

# WSUP

ADVISORY

## Sululta Municipal WASH Scoping Study, Integrated Urban WASH Project

IFRC Ref: C01647



## Technical & Financial Proposal

22/06/2017





International Federation  
of Red Cross and Red Crescent Societies

This Document has  
been prepared for:

International Federation of Red Cross and Red Crescent Societies (IFRC)  
P.O.Box 303,  
CH-1211 Geneve 19,  
Switzerland

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In response to:

**Request for Proposal No: C01647**  
Due date: 22<sup>nd</sup> June 2017  
Due time: n/a

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By:



**WSUP (Water & Sanitation for the Urban Poor)**  
Fleet House, 8-12 New Bridge Street, London EC4V 6AL  
44 (0)20 7822 1867 / [www.wsup.com/advisory](http://www.wsup.com/advisory)

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Main contact regarding  
this proposal:

**Tim Hayward**  
General Manager, WSUP Advisory  
Fleet House, 8-12 New Bridge Street, London EC4V 6AL  
44 (0)20 7822 8675, [thayward@wsup.com](mailto:thayward@wsup.com)

To: **IFRC**  
P.O.Box 303,  
CH-1211 Geneve 19,  
Switzerland

Object: **Request for Proposal No: C01647 – Sululta Municipal WASH Scoping Study, Integrated Urban WASH Project**

London, June 22<sup>nd</sup>, 2017

Dear Sir or Madam,

WSUP Advisory is delighted to send you our bid to the Request for Proposal No. C01647 – Sululta Municipal WASH Scoping Study, Integrated Urban WASH Project.

You will find, below, our technical and financial proposals.

We hope this proposal will match your requirements, standards and expectations and we remain at your disposal, should any further information be required.

Yours faithfully,

**Yaver Abidi**  
Managing Director, WSUP Advisory

# Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>2</b>
1.1	WSUP ADVISORY	2
1.2	CERTIFICATES OF REGISTRATION	3
<b>2</b>	<b>BACKGROUND AND CONTEXT</b>	<b>3</b>
2.1	ONE WASH NATIONAL PLAN COMPLIANCE	3
2.2	OWNP RELEVANCE TO THE SULULTA WASH SCOPING STUDY	4
2.3	ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENTS AND IWRM	5
<b>3</b>	<b>PROJECT APPRECIATION AND PROPOSED METHODOLOGY</b>	<b>5</b>
3.1	PROPOSED APPROACH	6
<b>4</b>	<b>PROGRAMME OF ACTIVITIES</b>	<b>9</b>
<b>5</b>	<b>PROJECT MANAGEMENT AND TEAM PROFILE</b>	<b>10</b>
5.1	PROJECT MANAGEMENT	10
5.2	TEAM PROFILE	10
<b>6</b>	<b>RELEVANT EXPERIENCE</b>	<b>11</b>
6.1	URBAN SANITATION AND HYGIENE STRATEGY AND STRATEGIC ACTION PLAN FOR ETHIOPIA	11
6.2	STRENGTHENING OF THE REGULATORY ENVIRONMENT AND IMPROVED PUBLIC INFRASTRUCTURE FOR FAECAL SLUDGE MANAGEMENT IN FREETOWN, SIERRA LEONE	13
6.3	TECHNICAL SUPPORT TO USAID/GOVERNMENT OF INDIA KNOWLEDGE PARTNERSHIP	15
6.4	AB INBEV AND WSUP PARTNERSHIP FOR SUSTAINABLE WATER ACCESS PROJECTS	16
6.5	FACILITATION OF IFRC'S ORGANISATIONAL ASSESSMENT AND DEVELOPMENT OF ITS STRATEGIC ORIENTATION FOR URBAN WASH	18
6.6	AFRICAN WATER UTILITIES	19
<b>7</b>	<b>FINANCIAL PROPOSAL</b>	<b>22</b>
<b>8</b>	<b>REQUIREMENTS AND EXPECTATIONS OF THE CONSULTANT</b>	<b>23</b>
<b>9</b>	<b>REFEREES</b>	<b>23</b>
	<b>ANNEX 1 - CURRICULA VITAE OF TEAM MEMBERS</b>	<b>24</b>
	TEAM LEADER - RICHARD WILSON	24
	PROJECT DIRECTOR - TIM HAYWARD	32
	HYGIENE AND BEHAVIOUR CHANGE SPECIALIST - ANNE WALSH	37
	<b>ANNEX 2 – CERTIFICATES OF REGISTRATION</b>	<b>42</b>

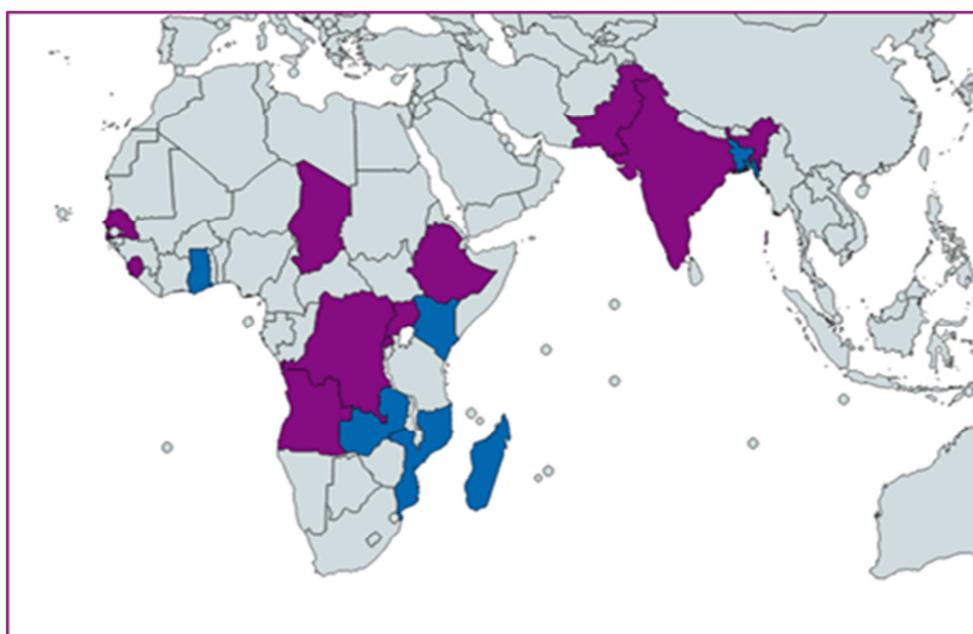
# 1 Introduction

## 1.1 WSUP Advisory

**WSUP Advisory** (WSUP-A) is the consultancy arm of **Water and Sanitation for the Urban Poor (WSUP)** and draws upon the considerable experience gained and the lessons learned from implementing the **WSUP Programme** which, for over 10 years, has supported work in 8 countries across Africa and South Asia with investments totalling US\$ 50 million. WSUP has long-term programmes established in Bangladesh, Madagascar, Mozambique, Kenya, Zambia and Ghana.

**WSUP Advisory** is a Community Interest Company providing specialist technical assistance in addressing the challenges of providing WASH services to urban low-income consumers across the developing world. WSUP-A empowers local service providers to plan and deliver technically and financially sustainable market-based water and sanitation services and promotes good hygiene to bring lasting improvements to the lives of the urban poor. WSUP-A focuses on building both demand and service provider capacity to deliver to low income consumers, and provides advice and guidance on all aspects of urban WASH service provision.

WSUP has successfully implemented projects for international cooperation organisations such as DFID, USAID and the EIB, for private foundations including the Bill and Melinda Gates and the Coca-Cola Foundations and NGOs and IOs e.g. IFRC, WaterAid, Oxfam, GOAL and SNV. WSUP-A has also worked extensively for UNICEF in Africa, the Middle East and South Asia.



**Locations of WSUP Programme Countries and WSUP-A project experience**

During the last 10 years WSUP has acquired considerable knowledge and experience of working with service providers, be they water utilities, municipalities or small scale independent providers (both private sector and community based organisations) to improve the quality of water and sanitation services available to low income urban communities. Through the grant funded programme WSUP has developed a close long term relationship with major African water utilities such as the Nairobi Water and Sewerage Corporation in Kenya, Lusaka Water and Sewerage Company in Zambia and Ghana Water. In all cases supporting the development of dedicated pro-poor units within those utilities, helping to reduce non-revenue water and working with both utilities and communities to improve relations between them and to develop approaches that deliver

affordable, sustainable and equitable services. WSUP has also worked with utilities supplying smaller towns in for example Naivasha and Nakuru in Kenya and in the Copperbelt towns in northern Zambia. WSUP works closely with municipal authorities too, in for example Maputo and Accra, to improve faecal sludge management services, household sanitation and the development of city wide sanitation planning. Whilst the focus of WSUP's work is largely on the service provider WSUP also recognised that effective and acceptable levels of service can not be achieved without a well-functioning water and sanitation sector and in order to achieve that WSUP also works closely with ministries and regulators, with the private sector and community based organisations.

Two projects of particular significance to the Scoping Study in Sululta that have been undertaken through WSUP Advisory are the development of the national Urban Sanitation and Hygiene Strategy and Strategic Action Plan for Ethiopia and the programme of technical support provided to the Government of India and the city of Visakhapatnam, in Andhra Pradesh. The former was conducted on behalf of the Ministry of Health and provides WSUP-A with a level of understanding of the sanitation sector in Ethiopia and its policies and structure that will be critical to the success of the Scoping Study. In India the programme was working in support of the Swachh Bharat Mission to eradicate open defecation across India and engaged at the national level with the Ministry of Urban Development and at the city level with the Greater Visakhapatnam Municipal Corporation to develop a city wide but very much community centered approach to addressing the sanitation challenges of the city.

Further details of all the projects and programmes mentioned above can be found in Section 6 below.

## 1.2 Certificates of registration

**WSUP** was established in 2005 and is registered in England & Wales as a Company Limited by Guarantee with no Share Capital No. 5419428. Both WSUP and WSUP Advisory's registered address is: 10 Queen Street Place, London EC4R 1BE.

**WSUP Advisory** was established to provide consultancy services building on WSUP's experience to countries that the WSUP programme itself does not operate in. WSUP Advisory commenced operations in 2013, initially as a unit within WSUP, but in February 2015 was registered in England & Wales as a Community Interest Company (CIC) No. 9461206. WSUP Advisory CIC is a wholly owned subsidiary of Water & Sanitation for the Urban Poor (WSUP).

WSUP and WSUP Advisory CIC registration certificates are presented in Annex 4.

## 2 Background and context

### 2.1 One WASH National Plan compliance

All Ethiopian urban and rural WASH interventions are increasingly being required to come under the umbrella of the One WASH National Plan (OWNP). Phase I of the OWNP has been running since 2013 (under an MoU signed by the ministries of Water Irrigation and Electricity, Education, Health and Finance and Economic Development) and is currently being reviewed and updated for Phase II for the remaining 3 years (in detail for July 2017 to June 2020 and in generic terms to 2030), and to ensure that it is in line with Ethiopia's second Growth and Transformation Plan (GTP-II) and the internationally agreed SDG targets.

Many studies and strategies have been commissioned by various ministries and agencies and produced by various working groups and their consultants, however these are not necessarily complimentary and it is part of the OWNP Phase II to define a clear set of actions to achieve the GTP-II goals and to meet SDG targets, as far

as practically and financially possible. At present it is too early to say what will be in the OWNP Phase II as the Inception Report for this work has only recently been drafted but it is possible that new Ethiopian OWNP modalities will include the following ten broad institutional concepts:

1. Regional regulators (reporting to a federal oversight body)
2. Voluntary clustering of large, medium and small towns
3. Inclusion networked villages under (1) and (2)
4. Sustainability Master Planning
5. Competition for funding based on “bankable projects”
6. Clarity on asset ownership
7. Two-way (oversight and reporting) mechanism through KPIs (key performance indicators)
8. Delegation of services and support functions to community organisations and private enterprise and involving clear contractual obligations
9. Equitable distribution of funding monitored by regional bureaus, but not at the expense of undermining competition
10. “In-house” capacity building at woreda and municipal levels through long-term on-the-job technical assistance and centres of excellence training

## 2.2 OWNP relevance to the Sululta WASH scoping study

It is anticipated that this scoping study for Sululta will, by the time it starts, be required by GoE to follow the OWNP Phase II. Specifically, the Sululta study would therefore be recognised as making a significant contribution towards Item 4 “Sustainability Master Planning” and may also contribute towards aspects of clustering (items 2 and 3 above) where this may be beneficial to considerations of Integrated Water Resource Management (IWRM) and to overall environmental and financial sustainability. IWRM is currently not well integrated in Phase I but Phase II will be looking to take fully in to account competing interests for water.

