

Terms of Reference

PO 7643 Clerk of Works Services to Oversee the Rehabilitation of Freetown Water Supply and Other Social Infrastructure in Sierra Leone

1 Objectives

The purpose of this Terms of Reference (ToR) is to seek a Clerk of Works to oversee the two DFID funded social infrastructure projects in Sierra Leone, under the post-ebola Presidential Priority Plan:

- a. **£38 million Freetown water supply rehabilitation project (2016 – 2018).** This project is intended to improve access to safe water for up to 600,000 people, mostly from low income areas of the city.
- b. **Quality Assurance of the construction of School classrooms and Rehabilitation of Health Centres (2016 – 2017) undertaken by NGO Consortia and UN Agencies.** The classroom construction project is intended to benefit approximately 9,000 school children. Rehabilitation of existing health centres will contribute to reducing neonatal, maternal and child mortality by 10% over the next two years; increase the use of quality reproductive, maternal, neonatal and child health (RMNCH) services, and reduce maternal related mortality/morbidity and teenage pregnancies.

The specific objective of the Clerk of Works (CoW) is to ensure that construction works being implemented under the two DFID water and sanitation and health and education projects are designed and constructed to an acceptable quality assurance standard in accordance with the Client's requirements, and provide good value for money.

2 The Client

The Client for these services will be the Government of Sierra Leone (GoSL), specifically the Ministry of Water / Guma Valley Water Company (GVWC); Ministry of Health and Ministry of Education. DFID is the contracting authority for the Services. The citizens of Sierra Leone are the recipients of the Services described in this ToR.

3 Scope of Works

The CoW scope of works for the two projects will be split as follows:

- Support to the Guma Valley Water Company to provide independent quality assurance for the Freetown water supply rehabilitation construction.
- Support to the Ministries of Health and Education to provide independent quality assurance for school classrooms and health centre (re)construction.

Freetown Water Supply Rehabilitation Project

The CoW scope of works is to support to the Guma Valley Water Company to provide independent quality assurance for the Freetown water supply rehabilitation construction. The assignment will involve the appraisal and inspection of seven Priority Work Areas. These are:

- **PA1. Rehabilitate bulk treatment facilities** and improve the reliability of the existing Guma Dam and Treatment Works.
- **PA2. Rehabilitate the transmission system**, remove the spaghetti connections and reduce supply pressures.
- **PA3. Rehabilitate the distribution network** in the west of the city, extend the network reducing pressures and remove spaghetti connections.
- **PA4. Enhance the Allen Town water supply system** in the east by upgrading Charlotte Weir.
- **PA5. Develop Kaningo water supply system** (weir, treatment and pipeline facilities).
- **PA6. Enhance Babadori water supply system** to increase supplies in the higher elevations of the city.
- **PA7. Enhance water supply to Wilberforce** and surrounding communities by replacing old and dilapidated plant at Spur Road.

A detailed feasibility study, including preliminary designs and costings for the above Priority Work Areas, has been prepared. This report is attached at **Annex A** and a complete list of works packages with budget estimate is provided at **Annex B**. Implementation of these Works will be led by a commercially appointed Engineering, Procurement and Construction (EPC) contractor within a limited timescale of 28 months. The Works will be implemented using a Design and Build form of contract, as the Contractor is expected to undertake the detailed design and construction for the Priority Work Areas identified.

4 Duties

School Classrooms and Health Centre Construction

The assignment will involve the appraisal and inspection of two components. These are:

- **Construction of 225 classrooms** (75 blocks of three rooms) in agreed junior and senior secondary schools; and 10 water facilities and 5 latrines, in the most needy schools (identified by the Ministry of Education Science and Technology - MEST), completed as per MEST specifications and fit for purpose. A list of the 75 schools where the works will take place is shown in **Annex D**.
- **Rehabilitation of three (3) Comprehensive Emergency Obstetric and Neonatal Care Centres (CEmONC) and twenty six (26) Basic Emergency Obstetric and Neonatal Care Centres (BEmONC)** (identified by the Ministry of Health and Sanitation (MoHS), completed to the required standards and fit for purpose. A list of the health centres where the works will take place is shown in **Annex C**.

Implementation of these Works will be led by NGO consortia and UN agencies, with local construction companies sub-contracted to carry out the work. Contract details and design specifications will be made available by the NGO consortia.

The CoW will be required to mitigate the risks of poor quality construction and fraud by verifying that the works have been completed to an acceptable standard before payments are made. The CoW will:

- In consultation with DFID Sierra Leone and the NGO Consortia, advise on the content of implementing partners' reports and specific issues to monitor (the NGO Consortia have committed to submit monthly reports, mid-project reports and a final report).
- Inspect the construction of all classrooms, health centres and water and sanitation facilities at different stages of construction, based on an agreed schedule with the relevant departments in the MEST and MoHS.
- Verify that construction is in accordance with each Ministry department's minimum design criteria and the terms of the contract.
- Recommend if further rehabilitation work or correction of defects is needed and advise DFID when to seek reimbursement from the NGO consortia and UN agencies if the works are not completed to an acceptable standard, after having been given adequate time to do so (if need be at all).
- Review the NGO Consortia training plans for Ministry staff in construction supervision methods and recommend improvements where necessary.

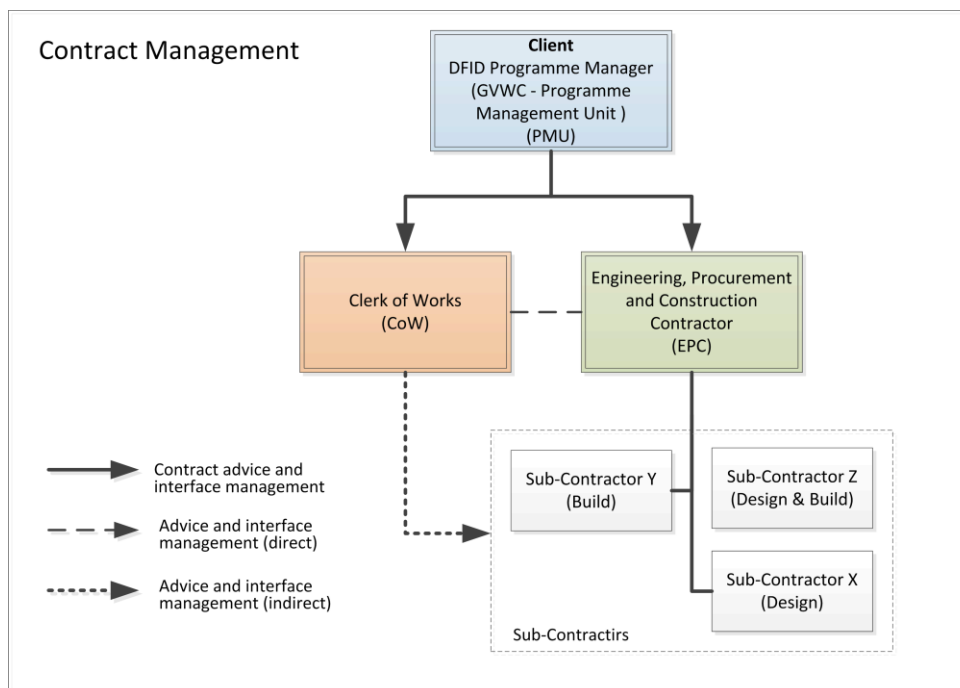
Support for Freetown Water Supply Rehabilitation Project

