



Water Utility Partnership **Utility PIP Framework**

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1. Introduction

This framework is based on the findings of a project funded by Swedish International Development Agency (SIDA) comprising two phases: the first phase was to select and audit representative African utilities to determine the status of their operation and management regimes; and phase two was to produce Performance Improvement Plans (PIPs) for addressing performance related issues revealed in the audit.

The framework is based on the experience of the six participating utilities (see Box 1) of producing relevant PIPs. Although they represented organizations of different sizes, cultures and procedures, they identified a number of shared problems and themes relating to improving performance, such as:

- Long-term financial viability
- Commercial management
- Tariff levels and structures
- Long-term financial planning
- Budgets and accounting
- Reduction of Unaccounted for Water (UfW)
- Improved operation and maintenance of water treatment and distribution
- Improved operation and maintenance of sewage treatment and sewerage
- Effective management information systems
- Monitoring and evaluation (M & E) of key performance indicators
- Generic utility management issues comprising:
 - Mandate and mission
 - Key roles and responsibilities
 - Management structures and effective delegation
 - Customer service
 - Human resources
 - Capital investment
 - Financial management.

The above problems and themes may also be common to other utilities. The framework described here is therefore intended to assist other utilities in addressing these, and other issues related to improving performance.

2. What is a Performance Improvement Plan (PIP)?

A Performance Improvement Plan (PIP) is a comprehensive strategic work plan developed to address a variety of utility management issues, with the aim of improving utility performance and enabling the utility to achieve its short, medium and long term objectives. One of these objectives may be improving services to the urban poor.

A PIP enables the development of a longer term view of utility management, while at same time ensuring that the day-to-day issues are attended to. It involves the planned application of utility resources to achieve these aims.

The PIP should encompass the two main types of planning – strategic and tactical.

Box 1: Participating utilities

1. Kisumu Water and Sewerage Company (KIWASCO), Kisumu, Kenya
2. Ministère de l'Energie et de l'Hydraulique Société Nationale de Distribution d'Eau (SNDE), Brazzaville, Congo.
3. Mwanza Urban Water and Sewerage Authority (MWAUWASA), Mwanza, Tanzania.
4. National Water and Sewerage Corporation-Entebbe (NWSC), Entebbe, Uganda.
5. Société Nationale des Eaux du Benin (SONEB), Cotonou, Benin.
6. Water and Sewerage Authority (WASA), Maseru, Lesotho.

A Strategic Plan covers a period beyond the next fiscal year, usually the next three to five years. This is important as strategic planning ensures that a utility operates in the most effective way, maximizing its chances of success and survival. If an organization is not operating effectively, it is far less likely to succeed and its survival is threatened. An example of this could be a Corporate Plan.

A Tactical Plan is an in-depth operational plan that covers actions to be taken, by whom, during a short-term planning period of usually one year or less. It is important that managers distinguish strategic from tactical considerations. Table 1 below shows that the most effective and efficient combination is effective strategic planning and efficient tactical planning, if an organization is to thrive.

Table 1. Strategic and tactical planning: Impact of effectiveness and efficiency on organisations.

STRATEGY (Doing the right things)			
		Ineffective	Effective
TACTICS (Doing things right)	Efficient	DIE (Slowly)	THRIVE
	Inefficient	DIE (Quickly)	SURVIVE

Source: Wilson, R.M.S. and C. Gilligan (1998)

A PIP is a road map to achieve stated utility objectives, and should be able to:

- Define the scope of the utility's activities in terms of what it will do, and what it will not do
- Match the utility's activities to the environment in which it operates, so that it optimizes opportunities and minimises threats
- Match the utility's activities to its resource capacity such as staff, finance, infrastructure, technology etc.

The potential benefits of developing a PIP may be summarized as:

- It can bring out structural deficiencies in the utility
- It leads to clear understanding of the utility's vision, mission and objectives
- It aligns the process of corporate strategic planning
- It creates a platform for common understanding and focus
- It creates a link between policies and plans for implementation

- It could trigger enabling legislation
- It enhances accountability and transparency
- It creates confidence among internal and external stakeholders
- It provides a benchmark for the organization through the monitoring and evaluation of policy
- It is a tool to implement significant process improvements and changes.

