August 2007 FRAMEWORK FOR

# global water operators partnerships alliance





www.unhabitat.org

# foreword

The on-going water and sanitation sector reforms, particularly in developing countries, have provided opportunities for creating more efficient, customer focused and autonomous water and sanitation utilities. However, water and sanitation utilities continue to face enormous challenges in meeting the ever-increasing demands of growing populations.

Most utilities suffer from a number of interrelated institutional weaknesses, including inadequate cost recovery compounded by a low customer base and limited physical coverage, dilapidated physical infrastructure, high levels of unaccounted for water, the low skill levels of the staff and poor customer relations, among others. There is also the inability to serve the needs of the urban poor, the main targets of the Millennium Development Goals (MDGs).



To manage and sustain the positive outcomes of the ongoing sector reforms, more focus is required in the improvement of the performance of water utilities in terms of service delivery, cost recovery, operation and maintenance, with special emphasis on improvement of access by the poor. As we take stock of the attainment of the MDGs half-way to the target date of 2015, there is a sense of urgency for more imaginative and accountable governance structures for water and sanitation utilities, as well as fundamental changes in attitudes and behaviour and a culture of service and responsibility by governments, utilities and citizens alike.

Fostering collaboration between Water Supply and Sanitation Utilities is a vital element in ensuring exchange of experiences between performing and non-performing utilities. The need for creating a mechanism for the collaboration of water utilities is highlighted in the "Hashimoto Action Plan" which was announced by the United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB) during the 4<sup>th</sup> World Water Forum in Mexico.

One of the recommendations of the Action Plan is for the establishment of a mechanism to promote water operators partnerships (WOPs). The rationale behind the WOPs mechanism is that most of the capacity for improving water and sanitation services lies with the operators themselves. It also builds on the fact that about 90% of all utilities are publicly managed, and that even modest improvements in these utilities will go a long way in contributing to meeting the internationally agreed development goals and targets for water and sanitation. Thus the WOPs are to be based on mechanisms to enable operators to systematically communicate amongst themselves and to share their experiences and learn from each others' practices for the benefit of all.

Following on the recommendations of the Hashimoto Action Plan, the United Nations Secretary General has mandated UN-HABITAT to promote and coordinate activities related to WOPs at the international level. UN-HABITAT has taken up this challenge, and has devoted human and financial resources to initiate a process for the establishment of a Global WOPs Alliance Centre within the organization.

This "Framework for the Global Water Operators Partnerships Alliance" is a culmination of the initial activities that have been undertaken in response to the UN-Secretary General's mandate to UN-HABITAT, including: initiating donor consultations; support to at least four regional WOP meetings; initiating staff recruitments for the Global WOPs Alliance Centre; and the formulation of this framework document.

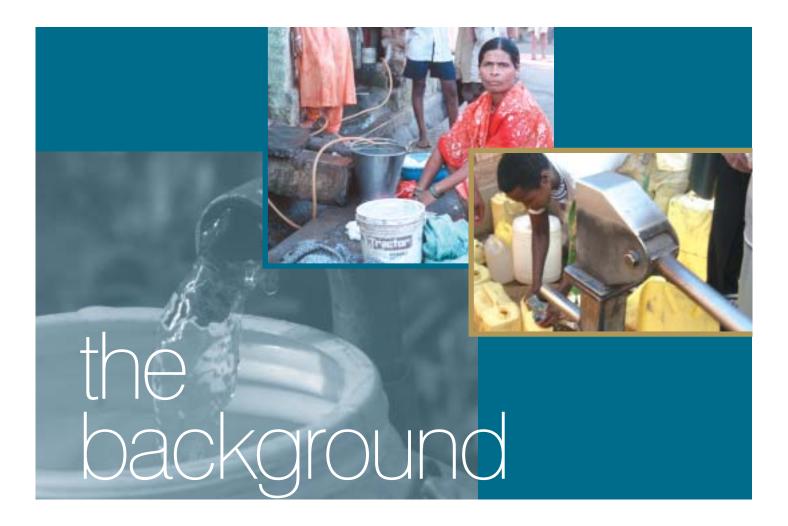
UN-HABITAT will continue and expand on these initial activities and invites all partners to contribute to this process.

