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TERMS OF REFERENCE

TITLE – *National Consultant – Technical Expert (Sanitation and WASH Infrastructure)*

CONTRACT MODALITY	Individual Consultancy
DUTY STATION	Dhaka, Bangladesh (Office Based)
DURATION OF CONTRACT	12 Months

Purpose of Assignment

UNICEF Bangladesh's Water, Sanitation and Hygiene (WASH) Section works with government agencies, development partners, private-sector actors and other stakeholders to advance SDG 6.1 and 6.2 and national WASH targets.

The consultant will provide specialized technical, institutional and quality-assurance support across UNICEF Bangladesh's sanitation and WASH infrastructure portfolio.

The assignment will cover sanitation systems strengthening, sanitation-market development, faecal sludge management (FSM), scheduled desludging, wastewater treatment, construction supervision, infrastructure QA/QC, operational performance monitoring and sustainable operation and maintenance (O&M) arrangements.

The consultant will also support construction monitoring, operational readiness, water-quality follow-up and sustainable management arrangements for seventeen climate-resilient, solar-powered mini-piped water-supply systems in the small char islands of Mujibnagar Union, Char Fasson Upazila, Bhola District.

Through technical assessments, field monitoring, capacity development, stakeholder coordination and preparation of actionable technical products, the consultant will contribute to safe, inclusive, climate-resilient and financially sustainable WASH services.

Scope of Work

• Catalyzing Financing for Climate-Resilient and Safely Managed Sanitation: assess and strengthen DPHE stewardship, regulation, market monitoring and accountability; support sanitation-enterprise registration, accredited training, certification, standards, affordability and financing assessments; and develop regulated FSM service and financing models.

• Climate-Resilient Mini-Piped Water Supply Systems: support DoE in construction monitoring and QA/QC of seventeen systems; verify compliance with approved designs and specifications; and support operational readiness, water safety, climate resilience and sustainable O&M arrangements.

• Citywide Inclusive Sanitation (CWIS), DNCC: support sustainable O&M of three existing FSM and wastewater treatment facilities, operationalisation and scale-up of scheduled desludging, and technical monitoring of child well-being centres linked to WASH interventions.

• Swiss NatCom Project, KCC: provide technical backstopping and performance assessment for two existing wastewater treatment plants, including operational efficiency, effluent quality, environmental compliance and corrective actions.

• EKN-Funded Transformative Sanitation Technologies Project, KCC: provide construction supervision and QA/QC for ten faecal sludge and wastewater treatment plants and prepare facility-specific SOPs and

sustainable O&M arrangements.

• Cross-cutting responsibilities: review drawings, designs, BoQs and technical specifications; maintain non conformity and corrective-action tracking; strengthen counterpart capacity; facilitate consultations and training; document good practices and lessons; and submit concise progress reports to the supervisor.

• Field Travel: Conduct field visits for QA/QC of construction works, Observations, consultations, on the job coaching and mentoring, suggestions and recommendations; review drawings, designs, BoQs and technical specifications; maintain non-conformity and corrective-action tracking;

• All additional tasks must be directly related to the agreed scope and requested by the supervisor.

Work Assignment Overview (activity)	**Deliverables/ Outputs**	**Delivery deadline**		**Planned Travel**
		Exact date to complete the deliverable	**Input days**	
Workstream 1: Sanitation systems strengthening and mini-piped water-supply support	**Deliverables:** • 1. Inception report and detailed workplan, including methodology, stakeholder-engagement plan, field schedule, deliverable calendar, risk matrix and QA approach. • 2. DPHE institutional assessment and costed transition roadmap for stewardship, regulation, market monitoring and accountability. • 3. Government-owned sanitation-enterprise registration framework and baseline assessment. • 4. Sanitation market-development training institutionalisation, accreditation and certification framework. • 5. FSM baseline/pre-feasibility assessment and prioritised investment pipeline, including service gaps, investment needs and financing options. • 6. O&M guidelines/SOPs for the seventeen mini-piped water-	1 August 2027	22 days	7 field trip for 28 days in different part of Bangladesh. The confirmed locations include Mujibnagar, Charfession, Bhola; Satkhira, Cox's Bazar, Kishoreganj, Lalmonirhat, Barishal, Kustia and Rangamati districts. 4 days per trip. So, total travel days = 7*4=28 days