3. The process of developing a PIP

3.1 Who should be involved?

Within the utility, a focal person should be appointed whose role is to lead communication, organization and delivery of the PIP development. In general, although the process should be participative, involving staff of all levels of seniority, gender, discipline and age, and a team of senior managers from different disciplines within the utility should be formed, with responsibility for the PIP preparation. One of the participatory utilities, Kisumu, assigned a 'Champion' with responsibility for moving the process forward and for data collection, analysis, preparation of reports and coordination of regular meetings with key staff to review progress and identify future actions.

3.2 A stepwise approach

A PIP should involve a consideration of the following questions:

1. Where are we now?
2. Where do we want to be?
3. How might we get there?
4. How can we ensure success?

3.2.1 'Where are we now?'

To answer this question requires a comprehensive and objective audit and review of the current state of utility performance and practice, measured against key performance indicators. The utility SNDE also included a consideration of the question 'Where have we come from?' This allows a utility to assess whether service has improved, has worsened or is unchanged over time and to understand what the reasons are behind that evolution.

Data about 'Where are we now?' can be obtained using relevant appraisal techniques such as Strengths-Weaknesses-Opportunities-Threats (SWOT), Political-Economic-Social/Cultural-Technological (PEST) and Problem Tree analyses, as they assist in understanding and summarizing the institution's environment and performance. A SWOT analysis identifies the organizational Strengths, Weaknesses, Opportunities and Threats, and aims to develop a set of key factors for good utility management. It allows an organization to match its resources and capabilities to the competitive environment. Potential areas for consideration are:

- Mandate and mission
- Key roles and responsibilities
- Management structures and effective delegation
- Effective management information systems
- Customer service
- Human resources
- Operations and maintenance
- Capital investment
- Financial management.

A PEST analysis considers Political, Economic, Social/Cultural and Technological issues that could affect strategic development. This ensures that a PIP is aligned with any changing circumstances relating to these areas, avoids unrealistic or untenable strategies due to external circumstances, and helps adapt to the external realities.

An example of a PEST analytical framework for environmental auditing is Table 2 below:

Table 2. PEST analytical framework.

<p>POLITICAL/LEGAL FACTORS</p> <ul style="list-style-type: none"> • Legislative structures • Monopoly restrictions • Political and government stability • Political orientations • Taxation policies • Employment legislation • Foreign trade regulations • Environmental protection legislation • Pressure groups • Trade union power 	<p>SOCIO-CULTURAL FACTORS</p> <ul style="list-style-type: none"> • Demographics • Lifestyles • Social mobility • Educational levels • Attitudes • Consumerism
<p>ECONOMIC FACTORS</p> <ul style="list-style-type: none"> • Business cycles • Money supply • Inflation rates • Investment levels • Unemployment • Energy costs • GNP trends • Patterns of ownership 	<p>TECHNOLOGICAL FACTORS</p> <ul style="list-style-type: none"> • Levels and focuses of government and industries R&D expenditure • Speed of technology transfer • Product life cycles • Joint ventures

Source: Wilson, R.M.S. and C. Gilligan (1998)

A problem tree analysis is a tool which assists in analysing an existing situation, through the identification of the problems related to the issue under investigation, and ordering these problems by highlighting the cause and effect relationships in a diagram or problem tree. The purpose of problem tree analysis is to identify real, important and priority bottlenecks related to the issue under investigation, e.g. lack of staff motivation. Problem analysis is vital for the quality of planning since it maps out the course of future interventions. A mistake at this stage will affect the entire planning process, as well as the way the intervention is implemented and its results. A problem tree uses the analogy of a tree with the trunk representing the core problem. The branches and twigs are the effects and the roots are the causes of the situation, which is perceived as a negative state. The problem tree is developed by the participants in an orientation workshop or by those tasked with planning.

3.2.2 'Where do we want to be?'

Based on the information collected in the situation analysis, objectives and targets for the utility can be developed and clarified, derived from the utility mission and vision, and underpinned by its mandate. Performance standards and targets should be agreed, which are SMART (Specific, Measurable, Achievable, Realistic and Time-bound). For instance, SNDE, one of the participating utilities, used the results of the SWOT analysis to define medium and long term realistic targets so as to:

- Correct weaknesses;
- Reinforce strengths;
- Prevent the threats;
- Seize the opportunities; and
- Realize the vision.