The Clerk of Works (CoW) will work within the Freetown Water Supply Rehabilitation Project Management Unit in GVWC. The CoW will:

- Provide technical advice to the Client, the GVWC Head of the Unit, and make recommendations for the approval and payment of the construction packages submitted by the EPC. This includes all technical designs, drawings, specifications, costs and contract documentation;
- Be the principle point of contact for the Client in respect of site quality matters and the resolution of defects for the works under construction;
- Attend weekly site meetings, monthly project team progress meetings and other meetings necessary for the proper execution of the works, management of site quality and the rectification of defects;
- Attend quarterly meetings with the Water Steering Committee to report on project progress, significant events or risks during the period;
- Monitor and inspect progress of the works during construction against the approved construction packages;
- Work closely with the EPC, provide technical advice and make recommendations on technical issues of compliance with the recipient's requirements.
- Provide technical assistance to the GVWC Project Management Unit to assist them with client side project management of the project.
- Check the EPC work packages and construction schedules to ensure that construction progress is maintained and make recommendations to the recipient for approval;
- Check the contract variations and advise the EPC and Client on matters related to works access and dispute resolution;
- Keep records and prepare monthly reports for the Client on the progress of the construction works, including any details of delays, drawings received,

- test results, health or safety issues, environmental issues and other significant events;
- Support the GVWC PMU to ensure environment issues, resettlement actions plans and stakeholder engagement is undertaken to ensure a permissive project environment.
 - Inspect the completed works once commissioned by the EPC, prepare schedules of defects and record/certify rectification of snagging items;
 - Prepare and attend snagging inspections, advise the EPC prior to the issue of works completion certificates and evaluate invoices submitted to the Client for payment;
 - Ensure that the EPC takes due consideration for health and safety and public consultation and communication during construction;
 - Work in collaboration with the Client, the EPC and other members of the project team to ensure a comprehensive commissioning process and the smooth hand over of construction works from the EPC to GVWC.
 - Be prepared to provide support for an additional 12 months to ensure the schedules of defects after handover are maintained, and their rectification before the expiration of the defects liability period. The defects liability period for the EPC is 12 months.

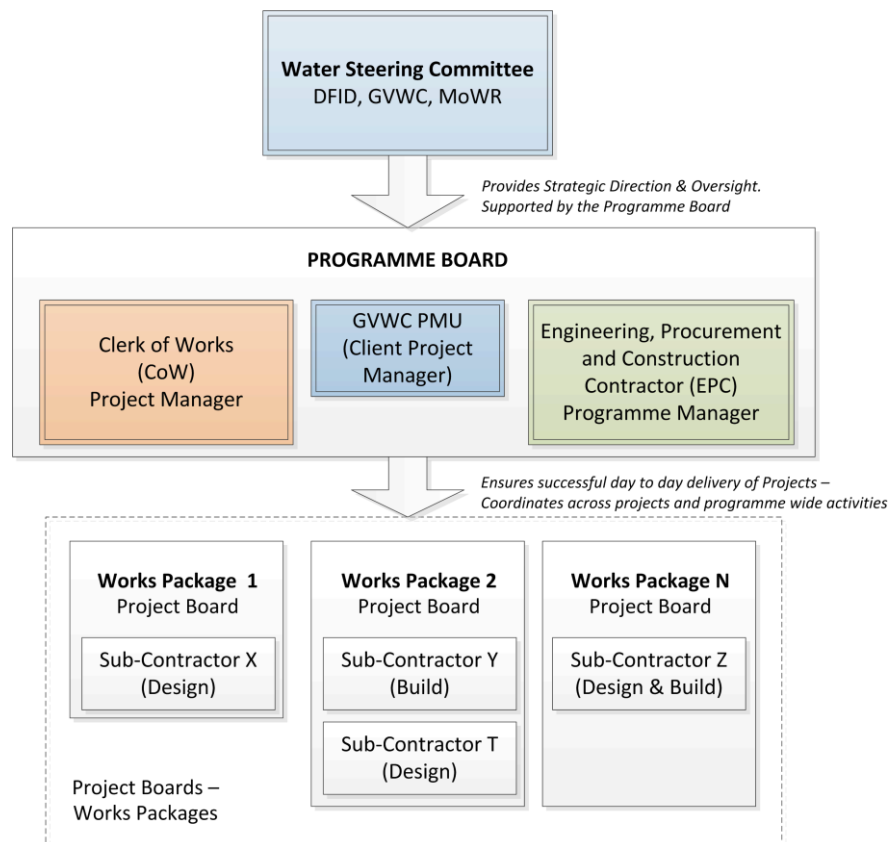
The diagram below shows the contractual relationships between the key project stakeholders.



The EPC, GVWC PMU and CoW contractor will be expected to work in partnership with each other through the Programme Board and the governance structure outline below.

4 Governance Structure

Key components and roles of the governance structure include:



- **Water Steering Committee (Sponsoring Group).** The Water Steering Committee provides the strategic direction for the programme. It is a joint DFID/GVWC Committee, comprising no more than two senior representatives of GVWC, two representatives of DFID and a representative of the Ministry of Water Resources. The Committee is the driving force behind the programme and provides the investment decision and top-level endorsement for the rationale and objectives of the programme.
- **GVWC Project Management Unit (PMU).** The PMU is responsible for the day to day running of the programme on the Client side (GVWC and DFID), and will support the Water Steering Committee as required to ensure the programme continues to move forwards in the right direction. The Project Manager will be from the PMU.
- **Programme Board.** The primary purpose of the programme board is to drive the programme forward and delivers the outputs, outcome and objectives in an expeditious and effective manner. The Board will oversee the day to day running of the programme and ensure coordination between the Programme components and cross-cutting activities. The Programme Board comprises of the GVWC Project Manager (PMU) and the senior representative from the CoW and EPC contractor. The Programme Board will coordinate and liaise with the Client – under the leadership of the Project Director. The Programme Board will meet at least monthly. The Programme board is accountable to the Water Steering Committee for project

outputs and performance. In conjunction, with the Committee it will take remedial action where necessary to address any performance concerns which arise.

