

TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS AND CONTRACTORS

Title: Construction Engineer consultancy (EPI/Health)	Funding Code: SC180798 WBS: 3900/A0/08/881/002/005	Type of engagement <input type="checkbox"/> Consultant (international) <input type="checkbox"/> Individual Contractor Part-Time <input checked="" type="checkbox"/> Individual Contractor Full-Time	Duty Station: Freetown, Sierra Leone (including travel to districts)
Purpose of Activity/Assignment: <ul style="list-style-type: none"> • <u>Background</u> Currently, there are sixteen district vaccine stores in all the sixteen districts in the country for storage of both routine and mass vaccination campaigns. Findings from recent assessment revealed that some of these stores are in a poor state and needs renovation and in some cases expansion for adequate storage of immunization supplies. To address this, the country developed and submitted a proposal to GAVI for support, and the proposal was approved with funding provided to rehabilitate and expand at least eight district vaccine stores in Bombali, Bonthe, Kambia, Kenema, Moyamba, Port Loko, Pujehun and Tonkolili districts; as well as to construct new stores in Karene and Falaba districts. As per the tripartite agreement between Ministry of Health and Sanitation (MoHS), Gavi and UNICEF, UNICEF is expected to lead the rehabilitation / expansion work in 8 districts while supporting the construction of new stores in Karene and Falaba led by the MoHS In the context of COVID-19 pandemic, the country is also significantly expanding the oxygen supply chain capacity. UNICEF has been supporting this effort through procurement, installation, and operationalization of oxygen generating plants amongst others. During 2022, it is expected that 7 additional oxygen plants will be procured and installed, involving some minor construction work including site preparation and ward piping. In the same context, other small scale infrastructural development support for health system strengthening such as solarization of the health facilities will also be provided. The UNICEF Health & Nutrition Section is recruiting a Construction Engineer (EPI/health), who will be responsible for managing the district vaccine store construction project throughout all the phases of construction works and also providing technical oversight, quality assurance and management support for other construction works supported under the Health & Nutrition section. 			
Purpose and objectives: Overall purpose of the consultancy is to ensure the quality, timely implementation, and cost-efficiency of construction work supported by UNICEF health and nutrition section. Specific objectives include: <ul style="list-style-type: none"> • Manage the entire process of the district vaccine store construction in eight districts (Bombali, Bonthe, Kambia, Kenema, Moyamba, Port Loko, Pujehun and Tonkolili districts) from inception to completion • Provide technical oversight and quality assurance support for other construction works supported by UNICEF health and nutrition section, including construction of 2 new district vaccine stores in Karene and Falaba (construction work managed by MoHS), site preparation and piping for oxygen plant installation in 7 sites, and small-scale 			

infrastructural development such as solarization and incinerator instalment in selected sites

Methodology and Technical Approach:

The Construction Engineer will work on full-time and be based in UNICEF Freetown with frequent travels to the field in line with work plans and deliverables. Under the direct supervision of the Immunization Specialist and general guidance of Chief of Health and Nutrition Section, the Construction Engineer will supervise and manage the entire process of the district vaccine store construction project in Bombali, Bonthe, Kambia, Kenema, Moyamba, Port Loko, Pujehun and Tonkolili districts. The consultant will engage the contractors on a regular basis and provide on-site support to them as they complete their activities, while simultaneously liaising with the EPI manager of MoHS, UNICEF Sierra Leone Immunization Specialist, Chief of Health and Nutrition Section and Supply Section staff to provide updates and troubleshoot as necessary. For other construction work that the consultant is expected to provide support, close collaboration with the MoHS health system strengthening programme manager and other relevant MoHS directorates/programmes, UNICEF biomedical engineer consultant, UNICEF Water Sanitation and Hygiene (WASH) section is also required.

Specific Tasks of the Consultant:

The expected activities / results for this role will be:

1. Management of District Vaccine Store Construction Project (covering 8 districts)

- Responsible for the overall supervision/coordination of all construction activities with special focus on project and contract management.
- Act as advisor in the selection of local technical partners and contractors.
- Review and verify proposed building plans for technical soundness, environmental and sustainability considerations; ensure final drawings and BOQs are approved by UNICEF and MoHS; and final sites are formally handed over by MoHS to the contractor with proper documentation before works begin.
- Ensure proposed works are approved by relevant government authorities prior to commencement of works and compliance with the Sierra Leone national construction codes and MoHS minimum standards for establishing district vaccine stores.
- Check and approve material and equipment incorporated in the works, ensuring compliance with designs, specification and safety regulations. Manage allocated resources at all levels during the construction period and supervise responsible partner in charge of quality assurance.
- Identify any delays or cost overruns and ensure timely reporting to UNICEF supervisor with suggestions of acceptable mitigating measures.
- Produce narrative reports on implementation progress and lessons learnt for use as inputs into donor reports and disseminated to MoHS and DHMTs, this includes documenting of lessons learned in the construction works for sharing with the UNICEF global Construction Unit, Supply Division and wider dissemination.
- Ensure lessons learnt are incorporated into design and construction process before initiating the next phase of the construction.
- Monitoring, verification and certification of construction works, working closely with the construction monitoring team comprising UNICEF and MoHS engineers and other district level partners by deploying the latest construction management principles and make recommendation to UNICEF on all claims of the Contractor(s) relating to the execution and

progress of the work, such as progress payments, variation orders, contract time extensions and suspensions.