Box 2: The performance objectives of NWSC Entebbe Area in 2005

1. Apply best practice management techniques that ensure overall reduction of non-revenue water from 30-20% by 2009.
2. Institute measures that will significantly increase annual revenue to Ush 5 billion from the current Ush 1.9 billion and ensure 100% compliance with WHO standards.
3. Ensure value for money capital investments with a payback period of not more than 15 years.
4. Carry out effective process control to ensure quality at all stages of water production, water supply and sewage treatment and ensure 100% compliance with WHO standards.
5. Ensure viability of NWSC Entebbe through maximization of revenues and optimization of costs to no more than 45% working ratio level.
6. Develop and implement an integrated Management Information System that supports and addresses business needs of the Entebbe Area.
7. Promote good customer service and ensure a customer satisfaction level of at least 98%.
8. Put in place systems that will ensure increased services coverage, especially to low income earners, from 64-95%.

Box 2 shows performance objectives highlighted by NWSC:

All of the six project utilities included in their plans specific targets to increase service coverage in terms of both water and sewerage. This achievement has a major impact on the poor in terms of health, the burden on women and children of collecting water, and the high costs paid to private water vendors.

3.2.3 'How might we get there?'

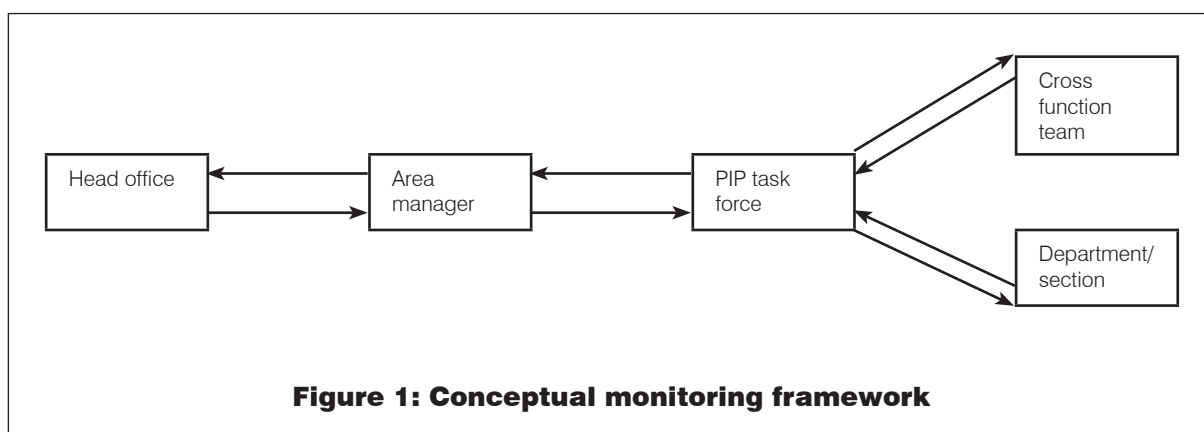
There are a number of critical success factors that contribute to effective and efficient utility management, against which each utility should assess itself and address identified areas of weakness appropriately. Strategies and concrete actions should be formulated to address the deficiencies. These action plans comprise the largest component of the PIP. More details may be inserted in the annexes. The proposed actions should be specific, measurable, achievable, realistic and time-bound. The action plans should cover all aspects of utility management, such as:

- Roles and responsibilities and review of existing organizational structure
- Human Resource Management (HRM) strategy
- Management Information Systems
- Customer services management strategy
- Operation and maintenance management strategy
- Reduction of UFW strategy
- Capital investment programme
- Financial management strategy.

For further details of the action plans, please see Section 4.

3.2.4 'How do we ensure success?'

In order to ensure the success of a PIP, it is important to carry out continuous monitoring to assess the performance improvement progress and its external factors at all levels, providing feedback using appropriate reporting mechanisms. This enables management to identify actual and potential success and failure early enough to facilitate timely adjustments.



An example monitoring framework is provided by NWSC (Figure 1).