- **Project Boards.** Each works package will have a Project Board with a remit to focus on project related activities – i.e. the day-to-day running of projects.

5 Budget and Timing

Schools and Health Centre Construction

The provisional budget for the works is up to GBP 300,000 (including taxes). The school construction is scheduled to begin September 2016 and end April 2017 (8 months). The health centre construction is tentatively scheduled to begin in September 2016 and end in December 2017.

The supplier shall present the lump sum fees within the allocated budget. Lump sum fees should be inclusive of all staff costs, sub-consultants' costs, printing, communications, travel, subsistence, accommodation, and the like, and all other costs incurred by the CoW for proper execution of the duties described in Section 4.

For the purpose of determining the payment for significant additional services, a breakdown of the lump sum fees should be provided for the two projects. The Supplier shall provide a fee rates schedule for key personnel, on a time-chargeable basis. Where the works are varied by the Client, post-contract fees and expenses for the CoW services in connection with such variations shall be negotiated between DFID and the CoW to produce an revised agreed lump sum, or in accordance with the rates schedule (depending on the scale of the changes).

Freetown Water Supply Rehabilitation Project

The provisional budget for the Phase 1 works is up to GBP 700,000 (including taxes).

This assignment is scheduled to begin in November 2016 and will last until April 2018. It is expected that construction will take place predominantly during the dry season, between November and June. All Freetown Water Supply works should be handed over to the Client by April 2019.

The supplier must clearly outline a clear risk matrix associated with the delivery of this requirement within the budget. Suppliers must also provide an indicative budget for Phase 2 to include any deliverables which may not be delivered within the timeframe and budget of Phase 1.

6 Deliverables

Freetown Water Supply Rehabilitation Project

As per the scope of works, the CoW will provide documentary evidence (e.g. inspection records and monthly reports) needed for GVWC to approve works being proposed by the EMC and for DFID to make payments to the EMC on behalf of

GVWC for the completed works. The CoW will also support GVWC provide monthly progress updates to DFID.

Schools and Health Centre Construction

The CoW will provide supervision reports to the respective Departments and DFID, with recommendations for remedial work where defects are found.

7 Consultancy Structure

The CoW services will be provided by a consultancy with international experience of designing, constructing and monitoring the implementation of social infrastructure, specifically water treatment and water supply systems and low cost buildings. Specifically, the consultant should be familiar with a variety of contracting methodologies, and have proven experience of contract supervision.

The supplier shall propose lead consultants who will be primarily responsible for providing the support in Sierra Leone.

Please note that participation in this competition, should you be awarded, will preclude the successful bidder from involvement in the additional component of the Freetown Water Rehabilitation Programme; namely the Engineering Management Contractor. This is in order to ensure that no conflict of interest exists between the Clerk of Works service provision and the Engineering Management Contractor.

Academic institutions are not eligible to apply for this contract.

Suppliers are encouraged to consider in their proposals what quality measures/ filters can be applied for the exchange of construction information, particularly for Design and Build Contracts where the CoW can expect to receive detailed drawings etc. post contract award.

8 Reporting

The CoW contract will be awarded by the UK Department for International Development (DFID), on behalf of the GoSL. For contractual matters, the CoW will report to DFID's Senior Infrastructure Adviser, based in Freetown.

For the Freetown Water Project, the CoW lead consultant will report directly to the Head of the Project Management Unit in GVWC. S/he will work as part of a team of Engineers from GVWC and will take part in weekly progress meetings between the EPC and GVWC. The CoW will authorise invoices for completed works sent by GVWC to DFID, who will pay the EPC directly. DFID will sit on the Water Steering committee and may take part periodically in monthly progress meetings between GVWC and the EPC.

For the schools and health centres projects, the CoW will report to the Senior Education Adviser and Senior Health Adviser in DFID Sierra Leone. They will also be expected to share reports with each Ministry and provide periodic quality assurance updates.

9 Performance Requirements

The performance of the Supplier will be managed through the DFIDs logframe and through a schedule of key performance indicators (KPIs). The KPIs will be agreed during the inception period and the schedule will form part of the inception report. Indicative KPIs can be found in **Annex E** and it is expected that these will be amended/added to in order to reflect this specific programme. Expected results will be set out in the logframe.

The Supplier will be required to produce and update an Exit Plan during the term in accordance with the Terms of Reference and DFID's Standard Terms and Conditions - Service Contracts.

10 Special Conditions

Freetown Water Supply Rehabilitation Project

The existing GVWC distribution system (particularly the spaghetti network of service pipes) has been built in an uncontrolled manner and is in very poor condition. As such, much of the detailed design work will only be possible once the EPC has mobilised and surveyed the supply areas in detail. The CoW will therefore need to work closely with the EPC to ensure that engineering solutions are appropriate and approved in a timely manner.

Due to the scale and speed of work required the CoW will be required to be able to mobilise services immediately and provide enough capacity to turn requests around within very tight timeframes.

11 Transparency

DFID has transformed its approach to transparency, reshaping our own working practices and pressuring others across the world to do the same. DFID requires Suppliers receiving and managing funds, to release open data on how this money is spent, in a common, standard, re-usable format and to require this level of information from immediate sub-contractors, sub-agencies and partners.

It is a contractual requirement for all Suppliers to comply with this, and to ensure they have the appropriate tools to enable routine financial reporting, publishing of accurate data and providing evidence of this to DFID – further IATI information is available from; <http://www.aidtransparency.net/>.

12 Duty of Care

The Supplier is responsible for ensuring that appropriate arrangements, processes and procedures are in place for their Personnel, taking into account the environment they will be working in and the level of risk involved in delivery of the Contract.

The Supplier is responsible for ensuring appropriate safety and security briefings for all of their Personnel working under this contract and ensuring that their Personnel register and receive briefing as outlined above. Travel advice is also available on the FCO website and the Supplier must ensure they (and their Personnel) are up to date with the latest position.

