (10% of contract value) in the form of bank guarantee as performance assurance and satisfactory implementation of the tasks here in this tender within 7 days after issuance of the contract. UNICEF reserves the right to cash the bond if the contractor fails to perform the tasks under this contract caused due to break in service delivery, labour disputes trouble, unsatisfactory implementation, or negligence.
- UNICEF will provide the selected contractor will all as-built drawings, operation manuals, and all related project's documents upon signing the contract.
- The contractor shall confirm in writing in his offer the ability to mobilize and commence the work within **10 days** from the date of signing the contract. If the contractor fails to mobilize within the stated period, UNICEF reserves the right to terminate the contract, and UNICEF will not be responsible for any legal or financial expenses incurred due to contract termination. The bidder needs to submit a confirmation letter along with the technical proposal.
- The successful bidder is expected to arrange all logistics including office space, transportation, stationary, computers with necessary software etc. The accepted bidder should include all remuneration involved in the contract as per the expected deliverables described above. This includes, but not limited to, travel costs, salaries, insurance(s) and per diem etc.
- For all purposes, staff of the contractor providing services under this contract will be strictly considered an employee of the contractor (not an employee of UNICEF). UNICEF shall not be liable for any omission, negligence, or misconduct of the monitors or any sub-contractors under this agreement nor for any insurance coverage, nor for any costs, expenses associated with any illness, injury, disability, or death of the monitors performing work under this contract nor from any third party.
- The contractor shall not, under any circumstances, charge or receive payments for provision of WASH services to refugees or institutions. UNICEF reserves the right to suspend the Contract in the event such a situation occurs.
- All the correspondences covered under this contract shall be communicated in English only.

- In preparation for the implementation of the contract, the successful contractor will participate in a one-day orientation onsite with UNICEF WASH officers.

Payment terms and conditions

- UNICEF shall make payment on monthly basis against completion of monthly deliverables.
- Payment shall be on actual against invoice to be submitted by the contractor on monthly basis along with the required documentation and evidence of completion of work.
- UNICEF will agree with the selected contractor on the template of invoice in the first operation meeting which will take place within two weeks from the start of the contract.
- The invoice will be submitted as per the items in the BOQ.
- The selected contractor will have to submit the invoice for review in the first week of each month. UNICEF team will review and share comments or deductions if there are any.
- **No advance payment** arrangement will be made.
- UNICEF will approve the invoice with the whole amount of the approved BOQ if there are no deductions or contractual penalties.
- Payment will be made only upon UNICEF's acceptance of the work performed. The terms of payment are Net 30 days, after receipt of invoice and acceptance of work. Payment will be affected by bank transfer in the currency of billing.

Other Clauses

Child Safeguarding

Consistent with UNICEF's Child Safeguarding Policy (CF/EXD/2016-006) (Section 4), the contractor is required to report reasonable suspicion of safeguarding violations committed by its own staff, suppliers, vendors, or partners to UNICEF. The contractor must ensure that its staff (or non-staff personnel) employed are aware that they are expected to immediately report all reasonable suspicions (or becomes aware of any reports or allegations) that violates the Child Safeguarding Policy or principles. The contractor is expected to have in place policies for the protection and safeguarding of children. The Contractor may be requested to provide proof of such policies upon request.

PSEA

Consistent with the UN Secretary General's Bulletin related to "Special measures for protection from sexual exploitation and sexual abuse" (ST/SGB/2003/13), entities and individuals entering into cooperative agreements with an agency of the United Nations are obligated to "take preventative measures against sexual exploitation or abuse, to investigate allegations thereof, or to take corrective action when sexual exploitation or sexual abuse has occurred." Failure to do so "shall constitute grounds for termination of any cooperative arrangement or contract. The contractor is expected to have in place explicit policies related to the prevention of sexual exploitation and abuse of beneficiaries, including commitment to the IASC 6 Core Standards (IASC/2002), and the investigation of such cases. Where the contractor does not have sufficient capacity for the

investigation of such cases, it should request the support of UNICEF. Reasonable suspicion of sexual exploitation or abuse of beneficiaries may be reported by any individual to UNICEF if the complainant so prefers.