Other useful elements of the NWSC monitoring mechanism are:

- All activities are initiated and implemented by a team from the section in charge or a cross function team composed of members with the right skills from different sections. Each team feeds back on a monthly basis.
- The PIP Task Force is made up of Heads of Sections responsible for coordinating activities and evaluating performance in line with the agreed targets on a monthly basis. This will report to the Area Manager, preparing quarterly and annual progress and performance reports.
- The Area Manager oversees the implementation of the PIP as the accounting officer and forwards reports as appropriate.
- The Research, Monitoring and Evaluation Department (Head Office) provides strategic guidance on the effective implementation of the PIP.
- Incentives are paid monthly to sections achieving agreed performance targets for a particular month. For each staff member, this represents 150% of their basic monthly salary.

The areas for formal reporting by MWAUWASA are the progress of PIP implementation, external factors and impact and effectiveness:

Table 3. The scope of MWAUWASA's monitoring programme.

Levels	Progress/external factors	Impact/effectiveness
Overall objectives		Relevancy/impact
Targets		Extent and effectiveness of the achievement
Results	Extent of achievement of results	Sustainability
Activities	Carrying out of activities	Efficiency of activities
Methods	Methods used	Efficiency and effectiveness of the methods used
Assumptions	Changes in environment	

The questions posed by MWAUWASA are:

1. Will the external factor be important to success?
2. Is the external factor likely to occur?
3. Is it possible to redesign the strategies and targets if required by external factors?

For MWAUWASA, the M&E team comprises those with technical skills and knowledge (including design, maintenance, regulation, utility management) and those with leadership skills (communication, organization, motivation, decisiveness and interpretation).

Feedback of the evaluation is useful to discuss and agree actions required; to disseminate findings and recommendations; and to operationalize lessons learned. Feedback methods may vary but as MWAUWASA found, operationalizing lessons learned can require organizational behaviour change, with rewards for some staff and encouragement and support for others.

4. The PIP structure

It is difficult to prescribe how a PIP should be structured, as the contents depend on the context in which it is developed. However, looking at the PIPs developed by the five utilities that participated in the WUP/SIDA project, the following generic structure could be recommended:

1. Introduction

A short brief about the utility in question, covering a summary of its development and the reasons why the PIP is being prepared (e.g. to improve utility performance).

2. Statement of utility mandate, mission and vision

A clear mandate and mission. This section will consider how these might be mainstreamed and communicated effectively to internal and external stakeholders

3. Utility objectives

These should be developed from the vision and mission, underpinned by the mandate. SMART targets should be set for each objective and these should contribute to their achievement.

4. Situation analysis

Where are we now? A comprehensive audit using indicators to describe its current status, including, for example, results of SWOT, PEST and Problem Tree analysis. Examples of performance indicators are shown in Annex 6.1.

5. PIP objectives and timeframe

Where do we want to be and by when? Agreed performance indicators, standards and targets should be stated, along with any assumptions made. Examples of indicators are shown in Annex 6.1.

6. Performance improvement strategies

This answers the question how might we get there? Several important sub-headings fall under this:

- Roles, functions and responsibilities in the utility management structure should be identified, reviewed and allocated to specific departments, divisions and sections, without duplication, in order to better deliver the utility objectives and to improve the existing structure. This may involve revisions to the management and organization structure.
- Human resource management strategy covering staff selection, management, development, conditions of service, salary structures, promotions, motivation, incentives and penalties, consistent with a commercially oriented utility.