The concept of Sustainability Master Planning has been fully described in the Integrated Urban Sanitation and Hygiene Strategy and Strategy Action Plan (IUSHS&SAP)<sup>1</sup> which was adopted by GoE in March 2017. The word “sustainability” was added to emphasise that sanitation planning is much more than about the infrastructure normally associated with conventional master planning.

The Sustainability Master Planning section of the Strategic Action Plan (SAP) outlines the various elements that make up comprehensive master plans capable of yielding “bankable” projects. The IUSHS defines a minimum sanitation and water package as: “The least cost option that provides equitable financially and environmentally sustainable sanitation and water service delivery for both small and large towns”. The SAP identifies the following constituent elements of sustainable master planning. Whilst they have been identified under a SAP for sanitation they are also generally applicable to water.

- Socio-economic analysis
- Cross-cutting factors (resilience to natural and manmade disasters, discretionary tariffs, equitable service delivery, gender and the disadvantaged)
- Appropriate and affordable technology
- Economies of scale, sharing and delegated management
- Formative research
- Financial analysis
- Tariff structures and phasing
- Funding
- Technical assistance.

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<sup>1</sup> This was produced by WSUP Advisory (2014 to 2016) working on behalf of the Ministry of Health and under a contract with UNICEF.

## 2.3 Environmental and social impact assessments and IWRM

An essential part of more detailed feasibility and design studies that may follow master planning, are environmental and social impact assessments (ESIAs) that may be required before particular projects can start. However, it is important to be aware at master planning stage of any potential issues that might arise at ESIA stage. For instance, FSM (Faecal Sludge Management) primary and secondary treatment systems including DEWWATS (Decentralised Waste Water Treatment Systems), need to ensure that groundwater sources are not affected and that faecal sludge and liquid wastes are treated sufficiently for safe re-use and also that communities, as well as politicians and technical managers, are sufficiently sensitised to the low impact of well-designed and operated systems located close to dwellings. Such sensitisation (or advocacy) may take many months and may require visits to successful “demonstration sites” (working business models) and sharing of good practice.

An “IWRM structure” is being considered under OWP Phase II that involves oversight, licensing, reporting and enforcement mechanisms. Industrial scale irrigation may significantly impact on traditional village and pastoral water practices. Where there are towns and cities nearby, the demand for water for domestic, commercial and industrial uses may also compete/impact surrounding village water supplies.

There is a recognised need for more formal IWRM in Ethiopia. Conventionally, this normally requires a licensing system based on sound hydrological and hydrogeological science and administered strictly under well-funded and independent national or regional EPAs (Environmental Protection Agencies). Hence competition for water resources can be managed equitably, generally with priority being given to domestic water needs over agriculture and livestock; and both of these being given priority over industrial and commercial needs.

Equally important, but rather more difficult, is the control of illegal solid and liquid wastes into the aquatic environments; point pollution sources from sewage treatment plants and industrial may be controlled through legislation and enforcement capacity. However, dispersed pollution sources from urban septic tanks, pit latrines, solid waste and agriculture are extremely difficult to tackle and may need in-stream mitigation as well as upstream controls.

## 3 Project Appreciation and Proposed Methodology

We understand that the purpose of the consultancy is to provide key strategic, technical and operational guidance for the municipality of Sululta for them to be able to provide adequate and sustainable WASH for the city in the medium and longer term. The RFP identifies a number of expected outcomes which when considered collectively can be regarded as a strategic overview of the WASH status of Sululta and its future needs. Specifically the strategic overview is required to consider three areas; water for all, with an emphasis on potable water supply, centralised and on-site human waste disposal, hygiene and behaviour change.

We are particularly encouraged by the statement that “The decision to provide such guidance through the commissioning of this study was the result of consultations made between Nestle Waters; ERCS; IFRC and the Mayor of Sululta’s Office, and a specific request of the Mayor” because in our experience the foundation for sustainable transformation of water and sanitation services lies in engaged leadership at this level. We note also that this assignment is intended to be a service to the municipality and therefore we expect to assess carefully the needs, capacity and expectations of the municipality and to work closely with the Mayor’s office and staff to formulate a plan and a development roadmap that is realistic and practical in light of their current and future needs and the level of resources availability.

We are also encouraged by the requirement that the study should consider a “pro-poor approach that ensures that all the population of Sululta will be catered for”. Upholding the principle of impartiality in considering the needs of everyone within the city will also help to ensure that the commercial interests of particular stakeholders will not unduly influence any judgements made during the course of the study or the reporting of findings and recommendations. To this end it will also be necessary to ensure that the views of all stakeholders are heard and are given fair consideration.

The challenges in Sululta are mercifully not ones of scarcity, but rather of rapid and uncontrolled urbanisation, conflicting needs and priorities, environmental degradation and a need to ensure greater equity. Creating an institutional framework for wisely managing resources, a commitment to providing equitable and affordable services and the capacity for coping with changing and growing demand in a financially sustainable manner over the next 30 years would, in our view, create the most sustainable basis for success. Ownership and buy-in by the municipality, government, funders, private sector and consumers to such a plan can be initiated through consultation and engagement during the study. However, in WSUP’s experience it is crucially important that this should be followed up by well-chosen demonstration projects that can not only help to develop new ways of working but can also create belief, trust and momentum for change. We will investigate whether and how the current IFRC pilot WASH project could create such opportunities for early-wins.

### 3.1 Proposed Approach

The table below identifies the proposed approach and methodology to be adopted to address each of the stated expected outcomes.

Expected Outcomes		Approach and methodology
1	The study will provide an overall, non-partisan strategic overview of the present WASH status in Sululta and project that overview in terms of future needs for the next 30 years (2017 to 2047).	Future needs can only be based upon current status in Sululta. Such status will be evaluated through pre-existing socio-economic and environmental studies, and statistical and asset data available at municipality, woreda, water board, utility, developer and funder levels. No new studies will be undertaken or commissioned as part of this consultancy, unless additional provision is made for this by the client. In order to ensure a “non-partisan” approach the views of all stakeholders will be sought and will be give fair consideration.
2	The study should take into consideration any existing National or local WASH plans and financing available in the near term.	Key WASH ministries (signatory to the OWNP; MoWIE, MoE, MoH and MoFED) as well as those ministries related to SWM, IWRM and industrial liquid and solid wastes will be consulted along with the government’s development partners, CSOs, and private enterprises to understand current WASH financing within Sululta and its hydrologically/ hydrogeologically connected impact areas.
3	The study will unpack those projected needs in three areas; water supply for all needs with an emphasis on potable water supply; centralised and on-site human waste disposal; hygiene and behavioural change.	A Strategic Overview of sanitation and water status and needs in Sululta will be prepared based on the availability of existing socio-economic analysis and formative research, current data on cross-cutting factors (resilience to natural and manmade disasters, discretionary tariffs, equitable service delivery, gender and disadvantaged), appropriate and affordable technology, economies of scale, concepts on clustering and delegated management, an appreciation of operational financial constraints (that is balancing level of services with ability to pay), tariff structures and phasing, and

		<p>the needs for capacity building technical assistance.</p> <p>The Strategic Overview will also take into account information available on SWM, IWRM and industrial liquid and solid wastes.</p> <p>Advocacy will be considered at both management levels (in terms of promoting and delivering services) and at consumer levels (take up of services and willingness, as compared with ability, to pay). Hygiene and behaviour change are already covered under the MoH by comprehensive Health Extension Programme (HEP), used successfully at rural levels, and the more recently introduced but to date less successful Urban Health Extension Programme. The “Integrated Urban Hygiene and Sanitation Strategy and Strategy Action Plan” and “National Hygiene and Environmental Health Strategy” will both be used to recommend an outline cost effective advocacy package.</p>
4	The study will present a menu of options to meet all three needs on a decade by decade basis from 2017 to 2047.	Projections can only be as reliable as the data on which they are based. Although improving, WASH data is generally poor in Ethiopia and sanitation data is particularly lacking. Setting a 30-year decade by decade timescale is likely to be limited in its value and it may be more realistic to use the sort of timescale used in the OOWNP, that is, a menu of options to be adopted immediately over the period January 2018 to December 2022 and longer term options to be introduced in the period up to 2030.
5	A more detailed and defined menu of options should be provided for the first five years (2018-2022).	
6	The study should take into consideration Ethiopian Government planning cycles and the possibilities of the study contributing to potential resource mobilisation or financing for WASH development activities be that from Government or local sources, International bodies, International Financial Institutions and the private sector.	The concept of Sustainability Master Planning is intended to deliver “bankable projects” able to attract funder confidence and assured return on investment (in terms of beneficiary service levels and coverage). As noted above the study will consider existing and potential funding sources and WASH implementation plans and the study recommendations will be structured so as to support the process of attracting funding and/or to trigger scale up through demonstration.
7	The study will not only focus upon the environmental and technical options but also separately define what may be needed in legislation (local); management; administration; financial viability; human resource development and skills training; community participation including tariff setting and commercial and industrial revenue generation for both investment and operation and maintenance costs.	<p>Capacity building needs and tariff structures and phasing will be assessed as part of study as indicated above. Cross subsidy from water to sanitation, municipal tax subsidies, sanitation levies, and cross-subsidy from high income users, commercial and industrial will all be considered. Community participation in project development and in final O&amp;M is clearly required, and an outline of how this might be achieved will be discussed.</p> <p>Any community communications carried out as part of this study will only be concerned with fact finding. There will be no mention of potential projects or funding so as to avoid the risks of raising expectations.</p>

8	The study will consult and take into account the water stewardship project of Nestle Waters and advise on synergy and coherence with the study outcomes and water stewardship objectives.	This requirement is noted.
9	The study will take into account present WASH delivery capacities in Sululta by the WASH providers and potential capacities or engagement that may be realised by all stakeholders for the benefit of all.	An initial assessment of capacities will be made and recommendations will be prepared accordingly.
10	The study will consider a 'pro-poor' approach that ensures that all the population in Sululta will be catered for and in an inclusive manner that takes into consideration vulnerable groups such as the elderly and infirm; those that may be poorly represented or served due to gender or diversity issues; those that are disabled and any group considered as disenfranchised.	As discussed above by following the principle of impartiality every endeavour will be made to ensure a pro-poor approach and that fair consideration is given to all vulnerable groups.
11	The study will take into account and align with Government of Ethiopia Policy and Strategies in relation to WASH provision.	These are enshrined in the OWNP described above.
12	The study in no way will be perceived as a commitment by the consortium or any of its members to invest further or provide further support to the municipality of Sululta.	As stated above, community level discussions will avoid any indication of what might result from the study.
13	Also at the core of IFRC WASH strategic thinking is the recognition that while our primary focus is upon SDG 6, we recognise WASH importantly overlaps with SDG 3 namely ensuring healthy lives and promoting the well-being for all at all ages essential to sustainable development.	The study will go beyond the confines of domestic water supply, sanitation and hygiene and as discussed above include aspects of SWM, industrial liquid and solid wastes and IWRM that can seriously impact individual health and ability to take part in the town's economy. The GoE policies on urban Beautification and Greening will be taken into account, both in terms of citizen wellbeing but also in terms of safe reuse of treated liquid and solid faecal wastes.