The Supplier is responsible for all acts and omissions of the Supplier's Personnel and for the health, safety and security of such persons and their property. The provision of information by DFID shall not in any respect relieve the Supplier from responsibility for its obligations under this Contract. Positive evaluation of proposals and award of this Contract (or any future Contract Amendments) is not an endorsement by DFID of the Supplier's security arrangements". Note that the term "Supplier's Personnel" is defined under the Contract as "any person instructed pursuant to this Contract to undertake any of the Supplier's obligations under this Contract, including the Supplier's employees, agents and sub-contractors.

DFID will share available information with the Supplier on security status and developments in-country where appropriate.

Applicant Suppliers must develop their Tender on the basis of being fully responsible for Duty of Care in line with available assessments including the initial risk assessment matrix developed by DFID (See **Annex H**). Suppliers must confirm in their Tender that:

- They fully accept responsibility for Security and Duty of Care.
- They understand the potential risks and have the knowledge and experience to develop an effective risk plan.
- They have the capability to manage their Duty of Care responsibilities throughout the life of the contract.

13 Background

At the United Nations (UN) International Ebola Recovery Conference in New York in July 2015 the UK pledged a total of £240m over the next two years (2016/17) to Sierra Leone. Of the £240m, a total of £110m was pledged for Sierra Leone's first priority, increasing economic development and jobs, in particular through improving transport infrastructure and through improving access to energy and water. The balance (£130m) was pledged to making adequate basic services available to all, particularly health, education and water and to enable Sierra Leone to respond better to new crises and to support the Government's capacity to raise tax revenue, to tackle corruption, and also more broadly to improve the capacities of public institutions.

DFID Sierra Leone office is responsible for delivering the range of projects that will deliver the UK's pledge to Sierra Leone:

The WASH programme includes a major component for construction of rehabilitation works for the Freetown water supply system to a value of £38m. The main elements of the proposed rehabilitation works have been identified by GVWC engineers with support from a DFID funded Technical Assistance programme. Preparatory design, specification and contract packaging for the rehabilitation works will be handed over to the engineering consultancy firm for procurement and commencement of construction.

The school and health center construction will be managed by a range of partners including international NGOs and UN agencies. These arrangements are still being finalized. DFID will work closely with the Ministries of Health and Education, who will be involved in the procurement and monitoring of the implementing partners. Local

government (such as the District Medical Officers and Chiefs) will also be involved in the monitoring of construction at the decentralized level.

Timescales for the interventions are challenging, demanding an innovative approach to contracting the works. Capacity to oversee construction within the GoSL is weak and in need of strengthening. The CoW function will be important to increase transparency and accountability for public infrastructure and to provide assurance for the appropriate use of UK AID in Sierra Leone.

Annexes:

- A. Atkins Report - 2016
- B. Works Packages
- C. Health and Sanitation
- D. Education
- E. KPIs and Logframe (TBC)
- F. Sierra Leone Risk Assessment

Annex B – Works Packages

Works Package	Description	Cost (USD)	Cost (GBP)
Works Package 1	Rehabilitation of Guma Valley Treatment Works	4.85	3.82
Works Package 2	Construction of Upper Sussex Division	1.5	1.18
Works Package 3	Rehabilitation of Transmission System	4.66	3.67
Works Package 4	Distribution Network – Improved Network/Pressure Management	2.33	1.83
Works Package 5	Distribution Network – Rehabilitation Pipeline	13.722	10.80
Works Package 6	Enhance Allen Town water supply system in the east by upgrading Charlotte Weir	6.331	4.99
Works Package 7	Development of the Kaningo Water Supply System	1.155	0.91
Works Package 8	Enhance Babadori water supply system	6.926	5.45
Works Package 9	Rehabilitation of Spur Road Facilities	1.35	1.06
		42.824	33.72

WBS	Task	Budget (USD m)	Priority
1.1	Replace Guard (gate) Valve and Larner-Johnson needle valve on dam scour system	0.2	High
1.1.1	- Design of stop-gate		
1.1.2	- Sealing of Scour pipe		
1.1.3	- Installation of new guard valve		
1.2	Prevent water ingress into intake tower	0.2	Medium
1.2.1	- Technical assessment to identify acceptable method for sealing intake tower		
1.2.2	- Design and install solution		
1.3	Improve access to intake tower	0.15	Medium
1.3.1	- Design ladders and platforms		
1.3.2	- Install ladders and platforms		
1.4	Repair all leaking structures	0.2	Medium
1.4.1	- Investigate leaking structures and repair as required		
1.4.2	- Repair 2 x defective launder channels		
1.5	Refurbish 14 x filters (United filters 6, Degremont 8)	3	Medium
1.5.1	- Design new filter bed arrangement		
1.5.2	- Refurbish filter bed arrangements		
1.6	Rehabilitate electrical and control installations	0.75	Medium
1.6.1	- Inspect electrical and control installation		
1.6.2	- Design rehabilitation works for electrical and control installation		
1.7	Install Plant Flow Metering	0.1	High
1.7.1	- Inspect existing flow-metering		
1.7.2	install - Finalise installation arrangements for new flow-metering and		
1.8	Install Back-wash water recycling system	0.25	Medium
1.8.1	- Review existing Atkins designs		