Anna Kajumulo Tibaijuka

Under-Secretary General, United Nations

Mycholibajnka

Executive Director, UN-HABITAT



This paper outlines the progress made and steps to be taken in implementing a proposal to establish a Global Water Operators Partnership Alliance. The proposal is one of the Compendium of Actions that were announced by the United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB) during the 4th World Water Forum held in Mexico during March 16-23, 2006.

The Compendium of Actions, now known as the Hashimoto Action Plan (HAP), after the late Chairman of the Advisory Board, was designed to strengthen the capacity of the key players engaged in the water and sanitation sector, thereby helping to achieve the water and sanitation targets of the Millennium Development Goals (MDGs). One of the provisions of the Hashimoto Action Plan was a proposal to create and implement a global mechanism to promote Water Operators Partnerships (WOPs).

### Response to the WOPs Proposal by the International Community

The proposal to establish WOPs has received approval and support from high level officials in international and regional organizations worldwide. These include the UN Secretary-General, the President of the World Bank, and the International Water Association (IWA). Senior managers of water utilities from countries in Africa, Asia and Latin America have also expressed their support for the WOPs mechanism.

Under the umbrella of the UN-HABITAT MoU with the African Development Bank, the two Agencies and the Water and Sanitation Program–Africa (WSP–AF) of the World Bank have agreed to co-operate and support utility operators in the implementation of the WOPs in Africa. In Asia, the Asian Development Bank and the Global Water Partnership have signed a co-operation agreement covering, among others, support to utilities for the implementation of the WOPs initiative in the Asia Pacific region, with a key task to set up water utility networks in the region.

The World Health Organisation (WHO) has proposed a course of action for an integrated UN system of support for WOPs. This is desirable as there are clearly complementary areas of activity with the WHO providing UN leadership on matters of drinking water safety.

# the principles

R R

The HAP gives the following guiding principles for WOPs:

The operators who deliver water services need help. Publicly owned and managed water operators currently provide more than 90 percent of the world's piped water, and even small managerial improvements could yield major benefits. The Board recommends a new mechanism—water operators partnerships. This would be a structured programme of cooperation among water operators, based on mutual support and on a not-for-profit basis.

Cooperation between water operators, or Water Operators Partnerships can be a useful mechanism for providing support for capacity building of public water operators. Given the preponderance of public sector undertakings, it is envisaged that most operating partnerships will be between public operators. However, we do not exclude private sector operators, Non-governmental Organisations (NGOs) or those who can contribute to the performance of public water undertakings on a not-for-profit basis.

The GWOPs Alliance follows this Guiding Principle for WOPs.

HAP also recommends some priority actions:

- Develop a database and Internet-interface for operating the WOPs' mechanisms.
   This Internet-interface will be field tested before its use is broadened to cover other regions;
- Public utilities with experience of twinning to work with WOPs to strengthen the proposals, and participate in implementing them;
- National water ministries to encourage public utilities to participate in suitable trials, and national finance ministries to make funds available for them;
- Professional water associations to contribute to building the Internet-based matching mechanism and to make their related networks available to water operators willing to establish WOPs;
- Relevant International Financial Institutions (IFIs) to be encouraged to provide financial and technical support to the WOPs programme.

The UN Secretary-General endorsed the HAP and mandated by United Nations Human Settlements Programme (UN-HABITAT), to promote and coordinate activities related to Water Operators Partnerships at the international level "in order to strengthen the capacities of the public water operators that currently provide over 90 per cent of the water and sanitation services and who are key players for attaining the Millennium Development Goals on drinking water supply and sanitation".