At an early stage in the process contact will be made with the both the regional WASH Coordination Office and the regional Water Bureau in order to ensure effective coordination of this study with other initiatives that may be connected in some way with Sululta.

## 4 Programme of activities

The Gantt chart below shows a proposed programme of activities that comply with the requirements of the RFP and the stated time allocations for the three field visits. This can be reviewed during the contract initiation meeting as there may be scope to reduce the total visit time, particularly visit 2, and spend more time on reviewing the information received. The contract initiation meeting would also be the appropriate time to discuss and confirm the scope of the study.

Activity	Days of consultant time				Month 1	Month 2	Month 3	Month 4	Month 5
	PD	TL	H&BC	IWRM					
1 Contract award					■				
2 Contract initiation meeting	0.5	1			■				
3 Identification of info requirements		1.5			■				
4 Preparation for Visit 1		0.5			■				
5 Visit 1		6			■	■			
6 Receive and review information		1	1	6		■			
7 Preparation for Visit 2		0.5				■			
8 Visit 2		12				■	■		
9 Receive and review information	0.5	1.5					■	■	
10 Prepare draft report		1.5						■	
11 Preparation for Visit 3		0.5						■	
12 Visit 3		6						■	■
13 Finalise report	0.5	1.5							■
14 Submit final report									■
<b>Total days for each consultant</b>	1.5	33.5	1	6					
<b>Total days for all consultants</b>									42

During Activity 3, Identification of information requirements, an initial list will be prepared of the information required and the stakeholders who should be consulted and with whom meetings should be organised during the field visits. In advance of each of the visits an activity has been identified for preparation for each visit. This is to highlight the need to prepare an agenda for each visit, to identify who the Team Leader will need to meet with during the visit and to make arrangement for those visits.

During the early part of Visit 3 a meeting will be held with appropriate representatives of the municipality and the consortium. The main objective of the meeting will be discuss the draft report, which will have been shared at least one week before the meeting, to identify any gaps and to validate the findings. It is anticipated that the remainder of the visit will be occupied with addressing issues raised at the meeting and perhaps holding further discussions with particular individuals.

It is intended that the final version of the study will be submitted before 30<sup>th</sup> November 2017. However this is dependent on the prompt award of contract.

## 5 Project management and team profile

### 5.1 Project management

WSUP will provide a Team Leader who will have day to day responsibility for the assignment and will be the primary point of contact for IFRC. The Team Leader will himself conduct most of the work described above however he will be able to call on additional specialist expertise that may be required on particular topics such as integrated water resource management and hygiene and behaviour change. In accordance with WSUP Advisory's standard operating procedures the Team Leader will report to a Project Director who will provide oversight, will ensure that quality standards are maintained and who will have overall responsibility for the assignment. The Hydrogeologist/IWRM Specialist will also have a sufficiently broad experience in the WASH sector to be able to provide more general local support to the study.

### 5.2 Team profile

**Team Leader - Richard Wilson – WASH Consultant, Civil/Water and Environmental Engineer.** Richard is an urban WASH Expert, with over 40 years' experience in managing large water and sanitation projects in the UK, Asia and Africa. He led the WSUP-A team working with UNICEF Ethiopia and the Federal Ministry of Health to develop a national Integrated Urban Sanitation and Hygiene Strategic Plan as well as the team supporting UNICEF urban WASH strategy formulation in Pakistan. Previously Richard was the Programme Director for WSUP's programmes in Zambia and Kenya and is therefore highly familiar with WSUP's work and approach. Given his previous role in the development

**Project Director - Tim Hayward – General Manager, WSUP Advisory, Water and Sanitation Engineer.** Tim has 30 years of experience in water sector projects in sub-Saharan Africa, Europe, South East Asia and Latin America. He is responsible for the scoping, development and management of projects and programmes in East and West Africa that support service providers to develop mechanisms and ways of working that improve services to low income communities (LICs). He has worked as WSUP's Programme Director in Kumasi, Ghana, Bamako, Mali and Lusaka, Zambia.

**Hygiene & Behaviour Change Specialist - Anne Walsh – Head of User Engagement, ICON team, WSUP, Registered Nurse.** Anne has 20 years of experience working as a health professional in international relief and development projects, with a focus on public health, nutrition and programme management. She manages the WSUP Innovation and Consumer Needs (ICON) team and provides technical expertise for improving the quality and breadth of innovative WASH approaches and behaviour change interventions which bring about positive health impacts in LICs.

**Hydrogeologist / IWRM Specialist – (to be identified) – Ethiopian Consultant.** A national consultant will be appointed who has a background in hydrogeology and solid experience of the assessment and application of IWRM.

## 6 Relevant experience

The sub-sections below provide summaries of a range of projects and programmes that have been conducted by WSUP and WSUP Advisory. These evidence our record of working for international humanitarian or development actors and of working with governments, municipal authorities and water utilities in less developed countries in the field of Urban WASH and with a particular focus on the needs of low income urban communities.

### 6.1 Urban Sanitation and Hygiene Strategy and Strategic Action Plan for Ethiopia

<b>Assignment name:</b> <b>Development of the National Urban Sanitation and Hygiene Strategy and Strategic Action Plan for Ethiopia</b>	<b>Country:</b> Ethiopia <b>Location within country:</b> All country
<b>Name of Client:</b> UNICEF Ethiopia and the Federal Ministry of Health of Ethiopia	<b>Address:</b> UNICEF Ethiopia, P.O. Box 1169, Addis Ababa, Ethiopia
<b>Duration of assignment (months):</b> 24 months  <b>Start date (month/year):</b> November 2014  <b>Completion date (month/year):</b> November 2016	<b>Total N<sup>o</sup> of staff months of the assignment:</b>  30 staff months
<b>Approx. value of the contract (in current US\$):</b>  USD 440,000	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b>  USD 300,000
<b>Name of associated Contractors, if any:</b>  Ygry Consulting Engineers PLC  Getachew Alem & Associates Ltd	<b>N<sup>o</sup> of professional staff months provided by associated Contractors:</b>  15 staff months  <b>Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader etc):</b>  <b>Richard Wilson</b> – Team Leader and Sanitary Engineer  <b>Regis Garandeanu</b> – WASH Institutions and Low Income Customer Specialist
<b>Narrative description of Project:</b> At the time that the project began there was no clear distribution of roles related to urban sanitation and hygiene in Ethiopia. Responsibilities were divided and sometimes overlapping between 4 Ministries (Health, Water, Environment and Urban Development). Funded by UNICEF and coordinated by the Ministry of Health,	

this project aimed to develop a national Integrated Urban Sanitation and Hygiene Strategy (IUSHS) and Strategic Action Plan (IUSHSAP) for Ethiopia, based on field visits and extensive consultations with multiple stakeholders (e.g. Ministries and other public organisations, NGOs, private companies, Universities), at different levels (local, regional, national/federal). This project was divided in 2 phases:

- Phase 1 consisted of in field visit, consultations, and the development of the IUSHS and inter-Ministerial Memorandums of Understanding clarifying the roles and responsibilities of different stakeholders (public, private, civil society) for urban sanitation, hygiene and solid waste management. At the end of Phase 1, 4 Ministries were presented with the draft Strategy for approval and signature of MoUs.
- Phase 2: once the IUSHS had been formally approved and signed by the Ethiopia Government, it was then translated into a realistic, actionable and quantified Strategic Action Plan defining the operational guidelines, schedule, budget, milestones, and M&E framework for the implementation of the Strategy.

**Description of actual services provided by your staff within the assignment:**

Actual services provided for completion of both phases of the project include:

- Preliminary meetings with the clients (UNICEF Ethiopia, Ministry of Health and Inter-Ministerial Technical Working Group) to develop a deep understanding of their needs and constraints; leading to the development of an inception report detailing the scope of work, methodology and schedule
- Field visits in a sample of 11 representative cities throughout Ethiopia (different States, sizes, climates, cultures, etc.) to meet local stakeholders and assess the urban sanitation and hygiene situation, leading to the development of a situation analysis report
- Organisation of regional consultation meetings with representatives of Ministries, local authorities, NGOs and civil society organisations to discuss and complete the situation analysis
- Based on the above, development of a draft IUSHS Strategy, discussed with the four Ministries and the Ministerial Technical Working Group, and corrected according to their comments.
- Approval of the final IUSHS Strategy by the 4 Ministries
- Definition of the short and medium sanitation and hygiene priorities in line with the Strategy, sector priorities and policy of the Ethiopian Government
- Definition of the logic of intervention, including outcomes, outputs, activities, monitoring framework with indicators, and regular SAP revision exercises
- Definition of implementation roles and responsibilities, including public authorities, CSO and private sector
- Estimation of capital and operational costs for liquid waste management, solid waste management for different categories of towns (small, medium, large) and institutions (including Health institutions and schools)
- Definition of a physical plan with all the thematic areas identified, including financial and capacity building requirements for the planned timeframe. Estimation of the costs for each of the sub activities.

## 6.2 Strengthening of the Regulatory Environment and Improved Public Infrastructure for Faecal Sludge Management in Freetown, Sierra Leone

<b>Assignment name:</b> Consultancy Services for the Strengthening of the Regulatory Environment and Improved Public Infrastructure for Faecal Sludge Management in Freetown	<b>Country:</b> Sierra Leone  <b>Location within country:</b> Freetown
<b>Name of Client:</b> GOAL Sierra Leone	<b>Address:</b> 89s Main Road Congo Town Freetown Sierra Leone
<b>Duration of assignment (months):</b> 24 months  <b>Start date (month/year):</b> Jan 2016  <b>Completion date (month/year):</b> Jan 2018	<b>Total N<sup>o</sup> of staff-months of the assignment:</b> 15 staff months
<b>Approx. value of the contract (in current US\$):</b> USD 535,000 (after 10% tax withheld)	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b> USD 535,000
<b>Name of associated Contractors, if any:</b> None	<b>N<sup>o</sup> of professional staff-months provided by associated Contractors:</b> n/a
	<b>Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader etc):</b> Jane Olley – Project Manager
<b>Narrative description of Project:</b> <p>The civil war in Sierra Leone in the 1990s put much of its water supply and sanitation infrastructure out of service. However, post conflict reform has progressed steadily to create an enabling framework for improved water and sanitation service delivery. WSUP Advisory has been working on Phase 2 (Phase 1 ran from March 2014 to October 2014) of a strategy to achieve viable city-wide faecal sludge management (FSM) in Freetown, ensuring safe collection, transportation, treatment, disposal and/or re-use of faecal sludge. The two key objectives are: strengthened regulatory environment and improved public infrastructure for FSM; and a strengthened private sector along all stages of the FSM chain.</p>	
<b>Description of actual services provided by your staff within the assignment:</b> <b>Strengthened Regulatory Environment and Improved Public Infrastructure for FSM</b> <p>WSUP has been working with Freetown City Council (FCC) to establish an FSM unit to provide overall regulation, oversight and monitoring of the FSM system. FCC were supported in designing the institutional and functional architecture of the FSM Unit and its contact centre, and its relations with other services within the FCC, thereby defining a clear mandate and objectives. These in turn have been used to determine the resources (e.g. human, infrastructure, equipment, financial) that are needed by the FSM Unit. The unit</p>	

became operational in October 2016, with WSUP having a continuing presence, developing capacity and ensuring its long term sustainability.

WSUP Advisory is also supporting the definition of the various levels of services to be provided by FSM private operators (e.g. manual and mechanised latrine emptying, desludging of septic tanks with vacuum trucks) and assisting FCC to draft the corresponding institutional, licensing, tendering and contractual frameworks the FSM Unit needs to delegate these services to private operators, and to regulate them. These require appropriate standards (e.g. social, financial, environmental, health and safety) against which the FSM services will be regulated by the FSM Unit and systems for the FSM Unit to monitor the performance of the private operators, as well as the performance of the FSM system as a whole.