1.8.2	- Construct new back-wash water recycling system		
2.1	Design and construction of 3m high weir located at 360m OD on the Sussex river	1.5	Medium
2.2	Design and construction of intake structure		Medium
2.3	Design and construct Upper Sussex to Guma pipeline		Medium
2.4	Design and construct outlet cascade		Medium
2.5	Design and construct 3.5km access road		Medium
3.1	Replace 4.4km of the above ground section of the 550mm transmission main	2.21	Medium
3.1.1	- Detailed design of 4.4km of 550mm main		
3.1.2	- Update model to reflect proposed improvements and finalise revised operating procedures.		
3.1.3	- Install new 500mm main		
3.1.4	- Test and Commission new transmission line		
3.1.5	- Decommission existing 450mm pipeline and reinstatement of road		
3.2	Construct 2 x service reservoirs at Marjay Town and Adonkia	2	High
3.2.1	- Detailed design of 2 No Service Reservoirs		
3.2.2	- Construction of Adonkia Service Reservoir inclusive of inlet and outlet pipework with associated valves and fittings.		
3.2.3	- Construction of Adonkia Service Reservoir inclusive of inlet and outlet pipework with associated valves and fittings.		
3.2.4	- Testing and Commissioning of Adonkia and Marjay Service reservoirs		
3.3	Rehabilitation of the cross-connections between 550mm and 700mm transmission mains	0.3	High
3.3.1	- Design and Rehabilitate 3 No Cross-Connections on the transmission main		
3.3.2	- Rehabilitate chambers to ensure security		
	- Test and commission new cross		
3.3.3	- Test and commission new cross-connections and decommission existing pipework		
3.4	Installation of District Metering Areas (DMA) Meters for the offtakes from the 550mm transmission main	0.15	High
3.4.1	- A detailed review of installation locations including chamber design		
3.4.2	- Procurement of 14 No. DMA meters		
3.4.3	- Installation of 14 No. DMA meters complete with chamber to the satisfaction of GVWC.		
3.4.4	- Testing and Commissioning of DMA meters		
4.1	Deliver improved leak control across the distribution network		
4.1.1	- Procurement of Leak Detection equipment	0.13	Medium
4.1.2	- Procurement of Repair equipment	0.13	Medium
4.1.3	- Procurement of a network/leakage management system		Medium
4.1.4	- Provision of training to GVWC staff on leak detection equipment OR external leak detection contractor	0.02	Medium
4.1.5	- Training of staff in the maintenance of PRVs, loggers and meters and in the use of the network management system	0.02	Medium
4.2	Deliver improved network and pressure management across the distribution network		
4.2.1	- Procurement and installation of DMA meters, PRVs and pressure loggers	0.67	Medium
4.2.2	- Procurement and installation of 15 PRVs to allow network and pressure management	0.13	Medium
4.3	Reservoir rehabilitation	0.45	Medium

4.4	Additional works	0.78	
5.1	Priority 1 : Mains Rehabilitation Works	0.735	High
5.2	Priority 2 : Network Rehabilitation	3.081	Medium
5.3	Priority 3 : Spaghetti Network Rehabilitation	4.334	Low
5.4	Priority 4 : Spaghetti Network Rehabilitation	4.572	Low
5.5	Design and install communal waterpoints/kiosks	1	Low
6.1	Undertake water source studies	0.1	High
6.2	Design and Reconstruction of Charlotte weir structure and intake chamber	1.03	High
6.3	Design and Construction of new source and intake at Mongegba	0.195	Medium
6.4	Redevelopment and Testing of Grafton boreholes	0.095	Medium
6.4.1	- Redevelopment and testing of boreholes		Medium
6.4.2	- Design and installation of hydraulic head, complete with all control and Monitoring facilities		Medium
6.4.3	- Design and Installation of pump and control panel, complete with all protections, control and monitoring facilities.		Medium
6.4.4	- Construction of control building and external works		Medium
6.5	Rehabilitate transmission connections		High
6.5.1	- Charlotte to Treatment Plant transmission	1.205	Medium
6.5.2	- Grafton Boreholes to Treatment Plant transmission	0.348	Medium
6.5.3	- Mongegba Transmission	0.38	Medium
6.6	Rehabilitation of Grafton tank	0.035	High
6.7	Design and Construction of Mongegba Chamber	0.021	Medium
6.8	Rehabilitation of Allen Town treatment plant	0.283	High
6.9	Rehabilitation of Allen Town distribution network	2.639	Medium
7.1	Undertake hydrological studies and investigations on the Kaningo Source	0.388	Low
7.2	Rehabilitate existing Kaningo weir and intake chamber		Low
7.2.1	- Rehabilitation of existing concrete weir		
7.2.2	- Design and construction/rehabilitation of Pre-treatment facility		
7.3	Design and construction of transmission main between Kaningo weir and treatment plant	0.085	Low
7.4	Design and construction of detention chamber and treatment plant	0.209	Low
7.4.1	- Design and construction of raw water detention chamber		
7.4.2	- Design and construction of Kaningo water treatment plant		
7.5	Design and construction of treated water distribution network	0.473	Low
7.5.1	- Design and rehabilitation of existing treated water transmission pipeline		
7.5.2	- Design and construction of distribution network extension.		
8.1	Design and rehabilitation of Kongo Dam		Medium
8.1.1	- Design and rehabilitation of Kongo Dam and intake chamber	2.135	
8.1.2	- Design and rehabilitation of Kongo to Babadori transmission line	0.296	
8.2	Design and rehabilitation of Takayuma Weir		Medium
8.2.1	- Design and rehabilitation of Takayuma Weir structure and intake chamber	0.175	
8.2.2	- Design and rehabilitation of Takuyama Weir to Babadori transmission line	0.269	

8.3	Design and Rehabilitation of Sugar Loaf Weir		Medium
8.3.1	- Design and rehabilitation of Sugar Load Weir structure and intake chamber	0.175	
8.3.2	- Design and rehabilitation of Sugar Loaf Weir to Babadori transmission line	0.234	
8.4	Design and Rehabilitation of Regent Borehole and transmission line	0.351	Medium
8.5	Design and Rehabilitation of Babadori and Hill Station Reservoirs	0.427	
8.5.1	- Design and rehabilitation of existing Babadori reservoir		
8.5.2	- Design and rehabilitation of Hill Station Reservoir		
8.6	Design and construction of new reservoirs at Sugar Loaf and Kongo Sources		Low
8.6.1	- Design and construction of new Sugar Loaf reservoir	0.65	
8.6.2	- Design and construction of new Bathurst reservoir	0.65	
8.7	Design and rehabilitation of Babadori Treatment Plant		Medium
8.7.1	- Rehabilitation of Bypass Chamber	0.067	
8.7.2	- Rehabilitation of Slow Sand Filter	0.137	
8.7.3	- Rehabilitation of Clear Water Tank		
8.7.4	- Rehabilitation of Lifting Station		
8.7.5	- Hill Station to Babadori Treatment Plant Pipeline	0.294	
8.7.6	- Design and rehabilitation of Babadori to Gloucester Tank transmission line	0.123	
8.8	Rehabilitation of Distribution Network	0.943	Medium
9.1	Design and replace Spur Road Pumps and provide standby generator		
9.1.1	- Design and Replace Spur Road Pump and rehabilitate reservoir	0.49	High
9.1.2	- Provide standby generator at Spur Road site	0.2	High
9.2	Design and replace pumps at Governor's Lodge and provide standby generator		
9.2.1	- Design and replace Governor's Lodge Pump	0.56	High
9.2.2	- Provide standby generator at Governor's Lodge site	0.1	High