It has become apparent that on current trends, the water targets will be missed by 230 million people and that 800 million in total will be without sustainable access to safe water supply by the end of 2015. With sanitation, it is estimated that the target will be missed by 431 million if current trends continue, and that a total of 2.1 billion people will be without access to basic sanitation in 2015. For sub-Saharan Africa, the region is generally held that with business as usual, not only will the targets be missed but, what is more, it will reach the water target only by 2040, and the sanitation target only by 2076.

These figures present an enormous challenge. They mean that globally, to meet the water target, the challenge is to provide 30 thousand people per day with access to improved water during 2005-2015. This calls for stepping up the current efforts by one third. For sanitation, access to basic sanitation should be provided to 450 thousand people per day during 2005-2015; and this calls for doubling the current rate.

Improving utilities' effectiveness (especially in serving the poor), their efficiency and sustainability is at the heart of the global water supply challenge. The burden of meeting such an enormous challenge rests with the various players in the water and sanitation sector operating in urban (including small urban centers) and rural areas; these include the following:

- National, state and city governments, including local governments and municipalities
- Regulatory institutions
- Public utilities (responsible for providing about 90 per cent of the water and sanitation services)
- Privately operated utilities
- Small-scale water and sanitation service providers (which step in as a market response to deficient and unreliable water and sanitation services)
- Community-based organizations (CBOs) and NGOs (especially important in rural water and sanitation service provision)
- Academic and research institutions

# the rationale

The decision to establish the WOPs mechanism stems from concern about the risk of missing the water and sanitation targets in the Millennium Development Goals. The WOPs is therefore a response to this concern. It is based on the premise that establishing direct and effective partnerships and networking between operators at a global, regional, sub-regional and national level and facilitating a process of "learning by doing" amongst them is an urgent necessity for better equipping the key players in the sector to play their crucial role in meeting the challenges of attaining the Millennium Development Goals on drinking water supply and sanitation.

It is also realized that initiatives such as training, networking, knowledge sharing or benchmarking can only make a limited difference, if there is no effective and sustainable governance structure in place. An effective utility partnership initiative will be one that is owned and managed by the utilities themselves in a manner that ensures that their needs are addressed and they derive specific benefits that provide the incentive for ongoing participation.

### **Approaches in establishing WOPs**

In considering the establishment of the WOP there were two key approaches that were taken into account:

### **Building on Existing Utility Networks**

At the regional level, there are examples of utility networks already in place and operating in Southeast Asia, Africa and Latin America, each with different degrees of success and performance. Examples of such networks are:

- The Southeast Asian Water Utilities Network (SEAWUN), a network of 47 water utilities in Southeast Asia. This has
  been very successful and the aim of the Asian Development Bank and Global Water Partnership initiative is to
  replicate this network in South and Central Asia and China so that these regions can enjoy the same benefits as the
  Southeast Asian region. These water utilities networks should serve as a platform for the implementation of the
  WOP programme in the region.
- Existing network organizations in the Africa region such as the African Water Association (AfWA), supported by other agencies such as WSP and the regional chapter of the IWA have already started to play an important role in capacity building of utilities and connecting them with each other in the region.
- AIDIS Interamerican Sanitary and Environmental Engineering Association is a non-profit association with outreach in 32 countries in the Latin America and the Caribbean (LAC) region. It currently has 32 thousand associates in its 24 national sections. The activities of AIDIS are co-ordinated through 20 technical divisions. AIDIS has accepted to host the WOPs mechanism in the LAC Region.



### **Propagating the WOPs Concept**

Following the decision to establish the WOPs mechanism, UN-HABITAT and other partners have been engaging with stakeholders on the WOPs concept. As a result, new regional WOPs initiatives and processes are flourishing, and in the last 6 months regional workshops have been held or organised in:

- Asia (Bangkok) where the Asian Development Bank and the Global Water Partnership are collaborating to support Asian water utility operators to implement the WOPs initiative in the Asia Pacific region.
- The Arab States held a meeting in Abu Dhabi where it was decided to establish a regional utilities network, the Arab Countries Water Utilities Association (ACWUA).
- Africa (Nairobi and Johannesburg) where the African Water Association (AfWA) and the WSP is supporting African utilities in the implementation of the WOPs in Africa, in collaboration with the African Development Bank, UN-HABITAT and others. The April 2007 meeting of Water Utility Operators held in Johannesburg, called for the formal establishment of the Africa WOPs and sets out the sub structures, programmes and priority initiatives.
- Eastern Asia (Islamabad) (as part of the GWP-ADB Asian WOPs sub-regional initiatives).
- In Latin America, the UN DESA WOPs Conference in Recife, Brazil adopted the Recife Statement in which the Latin American utilities supported the idea of establishing a WOPs mechanism in the region.
- In the North, IWA utility partnership Conference in the Netherlands is scheduled to be held in November 2007.

# the concept

### The Global WOPs Alliance Concept

The GWOPs Alliance is needed in order to facilitate and promote the building of partnerships to improve the performance of public water and sanitation operators and improve the prospects of meeting the water and sanitation related MDGs. To achieve this, it requires an approach that ensures that it is owned and managed by public utility operators and implemented in a structured, integrated and consistent manner, to support and monitor the performance.

A growing number of partners are expressing their commitment to support the utility operators in implementing the WOPs mechanism substantively (e.g. WHO for water quality issues, International Benchmarking Network (IB-NET) for benchmarking, IWA for young professional internships) and financially (external support agencies). These partners are considered core partners in building a Global WOPs Alliance platform.

The GWOPs Alliance should support and build on ongoing efforts at global, regional, subregional and national levels, including regional operator networks, professional organizations and capacity building institutions and other stakeholders/partners such as funding agents and development agencies.

### Learning from experiences of existing partnerships

A number of attempts have been made by donors in various regions to establish regional networks of utilities. In addition, a significant number of initiatives that are focused on capacity building, twinning and support to utilities already exist, typically at a regional or sub regional level. Many of these networks and initiatives have, over time, failed to become sustainable.

An analytical review of various past, existing partnership arrangements and emerging regional WOP arrangements was undertaken in order to determine the factors that contributed to or characterised the success or failure of the partnership arrangements. The findings (key lessons learnt) from this review are summarized hereunder and have been used to inform the proposed structure and modalities of the WOPs initiative at the global level. The findings can also be incorporated into existing and evolving WOPs partnership arrangements at the regional and sub regional level. These lessons learnt are considered to be key for the sustainability of partnership initiatives.

- All partners must have a clear understanding of the objectives and intended outcomes of the partnership.
- There must be common/shared "ownership" of the partnership arrangement.
- Partnership arrangements must be well structured, led and coordinated.
- Partnership arrangements must be" institutionalised" as key strategic initiatives within each partnership entity. (The review is littered with examples of failures due to the movement of key persons).
- "Champions" are important within the institutionalized concept.
- Partnership arrangements need to have "win/win" outcomes where all partners derive measurable benefit.
- Dedicated resources and capacity to support the ongoing implementation and co-ordination of partnership initiatives are a key factor in sustainability (part time work receives part time attention).
- Financial requirements/obligations and or funding commitments must be confirmed upfront and reviewed/ agreed on an ongoing basis.
- Comprehensive communication strategies must be implemented to support the partnership initiatives.

### Recommended modalities for action of the GWOPs Alliance

- Avoid duplication of work by others, while seeking to complement and enhance
- Support, facilitate and strengthen partnerships and networks
- Provide mechanisms and structures for mobilizing capacity and knowledge sharing drawing on global, regional, subregional, national and local utility experiences.
- Open to all public utilities (private utilities may also join in so long as they accept the "not for profit principle")
- Priority to reaching the unserved
- Ensure accountability, transparency and effectiveness
- Not for profit



## Vision, mission and strategic objectives for the GWOPs Alliance

The interim Vision, Mission and Strategic Objectives that are outlined hereunder will be used to direct the initial focus, structure, membership, activities and interactions of the GWOPs Alliance. These will be reviewed and confirmed by the parties to the Alliance in a participatory manner as the need arises.