- The Construction Engineer shall keep UNICEF informed of defects and deficiencies in the work of contractors and shall condemn work found failing to conform with the Contract Documents, Annexes or Special Provisions of the Construction Contract, if any, and decisions of UNICEF as conveyed.
- Maintain a filing system for all site memos and instructions, measured quantities of work and material on site, reports, and other documents and correspondence pertaining to the construction activities.
- As needed, ensure the contractor understands the contents and intents of the Construction Contract Documents, such as the working drawings, specifications and general conditions.
- Assist in the review and evaluation of the technical, institutional and financial feasibility and constraints of the project in coordination and collaboration with government and other partners.
- Develop work plan for the implementation for the quality assurance strategy and monitor compliance to ensure objectives and targets are met and achieved.
- Visit each active construction site at least once every month; site visits should be timed to coincide with significant construction activities, foundation excavation completion, steel fixing and formwork inspection, concrete pouring, roof structure inspection and formwork striking.
- Ensure detailed records are kept of all construction activities, enabling real-time tracking of construction progress.
- Arrange and conduct regular site meetings with the contractor/s and submit site meeting reports to Immunization Specialist within 5 working days of the meeting. This includes ensuring weekly and monthly progress reports are prepared and submitted detailing the following:
 - ✓ Site construction progress (percentage completed) and compared to the baseline (original) program.
 - ✓ Current payment certification status.
 - ✓ Current forecast completion date.
 - ✓ Resources being provided by contractors.
 - ✓ Current or anticipated problems and proposed solutions including likely deviations from timing and costing plans
 - ✓ Quality and efficiency of supervision set up.
 - ✓ Variation orders issued (from the original scope of works) with cost, time and quality reporting elements.
 - ✓ Other tasks as requested, including (but not limited to) the below provision of technical oversight and quality assurance support for other construction works.

2. Provision of technical oversight and quality assurance support for other construction works

- Assist with tendering process for oxygen plant site preparation and piping work, by supporting the UNICEF biomedical engineer and MoHS with finalization of drawings and BOQs and bids evaluation, if/as required
- Ensure infrastructure development works (including oxygen plant site preparation, incinerator installation, and solarization) are approved by relevant government authorities prior to commencement of works and in compliance with the Sierra Leone national construction codes and MoHS minimum standards
- Monitor, verify and certify the construction work, ensuring compliance with designs, specification and safety regulations. Work closely with UNICEF, MoHS and health facility staff. Identify any delays or cost overruns and ensure timely reporting to UNICEF supervisor with suggestions of acceptable mitigating measures.

- Produce narrative reports on implementation progress and lessons learnt.
- Provide technical assistance for the district vaccine store construction work managed by MoHS in Falaba and Karene, as required.

Management, Organization and Timeframe:

The consultant will be supervised by the Immunization Specialist, UNICEF Sierra Leone, under the overall guidance of Chief of Health & Nutrition Section. The consultant will be seated at UNICEF Country Office in Freetown with frequent field visits to construction sites. The monthly fees of the consultant will be processed by UNICEF with submission of his/her monthly progress report along with deliverables certified by the supervisor.

Start date: May 1, 2022
Months

End date: 28 February 2023

Time Frame: 10

Child Safeguarding

Is this project/assignment considered as "Elevated Risk Role" from a child safeguarding perspective?

YES NO If YES, check all that apply:

Direct contact role YES NO

If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:

Child data role YES NO

If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the [Child Safeguarding SharePoint](#) and [Child Safeguarding FAQs and Updates](#)

Work Assignment Overview			
Tasks/Milestone:	Deliverables/Outputs: <i>These deliverables are interlinked and need to be carried out on an on-going basis until the consultancy concludes.</i>	Timeline	Estimate Budget
Develop a workplan.	A detailed workplan is produced	First week of consultancy	
Review and verify proposed building plans for technical soundness, environmental and sustainability considerations; ensure final drawings and BOQs are approved by UNICEF and MoHS	Building plans are reviewed and verified for technical soundness, environmental and sustainability consideration.	Second week of consultancy	
Ensure proposed works (including oxygen plant site preparation, incinerator installation, and solarization) are approved by relevant government authorities prior to commencement of works and compliance with the Sierra Leone national construction codes and MoHS minimum standards for establishing district vaccine stores.	Proposed construction/rehabilitation works (including oxygen plant site preparation, incinerator installation, and solarization) are approved by relevant government authorities including MoHS.	Third week of consultancy	
Assist with tendering process for oxygen plant site preparation and piping work, by supporting the UNICEF biomedical engineer and MoHS with finalization of drawings and BOQs and bids evaluation, if/as required	Tendering processes are completed, and implementation works started timely.	Fourth week of consultancy	
Supervise construction works and provide monthly progress reports	Construction works supervised effectively and progress reports produced and shared with relevant partners.	Ongoing until the end of consultancy	
Identify any delays or cost overruns and ensure timely reporting to UNICEF supervisor with suggestions of acceptable mitigating measures.	Delays are identified and reported timely UNICEF and actions taken timely for smooth implementation of project works.	Ongoing until the end of consultancy.	
Visit each construction site at least once every month; site visits should be timed to coincide with significant construction activities, foundation excavation completion, steel fixing	Sites are visited monthly and progress reports produced and shared.	Ongoing until the end of consultancy	