Annex C – Health and Sanitation

Ministry of Health and Sanitation Selected EmONC (26 BEmONC; 3 CEmONC) facilities to be rehabilitated/ Expanded to meet EmONC compliance in the President's Recovery Priorities for health plans		
BEmONC FACILITY	Chiefdom	Total to be rehabilitated
KAMBIA DISTRICT		
Bamoi Munu	Munumasungbala	3
Mambolo	Mambolo Chiefdom	
Kukuna	Braimaia Chiefdom	
PORTLOKO DISTRICT		
Masiaka	Koya	2
Petifu	Lokomasama	
BOMBALI DISTRICT		
Binkolo	Safroko Limba chiefdom	1
KOADUGU DISTRICT		
Sinkunia	Dembelia Sinkunia	1
TONKOLILI DISTRICT		
Masingbi	Kunike Sanda	2
Makali	Kunike Barina	
KAILAHUN DISTRICT		
Daru	Jawei	2
Koindu	Kissi Teng	
WESTERN AREA		
Hastings	Western Area	3
Ross Road	Western Area	
Goderich	Western Area	
KENEMA DISTRICT		
Levuma	Kandu Leppiema	2
Largo	Nongowa	
PUJEHUN DISTRICT		
Malen		2

Gbondapi	Kbaka Kabonde	
MOYAMBA DISTRICT		
Moyamba CHC	Fakunya	2
Shenge	Kargboro	
KONO DISTRICT		
Kombayendeh	Lei	2
Gandohun	Gbane	
BONTHE DISTRICT		
Tihun	Sogbini	2
Madina	Bum	
BO DISTRICT		
Koribondo	Jaima Baingor	2
Ngalu	Bagbe	
Total BEmONC Selected		26
CEmONC FACILITY		
Rokupa Hospital Maternity Unit	Freetown	1
Kambia Government Hospital Maternity Unit	Kambia	1
Makeni Regional Hospital Maternity Unit (Expansion)	Bombali	1
Total CEmONC Selected		3
GRAND Total EmONC Facilities Selected		29

Annex D – Education

School No.	SID	Level	District	Chiefdom	School Name	Town	phone	owner	Enrolment	No. of Stream	No. of Teacher	1Pupil per clsroom	2Pupil per clsroom	Water	Latrine	Clsroom Solid	Clsroom Semi-Solid
311002302	310020	JSS	BO	Lugbu	SIR ALBERT SECONDARY SCHOOL	SUMBUYA	076991217	Mission	538	9	9	180	180	Yes	Yes	3	0
319102315	313220	JSS	BO	Bo City	NATIONAL ISLAMIC JUNIOR SECONDARY SCHOOL	BO	076-958694	Mission	421	6	5	211	106	No	Yes	2	2
319101318	310031	JSS	BO	Bo City	TAHIR AHMADIYYA JUNIOR SECONDARY SCHOOL	BO	076650443	Community	1813	20	55	152	91	Yes	Yes	12	8
310202304	413211	JSS	BO	Bagbo	GOVERNMENT JUNIOR SECONDARY SCHOOL (GIRLS)	JIMMI	078271524	Govt	457	6	13	457	77	Yes	Yes	0	6
311301305	412214	JSS	BO	Tikonko	The Islamic Secondary School Kulafai Rashideen Mission Kendeyeila	Kendeyeila	078444848/ 07875	Community	229	3	16	229	77	Yes	Yes	0	3
319101303	310003	JSS	BO	Bo City	Queen Of the Holy Rosary Junior Secondary School	Bo	076639799	Community	1188	16	36	75	75	Yes	Yes	16	0
310802401	310011	SSS	BO	Kakua	CENTENARY UNITED METHODIST SENIOR SEDONDARY SCHOOL	FREETOWN	076695015	Community	1108	14	37	124	124	Yes	Yes	9	0
319102405	310027	SSS	BO	Bo City	SAINT ANDREW'S SENIOR SECONDARY SCHOOL	BO CITY	76333485	Community	1326	19	11	70	70	Yes	Yes	19	0
319103401	310016	SSS	BO	Bo City	AHMADIYYA MUSLIM SENIOR SEC. SCHOOL	BO CITY	76646278	Mission	1781	37	17	69	69	Yes	Yes	26	0
219102302	210015	JSS	BOMB ALI	Makeni City	ANSARUL ISLAMIC JUNIOR SECONDARY SCHOOL	MAKENI	76929110	Community	505	7	25	101	73	Yes	Yes	5	2
210501302	210003	JSS	BOMB ALI	Libeisaygahun	EVANGELICAL AGRIC. SEC. SCHOOL	BATKANU	77840670	Community	413	5	16	69	69	No	Yes	6	0
219101307	210017	JSS	BOMB ALI	Makeni City	UNITED METHODIST CHURCH SECONDARY SCHOOL , MAKENI	MAKENI	76764487	Community	607	9	35	68	68	Yes	Yes	9	0
219101304	210007	JSS	BOMB ALI	Makeni City	BIRCH MEMORIAL JUNIOR SECONDARY SCHOOL	MAKENI	76621472	Community	1200	18	54	80	67	Yes	Yes	15	3
219101302	210004	JSS	BOMB ALI	Makeni City	ALHADI ISLAMIC VOCATIONALJUNIOR SEC	MAKENI	77523511	Community	525	9	21	175	66	Yes	Yes	3	5
219101404	210017	SSS	BOMB ALI	Makeni City	UNITED METHODIST CHURCH SECONDARY SCHOOL , MAKENI	MAKENI	76764487	Community	712	8	25	89	89	Yes	Yes	8	0
219102401	210022	SSS	BOMB ALI	Makeni City	BENEVOLENT ISLAMIC SECONDARY SCHOOL	MAKENI	76697022	Community	1759	21	50	93	84	Yes	Yes	19	2
219101403	210018	SSS	BOMB ALI	Makeni City	SIERRA LEONE MUSLIM BROTHERHOOD SENIOR SCHOOL	MAKENI	77151759	Community	1566	20	42	98	83	Yes	Yes	16	3
320401303	340002	JSS	BONTH E	Imperri	IMPERRI JUNIOR SECONDARY SCHOOL	MORIBA	076991452	Community	857	14	14	58	46	Yes	Yes	15	4