### **Proposed Vision**

**Suggestion:** To maximize the effectiveness of public water and sanitation utilities to provide improved services, particularly to the poor, in the attainment of the MDGs for Water and Sanitation.

### **Proposed Mission**

**Suggestion:** To promote, facilitate and support not-for-profit mutual cooperation and knowledge sharing between water and sanitation service providers, to enable public utilities to enhance their capacities.

### **Strategic Objectives**

In striving to achieve the interim **Vision** and **Mission** of the Global WOPs Alliance the focus, structure, membership, activities, interactions and resource allocations of the Alliance will be directed by the following broad strategic objectives:

- Position the GWOPs Alliance as an efficient, effective and functional global mechanism for regional, sub-regional and national WOPs supported by a coalition of agencies.
- 2. Engage in advocacy for WOPs in appropriate national, regional and international fora.
- 3. Facilitate and support regional, sub-regional and national mechanisms, for improving the performance of public water utilities.
- 4. Provide web based and other platforms to facilitate information collection, analysis and dissemination.
- Host, promote and support a range of events that are directed at meeting the demands/needs of public utility members of the alliance.

# the goals

The specific goals that underpin and support the strategic objectives are as follows:

| Strategic Objectives  | Goals  |  |  |  |
|---|--|--|--|--|
| Position the GWOPs Alliance     as an efficient, effective     and functional global     mechanism for regional,     sub-regional and national     Water Operator Partnerships     supported by a coalition of     agencies | <ol> <li>1.1 Establish, resource and operationalise the GWOPs Alliance Centre in Nairobi</li> <li>1.2 Identify and engage with all existing regional water utility partnership networks to promote and formalize the GWOPs Alliance</li> <li>1.3 Establish and implement appropriate (member based) governance structures and processes for the GWOPs Alliance</li> <li>1.4 Develop and implement a comprehensive communication strategy for the GWOPs</li> <li>1.5 Develop and implement frameworks that ensure broad alignment of GWOPs objectives at the global, regional and national level.</li> <li>1.6 Evaluate and develop frameworks for GWOPs Alliance subscriptions that can be introduced progressively to ensure financial sustainability of the Alliance</li> <li>1.7 Monitor and report on progress and performance of the GWOPs Alliance</li> </ol>  |  |  |  |
| Engage in advocacy for WOPs in appropriate national, regional and international fora  | <ul> <li>2.1 Profile the purpose and objectives of the GWOPs Alliance with all appropriate international bodies and agencies</li> <li>2.2 Garner support for the GWOPs Alliance with all appropriate international bodies and agencies</li> <li>2.3 Solicit external donor support for the GWOPs Alliance</li> <li>2.4 Support and coordinate efforts by regional, sub-regional and national WOPs for securing funding</li> <li>2.5 Facilitate dialogue between funders, donors and operators</li> <li>2.6 Formally launch the GWOPs Alliance</li> </ul>   |  |  |  |
| 3. Facilitate and support regional, sub-regional and national mechanisms, for improving public water utilities.   | <ul> <li>3.1 Identify and support existing or evolving partnership arrangements, as appropriate</li> <li>3.2 Promote and provide support for the establishment of partnerships based on expressed needs or demands</li> <li>3.3 Establish and support regional and sub-regional structures with capacity to coordinate and implement initiatives</li> <li>3.4 Establish a data base and profile of all utilities in partnership arrangements using a consistent data gathering framework</li> <li>3.5 Support the development of capacity building tools and new partnership modalities including piloting new approaches.</li> <li>3.5 Act as a facilitating agent for sharing best practice</li> <li>3.7 Support and promote benchmarking activities within and between WOPs</li> <li>3.9 Support the development of frameworks for improving utility management and governance</li> <li>3.10 Document and support, where possible, priority themes/focus areas from WOPs</li> </ul> |  |  |  |