**Strengthened Private Sector Entities at all Stages along the FSM Chain.**

WSUP Advisory is strengthening the capacity of small and medium service providers in Freetown, in their ability to adhere effectively to contracts, grow their businesses and improve their level of service.

Discussions are currently ongoing as to how best to support the fledging FSM industry but it is recognised that enhancing the technical and business management skills of the multitude of formal and informal service providers engaged in FSM will create sustainable economic opportunities along the faecal sludge value chain. Investment in equipment and improving the technical and business management capacity of manual pit emptiers (MPEs) will also improve safety standards, quality of service provided and reduce the stigma surrounding MPEs, thereby stimulating interest in manual pit emptying as a sustainable and profitable business opportunity.

WSUP Advisory is conducting a review of the value chain for FSM, along with their roles and linkages and is conducting capacity gap assessments and organisational assessments for all SMEs (vacuum truck operators) and MPE groups. Associated strategies to develop their capacities will be identified.

Going forward, the objective of these activities is to understand the FSM services currently provided by MPEs and SMEs, the level of these services, how they are financed and service provider awareness of alternative financing methods. Following on from this a list of skills and capabilities can be developed to match what is required by FSM service providers and various models of support to SMEs and MPEs will then be developed and refined. A critical step will be the creation of a monitoring and evaluation framework to inform continuous improvement.

### 6.3 Technical Support to USAID/Government of India Knowledge Partnership

<b>Assignment name:</b> <b>Technical Support to USAID/Government of India Knowledge Partnership</b>	<b>Country:</b> India <b>Location within country:</b> Delhi and Visakhapatnam
<b>Name of Client:</b> USAID	<b>Address:</b> 1300 Pennsylvania Ave NW, Washington DC 20004, United States
<b>Duration of assignment (months):</b> 36 months <b>Start date (month/year):</b> April 2015 <b>Completion date (month/year):</b> April 2018	<b>Total N<sup>o</sup> of staff months of the assignment:</b> 234 staff months
<b>Approx. value of the contract (in current US\$):</b> USD 3,8000,000	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b> USD 2,400,000
<b>Name of associated Contractors, if any:</b> Independent consultants	<b>N<sup>o</sup> of professional staff months provided by associated Contractors:</b> 44 staff months  <b>Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader etc):</b>  <b>Robert Martin</b> - Programme Director  <b>Tim Hayward</b> - Programme Director  <b>Akhilesh Gautam</b> – Country Programme Director
<b>Narrative description of Project:</b>  The Government of India has made a national commitment to improve sanitation for all through the Swachh Bharat Mission (SBM) the urban component of which aims to provide sanitation and toilet facilities for all 4,041 cities in India by 2019.  The challenges in achieving the aims of SBM are being met through a knowledge partnership between USAID, assisted by WSUP Advisory, and the Indian Ministry of Urban Development (MOUD). The programme goal is to develop the capacity of the relevant GOI bodies, at national, state and city level and also the private sector to support a successful outcome to the SBM.	

**Description of actual services provided by your staff within the assignment:**

Working closely with the Ministry of Urban Development in Delhi, WSUP Advisory is providing technical support on a wide range of aspects of the provision of sanitation services to low income urban communities to build the capacity of various GOI bodies at central, state and city levels. City level support is being provided specifically to the pilot city of Visakhapatnam in the state of Andhra Pradesh.

The capacity building activities include the sharing of good practices both from within India and internationally and the development and delivery of training workshops. Exposure visits are also being organised, both within India and internationally, to provide the opportunity for key personnel to learn from the experience of others who have faced similar challenges in other locations.

State and city level authorities will also be assisted to a) bring about behaviour change in people regarding healthy sanitation practices and b) to create an enabling environment for private sector participation in investment and operation and maintenance of community and public facilities and also the provision of sanitation related services.

#### 6.4 AB InBev and WSUP partnership for sustainable water access projects

<b>Assignment name:</b> ABInBev and WSUP partnership for sustainable water access projects in Africa	<b>Country:</b> 26 Country Assessment in Africa, Zambia Project, 3 Cities for Project Implementation tbc <b>Location within country:</b> Lusaka
<b>Name of Client:</b> AB InBev	<b>Address:</b> SABMiller House, Church Street West, Woking, Surrey, GU21 6HS
<b>Duration of assignment (months):</b> 6 months <b>Start date (month/year):</b> Jan 2017 <b>Completion date (month/year):</b> Jan 2020	<b>Total N<sup>o</sup> of staff-months of the assignment:</b> 21 months
<b>Approx. value of the contract (in current US\$):</b> USD 320,00	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b> USD 320,000
<b>Name of associated Contractors, if any:</b> None	<b>N<sup>o</sup> of professional staff-months provided by associated Contractors:</b> n/a <b>Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader etc):</b> Jane Olley – Project Manager

**Narrative description of Project:**

AB InBev and WSUP have agreed to establish a partnership to implement water access projects across the AB InBev Africa Zone. The partnership will aim to improve water access for the urban poor in a sustainable manner in 11 countries in sub-Saharan Africa. Based on the progress of work in Africa, the partnership has the potential to extend its reach to a further seven countries in Latin America and Asia in the medium term.

As a first step towards formalising the partnership WSUP will conduct research, provide substantive inputs to the development of AB InBev's sustainable water access strategy and develop an outline implementation plan for the period 2017 through to 2025; along with a more detailed plan for the first three-years to improve water access projects in four countries.

**Description of actual services provided by your staff within the assignment:**

The current scope of work will be completed in two stages to align with AB InBev's timetable for the development of its sustainable water access strategy.

By the end of Stage 1, in February 2017, WSUP-A had provided all the inputs necessary for AB InBev to finalise the water access strategy including the following:

- Identification of high potential cities and implementation approaches that can form the basis for overall forecasts for the strategy period. WSUP-A has conducted an initial screening of 26 African cities identified by AB InBev to understand the level of need and to gauge the potential implementation conditions i.e. the existence or otherwise of an enabling environment for water access projects. The list will be reduced to eight cities and more detailed research on these eight cities will be conducted to further understand and validate information on the level of need and the existence of an enabling environment.
- design work of the first implementation project in Lusaka will commence immediately after strategy approval. Our country programme team has been working to improve water and sanitation services in Lusaka for ten years and understands the scale of the challenge involved in achieving universal access. An initial assessment of the current progress towards universal access in the city and a short scoping study to show potential reach of different levels of investment towards the goal of universal access have already been prepared and submitted for consideration.
- Development of a programme management framework including decision making tools, a monitoring and evaluation methodology and targets for the period 2017 to 2025. The support to AB InBev in this area was intended to ensure that the objectives would be realistic, adaptable and attainable; and jointly develop an approach to managing the programme over its ten year life.

In **Stage 2**, WSUP will assess three cities, selected at the end of Stage 1, in greater detail, through primary data collection and site visits and will develop three additional water access projects to be implemented between Years 1 and 3 as part of the partnership's medium term implementation plan.

The process will be interactive with decision gates linked to products which are designed to ensure alignment and reach agreements between AB InBev and WSUP-A before moving forward. We will seek to engage key stakeholders and provide support to AB InBev's internal decision making. We will ensure that final recommendations are both practical and attainable within agreed timeframes.

## 6.5 Facilitation of IFRC's organisational assessment and development of its strategic orientation for urban WASH

<b>Assignment name:</b> Facilitation of IFRC's organisational assessment and development of its Strategic Orientation for urban WASH	<b>Country:</b> Global <b>Location within country:</b> n/a
<b>Name of Client:</b> International Federation of Red Cross and Red Crescent Societies (IFRC)	<b>Address:</b> Route de Pré-Bois 1, 1214 Vernier, Geneva, Switzerland
<b>Duration of assignment (months):</b> 12 months  <b>Start date (month/year):</b> August 2016  <b>Completion date (month/year):</b> December 2016	<b>Total N<sup>o</sup> of staff months of the assignment:</b>  1.5 staff months
<b>Approx. value of the contract (in current US\$):</b>  USD 16,103	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b>  USD 16,103
<b>Name of associated Contractors, if any:</b>  none	<b>N<sup>o</sup> of professional staff months provided by associated Contractors:</b>  n/a
	<b>Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader etc):</b>  <b>Tim Hayward</b> – Project Director and Project Manager
<b>Narrative description of Project:</b>  There were two principle objectives to the project: <ul style="list-style-type: none"> <li>• To facilitate a participatory organisational assessment of the IFRC's past, current and future engagement in urban WASH.</li> <li>• To redraft the IFRC's future Strategic Orientations in Urban WASH.</li> </ul>	
<b>Description of actual services provided by your staff within the assignment:</b>  WSUP-A designed and conducted a process of consultation with internal stakeholders, IFRC's Technical Working Group (TWG) on urban WASH and external stakeholders. This was achieved principally through an on-line survey and semi-structured interviews. The findings of the consultation process were then analysed and following further reflections on Red Cross/Red Crescent mandate and review of some key documents a	

SWOT analysis was conducted. The process followed and the findings were written up in a briefing document that was then shared with the TWG.

Based on the above WSUP-A redrafted IFRC's Global Strategic Direction document for urban WASH which was then discussed in detail at a two day workshop of the TWG organised by WSUP-A. Further amendments were made to the strategic direction document before it was resubmitted. The document has subsequently been approved and adopted by IFRC.

## 6.6 African Water Utilities

Kenya Country Programme	
<b>Location within country:</b> Nairobi, Naivasha, Mombasa, Nakuru, Kisumu and Malindi	<b>Duration of assignment (months):</b> 77
<b>Name of clients:</b> DFID, USAID, TCCAF, Dutch Government, OFID, Borealis & Borouge (B&B), BMGF, EC, KMT, One Foundation and others)	<b>Total No. of staff-months of the assignment:</b> c. 1,550
<b>Address:</b> Can be provided if necessary.	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b> c. \$ 4,500,000
<b>Start date (month/year):</b> 2006 <b>Completion date (month/year):</b> Ongoing	<b>No. of professional staff-months provided by associated consultants:</b> Not available.
<b>Name of associated consultants, if any:</b> Multiple consultants, construction contractors and NGOs.	<b>Name of proposed senior professional staff of your firm involved and functions performed:</b> Bill Peacock – current Programme Director Mugo Kariuki – Country Programme Manager
<b>Narrative description of project:</b> Kenya's urban population is projected to reach 16.9 million (38%) by 2017 and 31.7 million (56%) by 2027. Kenyan utilities are struggling to build and develop the skills and systems needed for effective management of water supply and sanitation services, with the situation more complicated in urban areas, due to a lack of the assets and investment finance needed to reach the unserved poor. Low levels of commercial and operational viability, an imperfect regulatory regime and high levels of non-revenue water (NRW) compound the situation. Since 2006, WSUP has worked with service providers and institutions to improve WASH services to low-income communities.	
<b>Description of actual services provided by your staff within the assignment:</b> <b>Low-income consumer units</b> - In Nairobi, WSUP has worked with the Informal Settlements Department (ISD) of Nairobi City Water and Sewerage Company (NCWSC) since its formation in 2008 as a low-key, grant-funded department. In 2013, WSUP initiated and supported a review of the departmental strategy to mainstream ISD in NCWSC's business plan. This involved integrating pro-poor performance measurement within the business structure, as well as processes to ensure that the department contributed to NCWSC's commercial objectives. In 2015, the utility elevated the ISD into an independent commercial region with full autonomy to manage commercially oriented services for LICs; the ISD's 25 employees have become an Informal Settlements Region (ISR) with over 200 staff. In Mombasa, WSUP worked with MOWASCO on a process of analysis and planning for a Low-Income Consumer Services Department in 2014 that is a <b>key component in the process of transforming MOWASCO's business</b> . WSUP has achieved similar change with the local utilities NAIWASS in Naivasha and NAWASSCO in Nakuru and is working with the utilities in Kisumu and Malindi.	