110802301	430002	JSS	KAILAH UN	Luawa	METHODIST SECONDARY SCHOOL KAILAHUN	KAILAHUN	76643631	Community	938	10	27	94	94	Yes	Yes	10	0
110802302	430055	JSS	KAILAH UN	Luawa	NATIONAL SECONDARY SCHOOL KAILAHUN.	KAILAHUN	88525734	Community	997	10	21	997	91	Yes	Yes	0	11
110201305	436515	JSS	KAILAH UN	Jawie	WALLACE AGRICULTURAL JUNIOR SECONDARY SCHOOL.	DARU	76841105	Community	422	6	16	71	71	Yes	Yes	6	0
111302301	430054	JSS	KAILAH UN	Upper Bambara	PENDEMBU VOCATIONAL SECONDARY SCHOOL.	PENDEMBU	76651467	Community	463	7	27	67	67	Yes	Yes	7	0
110802401	100409	SSS	KAILAH UN	Luawa	METHODIST SENIOR SECONDARY SCHOOL KAILAHUN.	KAILAHUN	88038939	Community	946	12	25	79	79	Yes	Yes	12	0
110802402	436512	SSS	KAILAH UN	Luawa	NATIONAL SENIOR SECONDARY SCHOOL	KAILAHUN	88603830	Community	789	12	25	72	72	Yes	Yes	11	0
220305302	6050	JSS	KAMBI A	Magbema	MOVEMENT OF FAITH ISLAMIC JUNIOR SECONDARY SCHOOL	MASORIE	76486862	Community	421	3	12	421	141	No	Yes	0	3
220304302	240002	JSS	KAMBI A	Magbema	KOLENTEN JUNIOR SECONDARY SCHOOL	KAMBIA	76587123	Community	1012	12	33	85	85	Yes	Yes	12	0
220301301	240005	JSS	KAMBI A	Magbema	MAGBEMA JUNIOR SECONDARY SCHOOL	ROKUPR	077688202	Govt	410	6	18	137	82	Yes	Yes	3	2
220304401	240002	SSS	KAMBI A	Magbema	KOLENTEN SENIOR SECONDARY SCHOOL, KAMBIA	KAMBIA	76327182	Community	1277	23	31	76	76	Yes	Yes	17	0
220301402	240008	SSS	KAMBI A	Magbema	AHMADIYYA MUSLIM SENIOR SECONDARY SCHOOL	ROKUPR	076864240	Community	656	12	20	73	73	Yes	Yes	9	0
129101313	413203	JSS	KENEM A	Kenema City	ST. JAMES JUNIOR SECONDARY MISSION	KENEMA	76606901	Community	981	11	20	109	109	No	Yes	9	0
129102303	410003	JSS	KENEM A	Kenema City	HOLY TRINITY JUNIOR SECONDARY	KENEMA	76640265	Govt	1825	22	45	83	83	Yes	Yes	22	0
129103303	420001	JSS	KENEM A	Kenema City	GOVERNMENT JUNIOR SECONDARY	KENEMA	076446448	Govt	1040	13	39	208	80	Yes	Yes	5	8
121301302	3225	JSS	KENEM A	Simbaru	STELLA MARIS VOCATIONAL SECONDARY BOAJIBU	BOAJIBU	76550139	Community	395	5	17	79	79	Yes	Yes	5	0
129102404	410007	SSS	KENEM A	Kenema City	NASIR AHMADIYYA SECONDARY	KENEMA	76643164	Community	2370	24	49	2370	99	Yes	Yes	0	24
129101402	410004	SSS	KENEM A	Kenema City	ANSARUL ISLAMIC SECONDARY SHERIFF STREET	KENEMA CITY	76643324	Community	2301	29	51	80	80	Yes	Yes	29	0
230901301	253205	JSS	KOINA DUGU	Sulima	GOVERNMENT JUNIOR SECONDARY SCHOOL	FALABA	076481069	Govt	391	5	17	131	131	Yes	Yes	3	0
230801302	250003	JSS	KOINA DUGU	Sengbe	LOMA SECONDARY SCHOOL	KABALA	76569245	Community	1020	9	18	114	114	Yes	Yes	9	0
230901302	263202	JSS	KOINA DUGU	Sulima	ALAKUMA AGRIC DR. A. A.S. SECONDARY SCHOOL	GBERIA TIMBAKO	78231161	Govt	295	3	10	295	99	No	No	0	3
230801402	250002	SSS	KOINA DUGU	Sengbe	AHMADIYYA MUSLIM AGRIC SECONDARY SCHOOL, KABALA	YOGOMAIA	78380485	Mission	1335	12	31	1335	112	Yes	Yes	0	12