- 4. Provide web based and other platforms to facilitate information collection, analysis and dissemination.
- 4.1 Identify and document best practices in Water and Sanitation (WATSAN) service delivery
- 4.2 Develop and launch web based platforms for establishing partnerships and knowledge sharing
- 4.3 Establishing a data base of where and what WATSAN information is available globally
- 4.4 Functioning as a "hub" for access to specific information
- 4.5 Promote and support the establishment of utility training and capacity building networks
- 4.6 Promote and support the establishment of effective utility and change management training networks
- Host, promote and support a range of events that are directed at meeting the demands/needs of alliance members.
- 5.1 Hold an Annual GWOPs Alliance Convention
- 5.2 Initiate and support regional and sub-regional WOPs meetings and support regional and sub-regional WOPS governance and implementation structures
- 5.3 Initiate and support appropriate specialist events/ programmes



### **Structure and Membership**

### **Levels of Operation**

This proposal is focused on the establishment of a Global WOPs Alliance. One of the objectives of the GWOPs alliance is to help strengthen and coordinate existing Regional WOPs Alliances and to help nurture the establishment of new regional sub-regional and national level partnerships

### **Global WOP Alliance Centre**

At the global level, UN-HABITAT has already begun forming a Global WOPs Alliance Centre. The staffing for the centre will comprise:

- Global WOPs Alliance Project Manager
- Information Technology (IT) and communication Expert
- · Capacity Building Expert, and
- Support staff

Junior Program Officers will be recruited (preferably on secondment from donors) as the need arises in due course.

The Global WOPs Alliance Centre will be responsible for the implementation of a GWOPs Alliance work-plan that is aligned to the delivery of the Vision and Mission through the agreed strategic objectives, goals and key activities.

### Membership

Membership is open to all the water operators and stakeholders such as Public Water and Sanitation Utilities, Private Service Providers, Capacity Building Institutions and Civil Society Organisations engaged with water and sanitation related services.

### **Regional WOPs**

It is recognized that the key to a strong Global WOPs Alliance lies in the strength of Regional WOPs. Regional WOPs should decide mechanisms which are suitable and effective in their Regions with support by Regional bodies.



### **Management, Hosting And Governance**

A Secretariat will be established at the Global WOPs Alliance Centre to manage the affairs of the Global WOPs Alliance. The Centre will be hosted by the UN-HABITAT, and located within its Water, Sanitation and Infrastructure Branch. The Global WOPs Alliance Project Manager will report to the Chief of Water, Sanitation and Infrastructure Branch in UN-HABITAT.

### **GWOPs Steering Committee**

There will be a GWOPs Steering Committee chaired by UN-HABITAT which will be responsible for setting the strategic direction and providing advice on the objectives and goals of the Global WOP Alliance and the associated work plan. The GWOPs Steering Committee will meet at least once a year. As often as possible, the Steering Committee meetings may be held in conjunction with major international meetings.

The membership of the GWOPS Steering Committee will be guided by the following principles: majority membership of public water utilities; fair geographical representativity (based on regions), and fair representation of stakeholders. Regional representatives should be selected by the regions.

The Global WOPs Alliance Centre will report to the GWOPs Steering Committee on performance/progress. UN-HABITAT will announce widely the establishment of a provisional Steering Committee, which will be constituted following the above principles. It will discuss a definitive workplan and appropriate structures. All interested parties are welcome to apply and will be selected through a transparent and consultative process.



### **Funding Arrangements**

It is anticipated that the funding of the GWOPs Alliance will come from international and donor sources and from membership sources. Initially, however, all its funding will come from international sources, but the levels of such funding should progressively decline as membership-based funding progressively increases.

In addition, a solidarity fund will be created offering the possibility of northern utilities (and its customers) to contribute to the Global WOP Alliance.

Funding of the activities of the GWOPs Alliance will be channeled through the UN-HABITAT Trust Fund. In this context, the Executive Director of UN-HABITAT has, based on the recommendation of the Advisory Board, approved a financial contribution from the Trust Fund. Efforts are underway to solicit external donor support, and approaches have been made to DFID, France and Germany, amongst others. There will be regular annual reporting of the WOPs activities, along with annual auditing of disbursed amounts.