<b>Location within country:</b> Nairobi, Naivasha, Mombasa, Nakuru, Kisumu and Malindi	<b>Duration of assignment (months):</b> 77
<p><b>Development of LIC water delivery and access models</b> - WSUP has drafted Social Connection Policies in Nairobi and Mombasa, and supported their implementation by demonstrating cost-effective water supply network intensification and creating <b>demand for connections from low-income households using successful marketing approaches.</b></p> <p><b>Delegated management of water supply services in peri-urban areas</b> - In Naivasha WSUP developed a model for converting services managed by small-scale informal water providers, mainly borehole owners, into a regulated service provision arrangement. This involved investment in fluoride treatment and a water distribution system, as well as brokering relationships between borehole owners, Rift Valley Water Services Board, and NAIVAWASS. This required a new business model, agreements between the water utility and borehole owners for bulk water purchase and delegated management of operations. This model has been replicated by WSUP, the World Bank (WB) and other partners across Naivasha sub-county and continues to provide learning to stakeholders all over the world.</p> <p><b>Facilitating stakeholder negotiations and relationship building</b> - WSUP has played a key role in easing difficult relationships between consumers, utilities and institutions in project areas. LICs are often hostile towards utilities, as are water vendors and other informal service providers. In Mombasa, kiosk operators were in conflict with the utility, to the extent of attacking meter readers and other MOWASCO field staff. At the utility's request, WSUP brokered a good working relationship between the two parties which continues to improve. In Naivasha, NAIVAWASS had been slated by WASREB, WSTF and donors due to poor corporate governance. WSUP and its partner invested in <b>corporate governance strengthening</b> and stakeholder negotiations, which over time saw the strengthening of relationships between the utility and national institutions, as well as with funders. Currently, NAIVAWASS is among the top-ranked utilities in good corporate governance in Kenya and is continuing to attract investment and grow towards commercial viability.</p> <p><b>Development of national pro-poor regulation and funding strategy</b> - WSUP has helped national institutions to become more effective in their pro-poor services regulation and funding. WSUP supported the development of the <b>national level Water Services Trust Fund (WSTF) 2014-2019 business plan</b>, aiming to ensure that critical elements of innovation and financial sustainability within WSTF were considered; financial sustainability, research and innovation are now well-entrenched in the business plan. WSUP has also worked with the national regulator WASREB to develop a specific KPI for monitoring investment in and management of services to LICs. This will measure the reliability of and access to services in LICs and enable ranking in this category. In preparation for full monitoring of pro-poor services, WASREB has redesigned its information system (WARIS) to incorporate a pro-poor module for assessing the quality of service and is currently conducting mapping of LICs in large and medium towns.</p>	

<b>Mozambique Country Programme</b>	
<b>Location within country:</b> Maputo, Matola	<b>Duration of assignment (months):</b> 63 months
<b>Name of client:</b> BMGF, USAID (ACF), AusAID/ DFAT, TCCAF, DFID)	<b>Total No. of staff-months of the assignment:</b> 300
<b>Address:</b> Can be provided if necessary	<b>Approx. value of the services provided by your firm under the contract (in current US\$):</b> \$ 900,0000

<b>Location within country:</b> Maputo, Matola	<b>Duration of assignment (months):</b> 63 months
<b>Start date (month/year):</b> 2008 <b>Completion date (month/year):</b> Ongoing	<b>No. of professional staff-months provided by associated consultants:</b> Not available
<b>Name of associated consultants, if any:</b> Multiple consultants, local construction contractors and CBOs	<b>Name of proposed senior professional staff of your firm involved and functions performed:</b> V Baghirathan/ W Peacock – Program Director Carla Costa – Country Program Manager Antonio Madeira – Co-ordinator
<b>Narrative description of project:</b> The programme aims to improve water access in low-income informal settlements and peri-urban bairros of Maputo and nearby Matola. Currently 56% of the urban population of Mozambique lacks access to basic sanitation and 20% uses unimproved, unsafe water supplies. For nearly ten years the WSUP program (termed <b>Tchemulane</b> ) has worked closely with municipalities, the utility and the asset owner to expand access for the poorest communities. Through our key relationships with the water asset owner, FIPAG, and water utility, Aguas Região de Maputo (AdeM), the water network has been extended to seven low-income communities, by installing ~100km of water pipes to reach 250,000 people.	
<b>Description of actual services provided by your staff within the assignment:</b> WSUP manages this project as an <b>integrated program of WASH based on a citywide strategy</b> . Targeting the LICs in peri-urban bairros, the program has gradually expanded from extending the tertiary network in 3 pilot bairros to 18 bairros with a total population of about 250,000. Gender is a mainstreamed feature in the development of services, training and hygiene promotion communications. The program is built around principles of consultation, participation and inclusion at all levels from national through to schools and households (the <b>Tchemulane program is considered a model by DFAT for its gender component</b> ).  <b>LIC Unit-</b> WSUP supported the <b>formation of a LIC unit</b> , whose remit focuses on achieving improved access to networked water through improved tertiary networks and pro-poor connection strategy (typically 2000-3000 new connections in each bairro). Baseline surveys are followed by promotion of individual HH/yard connections and improved engagement between AdeM and LIC customers. The success of a pilot phase in generating revenue from previously unserved populations led to replication in other bairros as AdeM and FIPAG benefitted from the increased revenue. FIPAG now contributes to the tertiary network improvements, despite budgetary constraints, and works in parallel with AdeM to develop capacity to extend services to new areas. WSUP has successfully advocated with FIPAG and the regulator to lower connection charges, resulting in a subsidised connection charge of 50%, met through adjustments across the tariff structure, and the introduction by AdeM of staged connection payments to increase connection rates  <b>Community Based Organisations (CBOs)</b> - With WSUP support to AdeM, <b>CBOs were contracted in a pilot</b> to work together with AdeM teams to complete house to house surveys to identify all AdeM LIC clients and their contract situation. They also identified illegal connections and promoted connections to new clients for AdeM, assisting households in the application process. Following this first phase of work, the CBOs started to take over responsibility for delivering the invoices, sensitizing LICs to pay for consumption of water, correct use of water and reporting problems. After 8 months of implementing these activities the results were: the collection ratio increased from 79% to 88% and the volume of water invoiced rose from 22,353m <sup>3</sup> /month to 23,293m <sup>3</sup> /month. In response to and recognition of the growing LIC consumer base through increased connection levels (and their associated revenue potential), AdeM has allocated additional staff members to each Operational Area to be responsible for low income customers.  <b>Non-revenue Water</b> - WSUP successfully engaged AdeM senior management by <b>making the business case for NRW</b> , and provided extensive training to higher and mid-level technical staff in areas including water balance calculations and reporting on NRW using internationally recognized indicators. This strategy brought about a clear shift in priorities by AdeM who established a dedicated NRW department and introduced NRW as a key performance indicator for Maputo's five operational areas. A separate but significant feature of WSUP support was the establishment of a pilot <b>District Metered Area (DMA)</b> , with installation of bulk meters and	

<b>Location within country:</b> Maputo, Matola	<b>Duration of assignment (months):</b> 63 months
<p>calculations of the water balance. <b>Overall, the results have been striking: NRW fell by 10% in the period 2010 – 2014 and average continuity of supply increased from 8 to 16 hours per day.</b> WSUP supported NRW work has now extended out to 7 further bairros with FIPAG propagating the work in others.</p> <p><b>Delegated Management</b> - WSUP has worked to enable FIPAG to <b>delegate the delivery of water services to smaller operators locally:</b> in this case FIPAG delegates to EMA and Maxaka. EMA and Maxaka are responsible for distribution, meter reading and billing the low income bairros. WSUP provided technical support, helping them to validate the customer database, set up a simple spreadsheet to manage billing and monitor revenue; and make improvements to field operational activities such as meter reading, billing clients without delay, and tracking of late payments. Prior to the intervention these activities were almost non-existent in the area. Tracking EMA's performance using key performance indicators (KPIs) produced impressive results: revenue receipts increased by over 100% in just under three years. As a result, delegated management organisations are being used by FIPAG as a means of engaging customers in the areas newly served but not covered by ADeM in the Greater Maputo Water Expansion Project currently underway.</p>	

## 7 Financial Proposal

The total fees and estimated expenses to conduct the study are as indicated below. All expenses, such as travel, accommodation and subsistence costs, will be charged at cost.

<b>Consultant Fees</b>			
	No of days	Day rate CHF	Total fee CHF
Project Director	1.5	841	1,262
Team Leader	33.5	784	26,268
H&BC Specialist	1	711	711
Hydrogeologist	6	413	2,475
			<b>30,716</b>
<b>Expenses (estimated)</b>			
	No	Unit rate CHF	Total Expenses CHF
International travel (London-Addis)	3	945	2,834
Hotel accommodation	26	100	2,600
Subsistence	29	30	870
			<b>6,304</b>

Fees will be invoiced at key stages during the study as follows:

Payment 1 – On completion of Visit 1	30%	CHF 9,215
Payment 2 – On completion of Visit 2	50%	CHF 15,358
Payment 3 – On acceptance of final report	20%	CHF 6,143

All expenses incurred by the time of each payment will be reimbursed accordingly.

## 8 Requirements and expectations of the consultant

As identified in the RFP it is expected that the client will ensure that all necessary documents will be made available and that a focal person will accompany WSUP-A to ensure that all correct protocols are followed. It is also expected that the Municipality will identify a key counterpart for the period of the study who will ensure that they have everything needed to complete the work who will also assist with the field work.

As required by the RFP WSUP-A will make all necessary arrangements for international travel, accident and medical insurance and local accommodation.

Introductions will be required to key people who can discuss other related activities that are being funded by Nestlé and the Ethiopian Red Cross Society/IFRC such as the environmental and socio-economic study that is being conducted by Addis Ababa University and the pilot small scale Integrated WASH Project that is to commence in Suluta

## 9 Referees

For references on our previous and current work please contact either/both of the following:

**Dr Sam Godfrey**

Chief Water and Environmental Sanitation  
UNICEF Ethiopia

Email - [sgodfrey@unicef.org](mailto:sgodfrey@unicef.org)

**Mr Andre Fourie**

SABMiller House,  
Church Street West,  
Woking  
Surrey GU21 6HS,

Email - [andre.fourie@ab-inbev.com](mailto:andre.fourie@ab-inbev.com)

## Annex 1 - Curricula Vitae of team members

### Team leader - Richard Wilson

#### Personal Details

<b>Nationality</b>	British
<b>Profession</b>	Civil/Water and Environmental Engineer
<b>Specialisation</b>	Water supply and wastewater; environment; institutional development
<b>Year of Birth</b>	1947

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#### Key

#### Qualifications (relevant to the project):

- Management of over 10 international water and sanitation projects.
  - Water and sanitation concepts for the urban and rural poor.
  - Development of large-scale strategies and action plans with international agencies.
  - Hygiene education, behaviour change.
  - Operations and Management of overseas water utilities.
  - Water and sanitation sector institutional development from country level structures down to delegated management of operation.
  - Implementation of sewerage and faecal sludge management strategies.
  - Capacity Building.
  - Environmental Impact Assessments.
  - Design consultation and supervision and direct labour.
- 

#### Education and Professional Status

- BSc, Civil Engineering, University of Bristol, 1968
  - MSc, Water Resources Technology, University of Birmingham, 1978
  - Member, Chartered Institute of Water and Environmental Management (CIWEM), London
  - Member, (Chartered Engineer), Institution of Civil Engineers (ICE), London
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#### Language Ability

English	First language
French	Basic

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#### Country Experience

Afghanistan - Bangladesh - Belgium - Belize - Cape Verde Islands - Equatorial Guinea - Ethiopia - Gaza - Guinea - Kenya - Lesotho - Mauritius - Pakistan - Romania - Seychelles - Sudan - Uzbekistan - UK - Zambia

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#### Experience Record

2014 to present

##### **Team Leader - WSUP Advisory**

##### **UNICEF & Government of Ethiopia - Ethiopia**

##### **Integrated Urban Sanitation and Hygiene Strategy**

The Government of Ethiopia has identified the need for a radical approach to address the serious urban sanitation situation in all urban areas from mega cities to rural towns. The Strategy as written is very broad with

recommendations ranging from major water and sanitation (including solid waste) sector reform to cost effective labour intensive micro-enterprises.