139103311	422237	JSS	KONO	Koidu City	SAINT PATRICK BOYS SEC.SCHOOL	KOIDU CITY	076-793420	Community	830	10	15	139	139	No	Yes	6	0
139103308	420011	JSS	KONO	Koidu City	KOIDU GIRLS SEC.SCHOOL	KOIDU CITY	76705242	Mission	761	9	23	109	109	No	Yes	7	0
130601302	420004	JSS	KONO	Kamara	AHMADIYYA NUSSAL JAHAN SEC. SCHOOL	TOMBODU	78513655	Community	328	5	15	66	66	Yes	Yes	5	0
139103401	420003	SSS	KONO	Koidu City	ISLAMIC SECONDARY SCHOOL	KOIDU	76603402	Community	1380	12	31	115	115	Yes	Yes	12	0
139102404	420001	SSS	KONO	Koidu City	ANSARUL BOYS SENIOR SEC. SCHOOL	YORMANDU 1	76713228	Community	1330	18	37	1330	95	Yes	No	0	14
331102305	320015	JSS	MOYA MBA	Lower Banta	AHMADIYYA JUNIOR SECONDARY SCHOOL	GBANGBATO KE	076785840/07614	Community	414	6	14	414	69	Yes	Yes	0	6
240402303	233203	JSS	PORT LOKO	Kaffu Bullom	KANKAYLAY ISLAMIC JUNIOR SECONDARY SCHOOL	SUMBUYA	76549263	Mission	314	3	11	314	314	Yes	Yes	1	0
240802302	220004	JSS	PORT LOKO	Marampa	MARAMPA ISLAMIC JUNIOR SECONDAR SCHOOL LUNSAR	LUNSAR	77588548	Mission	603	10	20	151	151	Yes	No	4	0
240403315	279016	JSS	PORT LOKO	Kaffu Bullom	KINGS WAY INTERNATION ACADEMY JUNIOR SECONDARY SCHOOL	ROTIFUNK	077-442970/077-	Mission	347	5	21	116	116	Yes	Yes	3	0
240802301	220017	JSS	PORT LOKO	Marampa	A.D WURIE MEMORIAL SECONDARY SCHOOL	LUNSAR	77584421	Govt	635	8	16	127	91	Yes	Yes	5	2
241001305	233610	JSS	PORT LOKO	Sanda Magbolont	SANDA MAGBOLONTHOR JUNIOR SECONDARY SCHOOL	SENDUGU	078-300484	Mission	237	4	11	79	79	Yes	Yes	3	0
240503306	220014	JSS	PORT LOKO	Koya	EVANGELICAL MODEL SECONDARY SCHOOL	MILE 38	33422607	Mission	229	5	15	229	77	Yes	Yes	1	2
240802401	220004	SSS	PORT LOKO	Marampa	MARAMPA ISLAMIC SECONDARY SCHOOL LUNSAR	LUNSAR	77588548	Community	419	9	20	105	105	Yes	Yes	4	0
240802402	220017	SSS	PORT LOKO	Marampa	A.D WURIE MEMORIAL SECONDARY SCHOOL	LUNSAR	76813753	Govt	663	9	11	133	95	Yes	Yes	5	2
240401402	223208	SSS	PORT LOKO	Kaffu Bullom	SAINT JOSEPH SENIOR SECONDARY SCHOOL	MASOILA	76854902	Mission	593	8	21	75	75	Yes	Yes	8	0
340801301	330003	JSS	PUJEH UN	Panga krim	ST. STEEVENS'S TECH/VOC. SEC. SEC	GOBARU	076926463/07686	Govt	613	7	5	88	88	No	Yes	7	0
341002301	330001	JSS	PUJEH UN	Soro Gbema	AHMADIYYA AGRIC JUNIOR SECONDARY SCHOOL	FAIRO		Community	377	6	3	189	76	Yes	Yes	2	3
340701401	330003	SSS	PUJEH UN	Panga krim	SAINT STEEVEN'S TECHNICAL AND VOCATIONAL SENIOR SECONDARY	GOBARU	76926463	Govt	224	8	4	56	56	No	Yes	4	0
250501309	263205	JSS	TONKO LILI	Kholifa Rowala	ST.THOMAS SECONDARY	MAGBURAKA	76630367	Mission	536	7	22	134	134	Yes	Yes	4	0
251105301	270002	JSS	TONKO LILI	Yoni	YONIBANA SECONDARY SCHOOL J.S.S	YONIBANA	78258037	Govt	821	13	27	118	103	Yes	Yes	7	1
250501306	260010	JSS	TONKO LILI	Kholifa Rowala	NATIONAL COMMERCIAL SECONDARY	MAGBURAKA	77217899	Mission	830	10	15	830	83	Yes	Yes	0	10

250202301	279006	JSS	TONKO LILI	Kafe Simiria	BENEVOLENT ISLAMIC JUNIOR SECONDARY SCHOOL	MABONTOR	76105521	Mission	234	3	10	78	78	Yes	Yes	3	0
250301401	260004	SSS	TONKO LILI	Kalansogoia	SAINT MATHEW'S SENIOR SECONDARY SCHOOL	BUMBUNA		Mission	416	12	13	84	84	Yes	Yes	5	0
251106402	270001	SSS	TONKO LILI	Yoni	SIERRA LEONE MUSLIM BROTHERHOOD SENIOR SECONDARY SCHOOL	MILE 91	76691642	Mission	697	12	21	697	54	Yes	Yes	0	13
410102306	222220	JSS	WESTE RN RURAL	Koya Rural	OUR LADY OF KWAMA J.S.S.	KWAMA	077554229	Community	350	3	19	88	88	Yes	No	4	0
410102305	140001	JSS	WESTE RN RURAL	Koya Rural	AHMADIYYA AGRIC SECONDARY SCHOOL	NEWTON	077902643	Community	433	6	13	73	73	Yes	Yes	6	0
410102401	222220	SSS	WESTE RN RURAL	Koya Rural	OUR LADY OF KWAMA S.S.S.	KWAMA	77554229	Mission	998	12	16	143	143	Yes	No	7	0
420702303	120004	JSS	WESTE RN URBAN	West II	GOVERNMENT SECONDARY TECHNICAL SCHOOL JSS	FREETOWN	025202995	Govt	1252	21	10	84	84	Yes	Yes	15	0
420101307	130009	JSS	WESTE RN URBAN	Central I	UNITED METHODIST SECONDARY SCHOOL FOR GIRLS (U.M.C.S.S.G.)	FREETOWN	078762583	Govt	904	22	10	76	76	Yes	Yes	12	0
420518301	110005	JSS	WESTE RN URBAN	East III	ST. HELENA J.S.S	FREETOWN	076650131	Community	1651	16	35	76	76	Yes	Yes	22	0
420101304	130002	JSS	WESTE RN URBAN	Central I	GOVERNMENT MODEL JSS	FREETOWN	078808478	Govt	1470	25	46	59	59	Yes	No	25	0
420520303	118000	JSS	WESTE RN URBAN	East III	AHMADIYYA MUSLIM J.S.S.	FREETOWN	0077587664	Community	1416	24	24	59	59	Yes	Yes	24	0
420706302	120105	JSS	WESTE RN URBAN	West II	CHRISTIAN FAITH RESCUE ORPHANAGE JSS	FREETOWN	077497711	Govt	344	6	0	58	58	No	Yes	6	0
420603401	133205	SSS	WESTE RN URBAN	West I	GOVERNMENT S.S.S. KINGTOM.	FREETOWN	76617655	Govt	850	13	35	850	142	Yes	Yes	0	6
420510401	113214	SSS	WESTE RN URBAN	East III	SIERRA LEONE MUSLIM UNION S.S.S.	FREETOWN	88866041	Community	1456	12	10	122	91	No	Yes	12	4
420511402	110004	SSS	WESTE RN URBAN	East III	SIERRA LEONE MUSLIM CONGRESS S.S.S.	FREETOWN	76608561	Mission	1636	21	24	91	91	Yes	Yes	18	0

Annex F - DFID Sierra Leone Summary Risk Assessment Matrix

Theme	
Country/Region Sierra Leone	June 2016 assessment
OVERALL RATING¹	3
FCO travel advice	3
Host nation travel advice	N/A
Transportation	4
Security	3
Civil unrest	3
Violence/crime	3
Terrorism	2
War	1
Hurricane	1
Earthquake	1
Flood	2
Medical Services	3 ²

1	2	3	4	5
Very Low risk	Low risk	Med risk	High risk	Very High risk
Low		Medium	High Risk	

¹ The Overall Risk rating is calculated using the MODE function which determines the most frequently occurring value.

² In Freetown only. Outside of Freetown the risk rating is a 4