and formwork inspection, concrete pouring, roof structure inspection and formwork striking.			
Produce narrative reports on implementation progress and lessons learnt for use as inputs into donor reports and disseminated to MoHS and DHMTs, this includes documenting of lessons learned in the construction works for sharing with the UNICEF global Construction Unit, Supply Division and wider dissemination.	Narrative reports on implementation progress and lessons learnt produced.	Ongoing until the end of consultancy	
Arrange and conduct regular site meetings with the contractor/s and submit site meeting reports to Immunization Specialist within 5 working days of the meeting.	Regular meetings held with contractors and reports produced and shared.	Ongoing until the end of consultancy	
Ensure lessons learnt are incorporated into design and construction process before initiating the next phase of the construction.	Lessons learnt are incorporated into the designs and construction process before initiating the next phase of the construction.	Ongoing until the end of consultancy	
Ensure detailed records are kept of all construction activities, enabling real-time tracking of construction progress.	Records are kept for real time tracking of works.	Ongoing until the end of consultancy	
Produce end of project report	End of project report is produced and shared with all stakeholders	At the end of the project	

Budget Year: 2022-2023	Requesting Section/Issuing Office: <i>Health and Nutrition Section</i>	Reasons why consultancy cannot be done by staff: Given the limited country office capacity in construction works, a construction engineer (EPI/health) would be required to oversee the development, design and construction of the district vaccine stores as well as other infrastructure related UNICEF support in health sector. In addition, the UNICEF supply section has also recommended the hiring of a full-time construction engineer to oversee this project from start to completion. In support of this, the construction engineer will provide full time support over the period of the construction work as part of UNICEF's technical support and oversight of the construction work in collaboration with Ministry of Health and Sanitation.	
Included in Annual/Rolling Workplan: <input checked="" type="checkbox"/> Yes <input type="checkbox"/>			
Consultant sourcing: <input checked="" type="checkbox"/> National <input type="checkbox"/> International <input type="checkbox"/> Both Consultant selection method: <input type="checkbox"/> Competitive Selection (Roster) <input checked="" type="checkbox"/> Competitive Selection (Advertisement/Desk Review/Interview)		Request for: <input checked="" type="checkbox"/> New SSA – Individual Contract <input type="checkbox"/> Extension/ Amendment	
If Extension, Justification for extension: N/A			
Supervisor: Baboucarr Boye, Immunisation Specialist	Start Date: 01 st May 2022	End Date: 28 February 2023	Number of Days (working): 10 months

<p>Minimum Qualifications required:</p> <p><input checked="" type="checkbox"/> Bachelors <input type="checkbox"/> Masters <input type="checkbox"/> PhD <input type="checkbox"/> Other</p> <p>Enter Disciplines: Degree in Civil Engineering, Architecture, or related Building Sciences; or in one or more of the disciplines relevant to the following areas: Architecture, Civil Engineering, Industrial design or any Science and Social Sciences fields relevant to Construction and Design. .</p>	<p>Knowledge/Expertise/Skills required:</p> <p><u>Experience</u></p> <ul style="list-style-type: none"> • At least 2 years of relevant construction or engineering experience at national level, preferably in the Health Sector • Experience in the design and management of development projects. • Have a good initiative with ability to apply technical knowledge creatively to ensure conflicts and disputes are resolved between contractors and beneficiaries. • Demonstrated ability to work in a multi-cultural environment and establish harmonious and effective working relationships both within and outside the organization. • Excellent interpersonal skills and demonstrated ability to plan and organize work to deliver results. • Excellent understanding of design and construction quality assurance processes; codes, procedures and standards. • An understanding of the Sierra Leone construction context especially with regards to availability of both imported and local materials; topography as it affects construction design and timelines is essential. • Experience working in the UN or other international development organization an asset. • Fluency in English, verbal and written required. An understanding of Krio is an advantage. • Have computer skills, including internet navigation and various office applications, including knowledge of AutoCAD and MIS/GIS applications.
<p>Administrative details:</p> <p>Visa assistance required: <input type="checkbox"/></p> <p>Transportation arranged by the office: <input type="checkbox"/></p>	<p><input type="checkbox"/> Home Based <input checked="" type="checkbox"/> Office Based:</p> <p>If office based, seating arrangement identified: <input checked="" type="checkbox"/></p> <p>TBD</p> <p>IT and Communication equipment required: <input checked="" type="checkbox"/></p> <p>Internet access required: <input checked="" type="checkbox"/></p>