- Main author and project management for Urban Sanitation Situation Analysis and Strategy (Phase 1 near complete) and Strategic Action Plan (Phase 2 yet to start).

2010 - present

**Programme Director/Water Sector Technical & Institutional Expert - WSUP Sanitation & Water Services to Peri-urban Areas – Lusaka & Copper Belt, Zambia**

In collaboration with Lusaka Water and Sewerage Company.

- Acceleration of WASH to the urban poor through innovation, operational, behaviour and ownership changes and financial modelling to demonstrate sustainability
- Capacity building of LWSC and its dedicated low income unit
- Community based enterprise capacity building
- Water supply, faecal sludge management, technical and institutional innovations (delegated management), non-revenue water reduction, groundwater resources studies including classroom and on-the-job training
- Financial and environmental sustainability
- Introduction of international grade High Strength Crack Resistant PE100 pipe to Lusaka ensuring supply chain and quality assurance; used in congested rock areas and shown to have significant benefit to NRW (in combination with DM) and NPV costs
- Formative Research, Communication Strategy, Customer Journeys, etc.
- Behaviour change using new collaboration between LWSC and MoH and using modified PHAST approach, Creative Concepts
- Sanitation marketing over range of options (pit latrines, ecosan, pour flush)
- Leverage of funding and scale up through working models and assistance with master plans and business plans.

Programme management: control of budget, appointment of local and international consultants, coordination with partners, direction of strategy, involvement with detailed planning and design, dialogue with funders.

Collaborative projects and agreements to leverage large IFI investments (EIB, WB, AfDB, MCC).

Increased WSUP local team from 1 to 8 professionals involved in community development, design, contract management, supervision of consultants, collaboration with IFIs, capacity building, M&E, etc. in full partnership with LWSC (under MoU).

Advice to EIB and Mulonga Water and Sewerage Company, Copper Belt, on pro-poor aspects of Euro 130M investment.

2008 - 2012

**Programme Director / Water Sector Technical and Institutional Expert - WSUP**

**Water Services to Low Income Areas in Nairobi and Naivasha, Kenya**

- Development and implementation of financially and physically ring-fenced delegated management to private sector operating under delegated contract to (weak) mandated service provider. 20,000 population system; since duplicated to three other similar areas

- Low NRW, high customer satisfaction and much reduced governance issues.

Sanitation and water services for low income areas in Kibera, Kenya, in collaboration with Nairobi City Water and Sewerage Company.

- Support to Athi Water Service Board, NCWSC and Water Services Trust fund for holistic approach to water and sanitation services in dense Nairobi slum areas faced with severe water shortages, vendor cartels, utility governance issues, low status and illegal operations of sanitation workers
- Formal financial analysis to demonstrate potential sustainability of water and sanitation services including public toilets, improved water supply and faecal sludge management
- Strong collaborative ties developed with communities to improve water supply, sanitation, behaviour change and local management and ownership. However, failed to get NCWSC to collaborate with delegated management concepts although much effort put into this over a 12 month period. It would have needed collaboration with existing vendors and slum “management structures”
- Some limited improvement in water supply situation through provision of local storage and multiple supply sources, although difficult without formal agreement between utility and vendor groups
- Successful pilot to raise status of pit emptiers, formation as CBE, legal operations and improved financial sustainability: development of manual pump involving local mechanical workshop and the pit emptiers themselves. Provision of PPE and wash facilities. Marked improvement in worker status and reduction in drunkenness. Agreement with NCWSC on legal discharge of sludge to trunk sewers, mixed with public toilet discharge
- Provision of shared pour flush toilets (minimum 2 toilets and wash rooms serving approximately 100 people in tenant compound typically) and sewer connections, where feasible, laid under very difficult physical, environmental and local community conditions

Programme management: control of budget, appointment of local and international consultants, coordination with partners, direction of strategy, involvement with detailed planning and design, dialogue with funders.

Combined WSUP local teams under single management structure involved in community development, design, contract management, supervision of consultants, collaboration with funders and capacity building.

2007, 2008, 2009/10

**Project Manager and Design Consultant - Rio Tinto through SWSL (in association with Pell Frischmann)**

**Simandou Iron Ore Mine Prospecting Camps - Guinea**

Feasibility of long term (50 year) mine operation; hydrology, hydrogeology, drains, storage.

- Report, recommendations and proposals for planning, designs, tenders and supervision
- Recommendations and detailed proposals and costs related to mine operation feasibility

Coordination of design of package water treatment plant, negotiation of contract for construction in UK factory, oversight of installation and testing on site.

- 2007 - 2009 **Project Manager and Promoter for Pell Frischmann - South West Water Business Development and Project Design & Management - UK**  
Business development with various clients.
- Promotion of concept and methodology for calculating carbon footprints of projects in all sectors
  - Presentation of the outputs and promotion of the environmental and financial benefits
- Design and project management of sewerage schemes, including innovative solutions.
- Help free two year-old Dartmouth South Town sewerage scheme project from technical and PR problems and risks and to get construction completed in narrow working window for marine access. Design assessments and changes, risk analysis
- Directional drilling through unstable coastline and installation of PE lining from seaward end, for storm water discharge.
- 2007 - 2008 **Consultant - Pell Frischmann**  
**CASA, architects and project managers - Cape Verde**
- Conceptual design of sustainable solutions involving wind generators, RO desalination, solar heating, lagoons and reed beds, rain harvesting
  - Master planning of water and wastewater
- Project management, team meetings, local consultations with Govt and operators, developers.
- 11/2005-12/2006 **Project Manager - Halcrow Group Ltd**  
**Thames Water - UK**  
Various projects within Thames Water western areas of operations (£1M to £10M range projects).
- Investigations into conditions of sewers and design of replacements and diversions. Pumping and storage solutions. Sewer flooding and rising main burst alleviation
  - Project management
  - Strategic studies, feasibility studies and detail design
  - Training of young engineers and graduates from 10 different countries.
- 2006 **Consultant - Black and Veatch**  
**World Bank (through Romanian Ministries) - Romania**  
Irrigation scheme near Focsani.
- Quality Assurance and re-write of FIDIC tender documents
  - Intensive three week input to turn around project from “potential failure” to “acceptable”
  - Supervision of sub-consultants to re-design specific components.
- 2004 - 2005, 2003 - 2004 **Team Leader - Halcrow Cowi JV**  
**Romanian Government with EIB, EBRD and EU Phare funding - Romania**  
SAMTID (Small and Medium Town Infrastructure Development) Pilot Project (Euro 40M pilot Works projects).  
SAMTID Stage Two Project (Euro 60M in Works projects).  
Technical and institutional project for the development of the water sector in small and medium towns in Romania.

- Covered 12 out of 40 counties (regions)
  - A Romanian initiative to drive institutional reform (voluntary clustering of operators and public ownership through Regional Operating Companies and Associations of Municipalities) using water supply efficiency projects (treatment, pumps, storage, pipe replacement and metering) as “carrot” for change
  - Master plans, feasibility studies, tender documents, institutional development, very detailed financial analysis to meet stringent requirements from EIB for bottom line positive cash flows from Year 2
  - Institutional strengthening for the Pilot Beneficiaries and new Regional Operators
  - Significant baseline problems with readiness of the county beneficiaries had to be overcome, including vested political interests
  - Management of over 40 people (local and international staffing) during Pilot Phase 1
  - Management of much reduced international staff and four regionally based local consultant companies for Phase 2
  - Works contracted under FIDIC Conditions of Contract
- Successful outcome to high risk TA projects for client, beneficiaries and also the consultant, (Ref: Paper for ICE 2008).

2003

**Water Specialist - Binnie Black and Veatch**  
**Cape Verde Government with KFAED funding - Cape Verde Islands**  
 Sanitation Program for Praia City 1998-2010.

- Study of water supply and sanitation needs for rapidly expanding capital town of 100,000 populations. Feasibility Study
- Identification and master planning of projects to meet the needs to years 2007 and 2015.

2000 - 2003  
 (Intermittent)

**Team Leader - Water Management Consultants (now SWSL)**  
**Mauritius Government - Mauritius**  
 Environmental Sewerage and Sanitation Project for northern half of capital Port Louis.

- Feasibility Study and Environmental Impact Assessment of a unique sewage effluent outfall proposal involving injection into volcanic strata before it reaches the sea
- Leader of multi-disciplinary team (including experts from the University of Wales)
- Coordination with WASA and German TA consultants
- Coordination with JICA and World Bank funding agencies.

2000

**Environmental Specialist - Banes Dawes Associates**  
**World Bank Supervision Mission - Zambia**  
 Urban Restructuring and Water Supply Projects in nine cities.  
 Rapid assessment of projects in Zambia to fulfil World Bank requirements for environmental studies. Findings focused on lack of institutional and financial viability, due in part to the macro-economics of the country, which meant that much of the capital expenditure from successive aid projects was wasted. Therefore economic and environmental benefits were not being achieved.

1997 – 2001 (Intermittent inputs approx. every 2 months)	<p><b>Team Leader - Binnie Black and Veatch</b>  <b>Government of Uzbekistan and World Bank/ KFAED – Uzbekistan</b>  Water Supply, Sanitation and Health Project, Aral Sea Program 5.1.</p> <ul style="list-style-type: none"> <li>• Designs and contract documents</li> <li>• Collaboration with Tashkent institutes to produce International tendering to FIDIC Conditions of Contract</li> <li>• Contract negotiations.</li> </ul>
1997 - 1998 (3 visits)	<p><b>Engineering Expert - Banes Dawes Associates</b>  <b>World Bank Supervision Missions - Pakistan</b>  Punjab Urban Development Project, Lahore.</p> <ul style="list-style-type: none"> <li>• Assessments of Implementation of major water supply, sewerage and drainage components of long term projects in Lahore</li> <li>• Identification and assessment of capital projects progress, costs and projections for financial models</li> <li>• Institutional and financial viability of future PSP.</li> </ul>
1992 - 1993 (3 months duration)	<p><b>Institutional Development Specialist - Camp Dresser McKee</b>  <b>UN Relief Works Agency for Palestine Refugees in the Near East - Gaza Strip</b>  Strategic Actions for Development of the Environmental Health Sector in the Gaza Strip.</p> <ul style="list-style-type: none"> <li>• Strategic plan for development in water supply, sanitation and solid waste sectors</li> <li>• Identification of water, wastewater and solid waste projects</li> <li>• Institutional and financial viability of the projects</li> <li>• Coordination with Palestinian authorities under difficult circumstances</li> <li>• Blueprint for future “water authority”.</li> </ul>
1991 - 1993	<p><b>Team Leader - Binnie Black and Veatch</b>  <b>UNDP/World Bank - Afghanistan</b>  Kabul Water Supply Phase II.</p> <ul style="list-style-type: none"> <li>• Re-assessment of projects stopped in 1978 for water supply in city</li> <li>• Simplified network model for master planning use</li> <li>• Production of master plans as well as detailed design and international tender documents for source works, storage and distribution networks</li> <li>• Project management (incl. remote management).</li> </ul>
1989	<p><b>Team Leader - Hydrotechnica Ltd</b>  <b>UN Capital Development Fund - Bangladesh, Bogra District, 10 pilot “paras”</b>  Village Water Distribution Network Feasibility Study.</p> <ul style="list-style-type: none"> <li>• Institutional, economic and technical feasibility study and recommendations for village distribution system based on often a single shared borehole</li> <li>• Work with local consultants and Bogra Rural Development Academy staff to assess the potential to share domestic and irrigation supplies.</li> </ul>
1989 – 1990	<p><b>Engineering, Water and Sanitation Specialist - UN World Tourism Organisation</b>  <b>Ambergris Caye Master Development Plan - Belize</b>  Responsible for engineering and environmental aspects including beach erosion, groundwater resources, water supply, sewage disposal, solid waste.</p>