### **Budgeting Cycle**

It is intended that a three-year budgeting cycle will be used by the Global WOPs Alliance. Initially, however, there will be a one-year budget for the first year. Subsequent budgets will be prepared on the basis of a three-year rolling plan.

The total budget for the first three years of operation is US\$6,970,000. A summary breakdown is as given in the Table below:

### **Estimated 3 Year Budget for the Global WOP Alliance**

| Item   | 1 <sup>st</sup> Year<br>(US\$) | 2 <sup>nd</sup> Year<br>(US\$) | 3 <sup>rd</sup> Year<br>(US\$) | Total<br>(US\$) |
|--|--------------------------------|--------------------------------|--------------------------------|-----------------|
| UN-HABITAT*: Core Staff  | 500,000                        | 600,000                        | 700,000                        | 1,800,000       |
| WOP Office Set up and Expenses   | 200,000                        | 250,000                        | 300,000                        | 750,000         |
| Support to Regional WOP activities   | 600,000                        | 700,000                        | 800,000                        | 2,100,000       |
| Organisation of Annual Global WOP<br>Alliance Convention   | 150,000                        | 150,000                        | 150,000                        | 450,000         |
| Network Development (including web based and communication tools)  | 250,000                        | 300,000                        | 350,000                        | 900,000         |
| Feasibility Studies (and updating) on<br>Financial Instruments and Capacity<br>Building of Water Operators | 300,000                        | 100,000                        | 100,000                        | 500,000         |
| Total  | 2,000,000                      | 2,100,000                      | 2,400,000                      | 6,500,000       |
| Miscellaneous (10% of Total)   | 150,000                        | 150,000                        | 170,000                        | 470,000         |
| Total  | 2,150,000                      | 2,250,000                      | 2,570,000                      | 6,970,000       |

<sup>\*</sup> UN-HABITAT contribution from the WATSAN Trust Fund.



### **Acronyms**

ACWUA Arab Countries Water Utilities Association

AfWA African Water Association

AIDIS Interamerican Sanitary and Environmental Engineering Association

CBO Community-based Organisation

COA Compendium of Actions

GWOP Global Water Operators Partnerships

GWP – ADB Global Water Partnerships- Asian Development Bank

HAP Hashimoto Action Plan

IB-NET International Benchmarking Network
IFI International Financing Institution

IT Information Technology
IWA International Water Association
LAC Latin America and the Caribbean
MDG Millennium Development Goal
NGO Non-governmental Organisation
SEAWUN Southeast Asian Water Utilities Network

UN-HABITAT United Nations Human Settlements Programme
UNSGAB United Nations Secretary-General's Advisory Board

WATSAN Water and Sanitation
WHO World Health Organisation
WOP Water Operators Partnerships
WSP Water and Sanitation Programme
WSP – AF Water and Sanitation Program – Africa





### Contacts:

Bert Diphoorn
Director (Ag)
Human Settlements Financing Division
United Nations Human Settlements
Programme (UN-HABITAT)
P.O. Box 30030, Nairobi, Kenya
Tel: (254-20) 7625420

Fax: (254-20) 7623588

E-mail: bert.diphoorn@unhabitat.org

Graham Alabaster Chief Water and Sanitation Section I Water, Sanitation and Infrastructure Branch United Nations Human Settlements Programme (UN-HABITAT) P.O. Box 30030, Nairobi, Kenya Tel: (254-20) 7623054, 7623048 Fax: (254-20) 7623588

E-mail: graham.alabaster@unhabitat.org

Andre Dzikus Chief

Water and Sanitation Section II
Water, Sanitation and Infrastructure Branch
United Nations Human Settlements
Programme (UN-HABITAT)
P.O. Box 30030, Nairobi, Kenya
Tel: (254-20) 7623060, 7625082

Fax: (254-20) 7623588

E-mail: andre.dzikus@unhabitat.org