- Management Information Systems (MIS) require a review of existing information technology in the light of objectives and targets and, if necessary, a proposal of a (more) suitable MIS for the utility. Effective Management Information Systems include customer data, distribution system data, billing systems etc.
- Communication system- internal (among staff, divisions, sections) and external (with customers, suppliers and other stakeholders)
- Customer services management strategy, including customer identification and management, with stakeholder agreement. This involves:
 - knowing the utility's customers and keeping up-to-date records;
 - linking the customer database with the financial management system;
 - targeting and serving the customer with utility services;
 - maintaining communication with customers;
 - developing and agreeing a human resources strategy (staff motivation, incentives, training, structures);
 - developing and agreeing Operations and Maintenance strategy (policies, objectives, schedules, monitoring); and
 - developing and implementing an agreeable capital investment programme with key stakeholders such as Government and financiers, to avoid unplanned and uncoordinated developments.
- **Operations and Maintenance management strategy** and systems (policies, objectives, schedules and monitoring) to deliver customer services according to the agreed Strategy.
- **Capital investment strategy** based on an analysis of existing infrastructure and projections made for investment needed to meet stated objectives and designed to meet customer demand for utility services.
- **Financial management strategy** including financial objectives, expenditure and revenue budget estimates, financing sources, procurement policy, cost recovery policy, tariff structures and a summary of financial implications and management of the PIP, including expenditure and revenue budget estimates. Annex 6.2 shows a typical method of developing a financial management strategy using a financial model.
- **Reduction of non-revenue water.** One of the main points of focus of a PIP is to achieve a reduction in the percentage of UfW. Any effective plan to reduce Unaccounted for Water (UfW) does not focus purely on leakage but also includes 'apparent' or 'commercial' losses. Annex 6.3 shows a typical strategy recommended for reducing UfW. Other areas of consideration for achieving improvements in reduction of non-revenue water are:
 - reviewing/improving billing efficiency;
 - reviewing legal connection policy;
 - ensuring availability of appropriate materials;
 - knowledge exchange between utilities;
 - developing a customer focused approach to utility management; and
 - capacity building and knowledge acquisition.

Annex 6.4 shows a summary of action plans for reducing unaccounted-for-water for all the participating utilities.

Additional headings under Performance improvement strategies might include Revenue and collection; Water quality improvement strategy; Effluent quality improvement strategy; and Total quality management strategy.

7. Performance monitoring and evaluation

This describes monitoring mechanisms, performance review and evaluation criteria, and incentive and disincentive mechanisms. Objective performance indicators could be utilized to monitor the progress.

8. Appendices

This section presents detailed work plans (e.g. in the form of a matrix) over the planning horizon and other supporting documents. An extract from work plan drawn by NWSC Entebbe Area is shown in Table 4:

Table 4. Water quality improvement.

Issues	Strategies	By whom	By when	Cost
Lack of water quality	Work closely with Water Quality Manager to ensure quick implementation of the water safety plan.	AM/ HQTRs	Jun 05	Nil

5. References

Kisumu Water and Sewerage Company. (undated). *Informal Settlements Service Strategy*.

Mwanza Urban Water and Sewerage Authority (MWAUWASA). (undated). *Performance Improvement Plan (July 2004-June 2008)*.

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6. Annexes



Annex 6.1: Example performance indicator and ratios

Category	Indicator or Ratio	Formulae	Value in 200x	Value in 200x+1	Value in 200x+2	Target for 200x+3	Comments/ Assumptions
Water Production	Quantity of water produced	Volume treated/per target population					
	Quality of water produced	Percentage samples acceptable					
	Production Factor	Energy & Chemicals costs as % of Op-Costs					
Water Delivery (for whole city)	Target Population						
	Average no. of people/ connection	Total population/no. of connections					
	Standpipe use	% of population who use standpipes or kiosks					
	Service delivery (use)	% of people who use house or yard connections					
Efficiency	Supply hours	Average supply hours per day at acceptable pressure					
	Unaccounted for water	Percentage of water paid for/water produced					
	Maintenance efficiency	Frequency of burst/km pipes					
	Maintenance efficiency	Average downtime of electromechanical plant					
	Maintenance spending	% maintenance expenditure of total operating expenses					

Annex 6.1: Example performance indicator and ratios ... continued

Category	Indicator or Ratio	Formulae	Value in 200x	Value in 200x+1	Value in 200x+2	Target for 200x+3	Comments/ Assumptions
Consumption	Quantity of water consumed per person	Water consumed/ served population					
	Working meters	Percentage of working consumption meters					
	Quality of water delivered	Percentage samples acceptable					
Sewerage	Service Coverage	Percentage population connected to sewers					
		% population with acceptable on-site sanitation					
	Maintenance	Freq. of failure/km sewers					
Effectiveness	Treatment	% wastewater treated					
	Extent of water related diseases	Diarhoea /cholera/ typhoid cases per million per year					
	Customer satisfaction surveys	Proportion customers questioned expressing satisfaction					
Productivity	Staffing levels	Staff per thousand connections					
		Staffing costs as % Op-Costs					