- 1987 - 2002      **Project Manager and Design Consultant - Various UK**  
Over 20 projects in the fields of water supply, sewage treatment, industrial pollution, environmental projects, site investigations, studies, reports, supervision, coordination.
- 1987 - 1988      **Water and Sanitation Specialist - REDR SCF (UK) / UNHCR - Ethiopia/Zambia**  
Diarrhoeal Disease Control Program in Welo Region of Ethiopia; formulation of long term project in water and sanitation as a next step to existing health education program.  
Angolan refugee settlement in Zambia; Appraisal Report on water supply and sanitation with recommendations for expansion.  
Sudanese refugees in remote western region of Ethiopia; design and installation of sanitation and water supply systems for 25,000 refugees using air freighted materials and refugee labour.
- 1980 - 1986      **Chief Engineer, Operations, Design, Contracts British Aid/Seychelles Water Authority - Seychelles**  
Included Greater Victoria Sewerage Project, Submarine Water Pipeline, Praslin Island Treated Water Supply.  
Master planning, source works, distribution and collection, treatment works, town and village, sub-marine pipelines, introduction of new and appropriate technologies, standardization of materials, public utilities co-ordination.
- Management of water and sewerage project implementation
  - Supervision of international Works Contractors, large direct labour force and Consultants, including in-house design team
  - Training
  - Formation of Water Authority
  - Operations and maintenance.
- 1978 - 1980      **Engineer – Aspinwall Hydrotechnical Services UK**
- Site investigation, design supervision of construction
  - Solid waste disposal site environmental control
  - Design and construction of local water supplies and farm irrigation schemes.
- 1973 - 1980      **Water Engineer / Acting Chief Water Engineer British Aid / Lesotho Water Department - Lesotho**  
Included Maseru Water Supply and Sewerage Schemes, Twelve Towns Supply, Roma Groundwater Investigations.
- Design and construction of water and sewerage projects and groundwater investigations
  - Project management, investigations, design
  - Operation and maintenance
  - Training
  - Supervision of international works contractors and direct labour
  - Supervision of consultants.

1968 - 1973

**Graduate Engineer and Assistant RE, Team Leader - Sir William Halcrow and Ptns**

**UK**

Offshore structures, including Royal Sovereign Lighthouse; marine works design and construction.

South Wales Spoil tips; reports, design and supervision of construction, studies.

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#### **Publications/Other**

2006

*Richard Wilson, Colin Schoon, Adrian Uifalean, and William Peacock.* Institutional change: regionalizing the water business in Romania. Proc of the Institution of Civil Engineers, May 2006, Vol 159, Special Issue.

2008

*Wilson R.* Sustainable Environmental Projects – a bottom up approach, Presentation to the 2nd European Water and Wastewater Conference, Birmingham, 30th September 2008

## Project director - Tim Hayward

### Personal Details

<b>Nationality</b>	British
<b>Profession</b>	Water Engineer
<b>Specialisation</b>	Project management; water and sanitation engineering
<b>Year of Birth</b>	1958

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### Key

#### Qualifications

- Over 25 years of professional experience on a variety of water sector projects in Africa, Europe, South East Asia and Latin America.
  - Scoping, development and management of projects to improve water and sanitation services in low income areas of a number of African cities (Bamako, Kumasi, Nairobi, Lusaka, Antananarivo, Maputo) working closely with utilities, municipalities and local NGOs.
  - Development of RedR's international programme of training and learning for relief workers. As a Senior Manager, was required to develop strategy and to show leadership and vision.
  - Consultant contracts with UNHCR as Water & Sanitation Co-ordinator in Kosovo, and in Uvira, DRC. Both positions drew heavily on diplomatic and co-ordination skills while working with a range of stakeholders.
  - Several contracts with Oxfam, MSF and Mercy Corps working in technical positions in humanitarian relief operations in the Balkans, Central Africa, and Asia. On all occasions engagement with beneficiaries, government departments, donors and other relief organisations was crucial.
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#### Education and Professional Status

- BSc (Hons) 2.1, Applied Science, Kingston University, London, 1984
  - MSc, Soil and Water Engineering, Silsoe College, Cranfield University, 1985
  - PG Diploma, Voluntary Sector Management, CASS Business School, City of London University, 2004
  - Member, Register of Engineers for Disaster Relief (RedR), London
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#### Language Ability

English	First language
French	Good
Indonesian	Good (previously fluent)
Spanish	Basic

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#### Country Experience

Bolivia - Bosnia – Chad - Democratic Republic of Congo - Ghana - Indonesia - Jordan - Kenya - Kosovo - Mali - Macedonia - Madagascar - Mexico - Mozambique - Pakistan - Republic of Congo - Rwanda – Senegal - Thailand - UK – Zambia.

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## Experience Record

- 2013 to present      **General Manager – WSUP Advisory**  
**Water& Sanitation for the Urban Poor - London, UK**  
Responsible for establishing and managing WSUP Advisory a separate business within WSUP which aims to provide advice and guidance to others through a consultancy service on all aspects of improving water and sanitation services for low income urban communities.
- 2009 – 2012      **Programme Director**  
**Water& Sanitation for the Urban Poor - London, UK**  
Direction and primary responsibility for the implementation of specific WSUP supported programmes in Mali, Ghana and Zambia. Responsible for performance of in country Programme Managers, planning and monitoring progress against objectives and for financial control and adherence to procurement policies. All projects aim to develop sustainable delivery models that will improve the quality of water and sanitation services available in low income informal settlements.
- 2006 – 2009      **Programme Manager**  
**Water& Sanitation for the Urban Poor - London, UK**  
Responsible for developing the portfolio of projects; establishing and chairing the WSUP Projects Group; ensuring that guidance and support was provided to local project teams and that the expertise required for successful project implementation was identified and mobilized.
- 2004 – 2006      **Head of Training and Learning**  
**RedR - London, UK**  
Responsible for all aspects of the development and management of RedR-IHE's programme of training and learning services, and reporting to the CEO. The programme tripled in size in 5 years and delivered over 100 events internationally. Training was provided for more than 2000 relief workers per year with a staff of 19, and an annual budget of £1.7 M.
- 2005      **Water and Sanitation Programme Manager**  
**Mercy Corps - Pakistan**  
1 month assignment. Initiated Mercy Corps' water and sanitation response to the earthquake in North West Frontier Province and Kashmir. Managed a team of 5 Engineers and a Technical Project Manager before handing over to the longer term Programme Manager; liaised with UNICEF, government authorities and local and international NGOs.
- 1999 – 2004      **Training Manager**  
**RedR - London, UK**  
This position developed into the Head of Training and Learning. Employed as Senior Training Officer from 1999 -2000. Responsible for convening and delivering training courses to relief workers. Initiated RedR's programme of in-field Security Management Workshops for relief organisations, beginning in Kosovo and Indonesia.

- 1999 **Water and Sanitation Coordinator**  
**UNHCR - Kosovo**  
2 month contract . Coordinated all water and sanitation activities in Kosovo during the return of refugees immediately following Security Council Resolution 1244 and the cessation of hostilities. Involved considerable liaison with NGOs, other UN agencies, and NATO.
- 1999 **Technical Programme Manager**  
**Oxfam GB - Macedonia**  
6 week assignment. Initiated Oxfam’s water supply and hygiene programme in Macedonia for 100,000 Kosovar refugees. Established and managed a team of 24 national and international staff. Responsible for all aspects of the first phase response including supplying chlorine gas and aluminium sulphate to the national water companies; recruiting the services of a sewage treatment consultant; engaging and managing local borehole and pump contractors; coordination with other NGOs, UNHCR, NATO and government ministries at all stages.
- 1998 – 1999 **Water Engineer/Adviser**  
**MSF France - Thailand**  
4 month assignment. To improve the water supply to a camp of 32,000 Karen refugees in eastern Thailand. After an assessment and complete topographic and plan survey of the 4km site, a new pumping system was designed and proposed, the construction initiated, a team of local staff was recruited to carry the project to completion. The design comprised a river intake, 3 new 11kW pumps, a standby generator, HDPE and uPVC rising mains, and 4 concrete storage reservoirs. Before approval was given to precede much liaison and discussion was required with the Ministry of Interior, the local authorities, and the Irrigation Department.
- 1998 **Programme Manager**  
**Oxfam GB - Bosnia and Herzegovina**  
2 month assignment. To establish a reconstruction programme for Drvar, which had an overwhelming Croat displaced population, and a large number of the returning Serb population. The programme had a 12 month DG1A budget of £3.9 M and included the rehabilitation of electricity and water supplies, and sanitation and sewerage, the reconstruction of 300 houses, and agricultural assistance. Responsible for managing the office, the programme and its staff, including the recruitment of a large number of staff. Liaison and co-ordination with other NGOs, UN agencies, and SFOR, and representing Oxfam locally.
- 1997 – 1998 **Technical Coordinator**  
**UNHCR - Democratic Republic of Congo**  
8 month assignment. The technical programme in Uvira provided \$3 M of funding to Implementing Partners for the rehabilitation of physical Infrastructure (schools, health centres, roads and bridges, village water supplies), and for a number of agricultural and forestry projects. Responsible for developing and managing the Technical Unit; for identifying and assessing needs; formulating and organising the proper implementation and monitoring of technical projects. Provided technical support to the repatriation programme and contingency planning. An important part of the role was to foster good relations with the local authorities, and to ensure that the Implementing Partners did likewise. Also deputised for the Programme Officer and Office Manager during their absence.

- 1997
- Technical Adviser**  
**Oxfam UK and Ireland - Republic of Congo**  
 1 month assignment. Responsible for the establishment of an emergency water programme to respond to a number of scenarios arising from the conflict in Zaire. Evaluation and planning for a transit camp to receive Rwandan refugees arriving in Republic of Congo, recruitment of local technical staff, establishment of technical team, programme design and budgeting, liaison with other NGOs.
- 1997
- Assessment Engineer**  
**Oxfam UK and Ireland - Bolivia**  
 1 month assignment. Leader of mission to assess needs arising from widespread flooding in the Amazonian areas of Bolivia. Field visit and extensive discussions with local actors in order to identify local partners through whom to operate. A detailed report and project proposal (for improvement of water supplies and prevention and treatment of malaria) with a budget of £150k were submitted to ECHO. ToRs for staffing were also written.
- 1996 – 1997
- Technical Programme Adviser**  
**Oxfam UK and Ireland - Rwanda and Zaire**  
 1 year assignment. Adviser on technical and programme issues relating to Oxfam's Public Health Programme in Rwanda. Included spring capping, water treatment plants (gravel and sand filtration, and chemical), gravity distribution systems, hand pump rehabilitation, and borehole drilling. Responsible for contingency planning and emergency preparedness for possible mass movements of people; liaison with government ministries, aid agencies and UNHCR; management of stores and materials; project planning and staff training. Much of early 1997 was spent in Bukavu, eastern Zaire, identifying strategies, and planning and implementing a programme to assist the return of Rwandan refugees.
- 1994 – 1995
- Technical Team Leader**  
**Oxfam UK and Ireland - Zaire**  
 4 month assignment. 2 months as Deputy followed by 2 months as Leader of Oxfam's Water Supply and Sanitation Programme in the Rwandan refugee camps in Goma. The programme (budget £5.5M) supplied water to 800 000 refugees, and employed up to 2 000 refugee, local, and international staff. Responsibilities included programme management, technical support to Site Engineers, staff recruitment, financial management, liaison with UNHCR and Aid Agencies, and co-ordination between field office and UK head office.
- 1990 – 1996
- Design Engineer/Project Manager**  
**Acer Consultants Ltd - UK**  
 Supervision of all aspects of sewage treatment works and pumping station construction. Hydraulic and process design for large schemes (up to £10M) mainly for Severn Trent Water Ltd. Development and verification of computer models and preparation of comprehensive Drainage Area Plans.
- 1987 – 1989
- Water Development Engineer**  
**Voluntary Service Overseas (VSO) - Indonesia**  
 Responsible for establishing an irrigation/drinking water programme that formed part of an integrated rural development project on Sabu Island. Local needs

assessment, evaluation of alternative techniques and practices. Liaison with village leaders, government officials, and funding agencies. Outlining long term policy and training of counterparts to implement programme.