	supply systems, including roles, preventive maintenance, financial management, water-quality monitoring, emergency response and service continuity.			
Workstream 2: CWIS technical and institutional support	**Deliverables:** • 7. CWIS technical-support package comprising: sustainable operational and financial models for three treatment facilities; scheduled-desludging operationalisation and scale-up arrangements; and documented monitoring and corrective-action follow-up for child well-being centres linked to WASH interventions.	1 October 2027	22 days;	2 field trip for 8 days in different part of Bangladesh. The confirmed locations are Dhaka and Rajshahi city corporations. 4 days per trip.
Workstream 3: Swiss NatCom wastewater-treatment performance support	**Deliverables:** • 8. Plant-specific monitoring and performance-assessment reports for two wastewater treatment plants, covering operational status, treatment performance, effluent quality, environmental compliance, O&M constraints and time-bound corrective actions.	1 November 2027	22 days	1 field trip for 4 days in Khulna City Corporation, Bangladesh
Workstream 4: EKN-funded construction QA/QC, SOPs and final handover	**Deliverables:** • 9. Construction supervision and QA/QC reports for ten treatment plants, including progress, design/specification compliance, material and workmanship quality, non-conformities and closure of corrective actions. • 10. Facility-specific SOPs and O&M guidelines for the ten treatment plants, plus a final consolidated technical report and handover package summarising results, pending actions, lessons learned and the repository of approved technical products.	31 December 2027	44 days	2 field trip for 8 days in Khulna City Corporation (4 days per trip).

Payment Schedule:

Payment will be made on submission and acceptance of deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.

Important Notes

- Individuals engaged under a consultancy or individual contract will not be considered "staff members" under the Staff Regulations and Rules of the United Nations and UNICEF's policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.
- Contracts are conditional upon the selected candidate's willingness to comply with any current or future vaccination requirements that may be established by UNICEF, where applicable. Failure to comply with applicable vaccination requirements, where required and without an approved medical exemption by UNICEF, may result in the withdrawal of the consultancy offer or termination of the contract in accordance with the General Terms and Conditions of Contract.
- UNICEF offers reasonable accommodation for consultants with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.

QUALIFICATIONS / SPECIALIZED KNOWLEDGE / EXPERIENCE/ COMPETENCIES (CORE/TECHNICAL/FUNCTIONAL) / LANGUAGE SKILLS REQUIRED FOR THE ASSIGNMENT

Minimum requirements:

Education:

An advanced university degree (master's degree or equivalent) in civil engineering, environmental engineering, water or sanitation engineering, public health engineering, hydrogeology, or another relevant technical discipline is required.

Work Experience:

• A minimum of 10 years of progressively responsible experience in WASH engineering, programme implementation or infrastructure management, including at least five years in rural and/or urban WASH implementation in Bangladesh.

Knowledge/Expertise/Skills:

• Demonstrated experience in FSM, wastewater treatment, treatment-facility O&M, scheduled desludging or related urban sanitation services.

• Practical experience in reviewing designs, drawings, BoQs and technical specifications and in construction supervision, QA/QC, commissioning and performance monitoring of WASH infrastructure.

• Experience in at least two of the following: sanitation-market development; enterprise registration or certification; institutional or regulatory strengthening; tariff, financing or cost-recovery models; government transition roadmaps; SOP development.

• Experience working with government institutions, city corporations, utilities, contractors, development partners and private-sector service providers is an asset.

• Demonstrated ability to facilitate consultations, training, mentoring and on-the-job capacity development

and to produce high-quality technical reports in English.

Language Requirements:

Fluency in written and spoken Bangla and English is required

Desirables:

• Passion and commitment to UNICEF's mission and values

• Agencies, academia, UN organizations, INGOs, or the private sector is an advantage.

• Strong analytical, facilitation, communication, and report writing skills in English; working capacity in Bangla is required.

• Ability to work in a multidisciplinary environment and undertake approved field travel.