1985 – 1986

**Hydroponics Development (Volunteer)**

**Silsoe Aid for Appropriate Development (SAFAD) - Mexico**

Contracted by Universitas Autonoma del Noreste to design and construct hydroponics systems.

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**Other Training**

**Participation in a range of sector-related short (1-10 day) training courses:**

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|------|--|
| 2011 | Managing & Financing Urban Water and Sanitation - Cranfield University -UK (10 days).  |
| 2006 | Security Management Workshop - RedR - UK (3 days).   |
| 2001 | Managing for Managers - Directory of Social Change - UK (3 days).  |
| 2000 | First Aid for Overseas Workers - The British Red Cross - UK (1 day).<br>UN/CIMIC - UNOCHA - UK (5 days).<br>Needs Assessment Workshop - RedR - UK (3 days).  |
| 1998 | Roads and Crossing - RedR - UK (3 days).   |
| 1997 | Health Care in Emergencies: Introductory Course - IHE - UK (5 days).   |
| 1995 | Overseas Delegate Training Course - The British Red Cross - UK (7 days).<br>Field Construction - RedR - UK (2 days).<br>Needs Assessment - IHE & RedR - UK (2 days).<br>Refugees, Aid Agencies and Relief Workers - RedR - (5 days). |
| 1994 | Water Sources - RedR - UK (2 days).  |
| 1993 | Working in Confined Spaces - West Midlands Training Centre - UK (2 days).<br>Financial Aspects of Management for the Construction Industry - Birmingham, University - UK (evening course 8 weeks).                                   |
| 1992 | Managing Safety Risks Effectively - Hinton & Higgs - UK (2 days).  |
| 1991 | ICE Conditions of Contract - Water Training International - UK (3 days).   |
| 1990 | Site Supervision, an Introduction for Resident Engineers - Water Training International - UK (5 days).   |
| 1987 | Appropriate Technology - National Centre for Alternative Technology - Machynlleth, UK (2 weeks).   |
| 1986 | Water Supplies and Sanitation - WEDC, Loughborough University - UK (10 days).  |
| 1985 | Diesel Engine Maintenance - Perkins Ltd - UK (5 days).   |

## Hygiene and Behaviour Change Specialist - Anne Walsh

### Personal Details

<b>Nationality</b>	British
<b>Profession</b>	Health nutrition and hygiene specialist
<b>Specialisation</b>	Health, public health, nutrition, behaviour change, training, programme and organisation management

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<b>Key Qualifications</b>	<ul style="list-style-type: none"><li>• Over 25 years' experience in the humanitarian relief and development sectors, specialising in public health, nutrition, WASH and programme management.</li><li>• Expert in health, nutrition and WASH issues affecting some of the poorest and most marginalised communities around the world, with recent work informing and changing international policy and practice for identifying and treating severe and moderate acute malnutrition.</li><li>• Broad experience of managing all aspects of small to large complex programmes from concept through to completion.</li></ul>
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<b>Education and Professional Status</b>	<ul style="list-style-type: none"><li>• Master of Arts in Health Services Studies, Nuffield Institute for Health Services Studies, University of Leeds 1989-1990. Registered Nurse, Board of Registered Nursing, California, USA, 1985.</li><li>• State Registered Nurse, St Bartholomew's School of Nursing, London, 1979-1982.</li></ul>
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<b>Language Ability</b>	English	First language
	Arabic	Basic spoken
	French	Basic

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<b>Country Experience</b>	Afghanistan – Azerbaijan – Balkans – Bangladesh - Burundi – Cambodia - DPRK – Ethiopia – Haiti – India – Kenya - Liberia – Malawi - Pakistan - Rwanda- Sierra Leone – Somalia - Somaliland – Sudan – Tajikistan – United States – United Kingdom – Zambia
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### Experience Record

Dec 2015 - present

#### **Head of Innovation and Consumer Needs Water & Sanitation for the Urban Poor (WSUP) UK**

Managing the Innovation and Consumer Needs team, providing technical expertise and for improving the quality and breadth of innovative WASH approaches and solutions. Specialist focus on hygiene behaviour change in WASH from institutional to household level to bring about a positive impact on the health and wellbeing of low income urban communities.

April - Nov 2015

**Interim Managing Director – WSUP Advisory  
Water & Sanitation for the Urban Poor(WSUP) UK**

Interim post managing the newly formed consultancy arm of WSUP supporting low income consumer water, sanitation and hygiene service models.

2003 - 2015

**Operations Manager  
Valid International – UK**

Managing Valid International, a health and nutrition focussed organisation operating in more than 10 countries at any one time. A major achievement has been managing Valid's operational research into treatment of malnutrition to establish the evidence base that has completely rewritten international policy for identifying and treating acute malnutrition. The ongoing research and dissemination of findings continues to shape global policy and practice, providing access to effective treatment for millions of children. This work has included the development of cutting edge techniques for mapping, monitoring and evaluating programme coverage and impact, along with building a pool of technical expertise providing high quality consulting services internationally.

Role included:

- Managing international programmes, providing technical, programmatic and administrative leadership and support.
- Coordinating innovative work in operational research and development of tools to identify, treat, monitor and evaluate programme effectiveness at individual and programmatic levels.
- Assessing impact and cost effectiveness of the Community based Management of Acute Malnutrition compared to hospital based treatment.
- Working with Ministry of Health in multiple countries at national to facility level to integrate treatment of acute malnutrition into primary health care services.
- Advising, training and providing onsite support to UN agencies, national governments, health service providers and NGOs on all aspects of Community based Management of Acute Malnutrition
- Representing Valid and presenting evidenced based findings at international forums leading to change in policy and practice for policy makers (WHO, Unicef, MoH) to practitioners.

2002 - 2003

**Consultant**

Various contracts in community development, nutrition surveys, and employment fields.

1999 - 2002

**Director of Programmes  
Children's Aid Direct – UK**

Overall management of the Programmes Department, covering multisectoral emergency relief and development programmes in Sierra Leone, Liberia, Burundi, Rwanda, Haiti, Tajikistan, Afghanistan, DPRK, Azerbaijan and the

Balkans.

- Managed multidisciplinary team of 14 UK staff, 50 international and 500 national staff.
- Developed strategic plan and organisational policies including child protection policy, security protocols, capacity building, and entry and exit strategies.
- Compiled and managed departmental budget and monitored compliance.
- Advised management team, country teams and trustees on start up, maintenance, and close down of emergency response and longer term programmes.
- Member of the DEC advisory Operations Committee.
- Managed the safe closedown of all CAD programmes overseas, and the final closure of the UK operations.

1995 - 1999

**Health Advisor  
Children's Aid Direct – UK**

Responsible for technical support to all health, nutrition and emergency response programmes in Africa, Asia and the Balkans:

- Lead for all health and nutrition projects; design and development.
- Carried out rapid assessments for emergency response to health and nutrition interventions in rapid onset emergencies.
- Technical support to ongoing projects, monitoring, midterm evaluations and evaluation of completed projects.
- Nutrition and food security surveys.
- Recruitment and training for UK, international and national staff.
- Liaison with beneficiary groups, donors, governments, UN and non governmental agencies.

1994 - 1995

**Primary Health Care Advisor  
Save the Children Fund, UK – Somaliland**

Advisor to Somaliland Ministry of Health. Worked with national counterpart to re-establish primary health care in 5 regions of Somaliland following destruction of infrastructure during the war. This included:

- Developing and implementing health policies and PHC guidelines.
- Developing and using updated training curriculum for trained health staff, Traditional Birth Attendants and Community Health Workers.
- Design and co-ordination of emergency response to widespread cholera outbreak.
- Planning for cost recovery for health service provision.

1991 - 1993

**Public Health Officer  
Save the Children Fund, UK – Ethiopia**

Seconded by SCUK to Ethiopian government Administration for Refugee Affairs. Responsible for management and implementation of health and WASH activities in the refugee camps in Eastern Ethiopia (11 camps, approx. 500,000 refugees). Role included:

- Maintaining and strengthening preventative and curative health services.
- Setting up basic health and sanitation facilities in newly formed refugee camps.
- Training of Traditional Birth Attendants and Community Health Workers, integrating their work with health centre activities.
- Introduction of reproductive health services.
- Work with sanitation team to monitor and improve water and sanitation in the camps.
- Rapid response to health emergencies; managing treatment, prevention, and monitoring spread and control of outbreaks.

1986 - 1988

**Primary Health Care Coordinator  
Medical Volunteers International USA – Sudan**

PHC coordinator for USAID funded Child Survival Project in Tokar District, Eastern Sudan. Worked with nomadic communities and MoH personnel to strengthen post-emergency Primary Health Care and access to health services for villages and nomadic groups in the district.

- Clinical practice, staff training, health and nutrition promotion.
- Setting up immunisation programme and cold chain network and training health workers to maintain the programme.
- Emergency response to flooding to provide safe water, sanitation facilities and health education.

1985 - 1991

**Registered Nurse, UCSD Medical Centre – San Diego, California**

Not continuous employment - worked for periods between travel and study. (July 1985 - December 1986, January 1989 - September 1989, October 1990 - March 1991). General medicine, Oncology, Intensive Care.

1982 - 1985

**Senior Staff Nurse, St Bartholomew's Hospital – London**

Pulmonary medicine, Medical Oncology, General Medicine.

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**Other training**

2012

Household Economy Approach and Cost of Diet assessment methods. Introductory training for use of HEA and CoD analytical tools.

- 2000                      Making the most of Accounting  
Finance workshop for non financial managers, BOND
- 2009                      ACSET 1 Teaching Certificate  
Teaching for adult learning. Guildford Adult Education Institute, UK

### Publications

Kerac M, Egan R, Mayer S, Walsh A, Seal A. The new WHO Growth Standards: rollout needs more resources. *The Lancet (Commentary)*, Vol 374, Issue 9684, p 136 to 144, July 2009.

Collins S, Sadler K, Dent N, Khara T, Guerrero S, Myatt M, Saboya M, Walsh A. Key Issues in the success of community-based management of severe malnutrition. Technical Background Paper for WHO, UNICEF, SCN informal consultation in Geneva (21-23 November 2005). *Food and Nutrition Bulletin* 2006 Sep; 27(3): S49-82.

Community-based Therapeutic Care: A Field Manual. Valid International. 2006.

Infant feeding in Emergencies: Experience from the Former Yugoslavia. *ENN Field Exchange*. Issue no.1 May 1997.

## Annex 2 – Certificates of registration



### CERTIFICATE OF INCORPORATION OF A PRIVATE LIMITED COMPANY

Company No. 5419428

The Registrar of Companies for England and Wales hereby certifies that  
WATER AND SANITATION FOR THE URBAN POOR

is this day incorporated under the Companies Act 1985 as a private  
company and that the company is limited.

Given at Companies House, Cardiff, the 9th April 2005



*Companies House*  
— for the record —

The above information was communicated in non-legible form and authenticated by the  
Registrar of Companies under section 710A of the Companies Act 1985



**CERTIFICATE OF INCORPORATION  
OF A  
COMMUNITY INTEREST COMPANY**

Company Number **9461206**

The Registrar of Companies for England and Wales, hereby certifies that

**WSUP ADVISORY CIC**

is this day incorporated under the Companies Act 2006 as a private company, that the company is limited by shares, and the situation of its registered office is in England and Wales

Given at Companies House on **26th February 2015**



Companies House