Annex 6.1: Example performance indicator and ratios ... continued

Category	Indicator or Ratio	Formulae	Value in 200x	Value in 200x+1	Value in 200x+2	Target for 200x+3	Comments/ Assumptions
Marketing	Socio-economic GNP per capita						
	Average Willingness to Pay to Vendors						
Financial Sustainability	Average domestic tariff						
	Commercial tariff						
	Sewerage tariff						
Profitability	Operating ratio	$\frac{\text{total operating cost}}{\text{total revenue}}$					
	Return on fixed assets	$\frac{\text{Profit after depreciation}}{\text{net fixed assets}}$					
Liquidity	Current ratio	$\frac{\text{current assets}}{\text{current liabilities}}$					
Creditworthiness	Debt equity ratio	$\frac{\text{long term loans}}{\text{equity}}$					
Financial Efficiency	Days receivable ratio	$\frac{365 \times \text{accounts receivable}}{\text{annual billed revenue}}$					
	Bill collection efficiency	$\frac{\% \text{ of bills collected}}{\% \text{ of bills issued}}$					

Annex 6.2: Financing plans

The Financing Plan should consider the financial implications and requirements necessary to achieve the PIP. A useful model is offered by SONEB (Table 5), which firstly described the financial operating environment, and secondly, the financial model used to capture all the forecasts and their interdependence.

The financial model

The main points of concern might be:

- Policy issues, in particular the impact of additional water production capacity and improvements to UfW on the availability of water and the resultant need to plan and proactively promote its sale and delivery
- The implications relating to any assumed composition of UfW between technical and commercial losses
- Service coverage i.e. population served
- Capital programme
- Income and expenditure and cash flow requirements
- Tariff setting
- Manpower planning
- Setting SMART targets.

The financial forecast and assumptions

The following elements may be included:

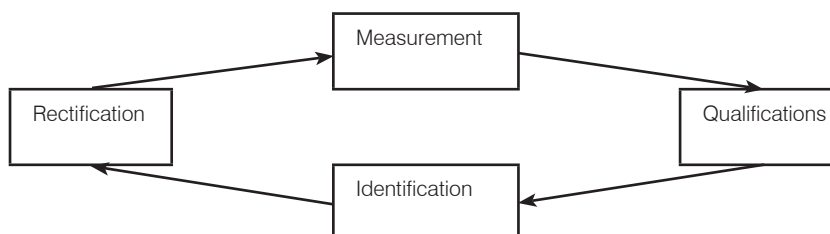
- Capital expenditure and financing plan
- Costs and tariffs
- Other principal assumptions
- Summary of financial results shows the key results from the above assumptions
- Commentary on the financial results.

Table 5. Example of a financial model drawn from the SONEB PIP

Supply and demand	
1. Water available for sale	<ul style="list-style-type: none"> • production capacity of all the works combined • production reliability • actual and future target levels of UfW
2. Annual demand/sales	<ul style="list-style-type: none"> • Each year takes the previous year as its start position
3. Demand	<ul style="list-style-type: none"> • Analysed by: <ul style="list-style-type: none"> – Industry – Commercial – Government – Domestic
4. Total population and service coverage	<ul style="list-style-type: none"> • Contains the population of the area for which the utility is responsible and a percentage estimate each year of population growth.
5. Utilization of water deliverable	<ul style="list-style-type: none"> • Shows what percentage of water produced and distributed is forecast as sales.
Water supply income	
1. Basis of calculation	<ul style="list-style-type: none"> • The tariffs are automatically multiplied by the volumes and numbers of connections in Supply and Demand including multiplying the monthly fixed charge by 12 to convert to annual figures.
2. Collection efficiency	<ul style="list-style-type: none"> • The percentage of the amounts billed that is expected to be collected.
3. Sewerage income	<ul style="list-style-type: none"> • Calculated from customer numbers, volumes and tariffs.
4. Operating costs (Opex)	<ul style="list-style-type: none"> • Staff • Electricity • Chemicals • Administration • Lease fee • Maintenance • Other
5. Capital programme (Capex)	<ul style="list-style-type: none"> • The programme is organized according to funding and entered on a scheme by scheme basis for each year.
6. Profit and loss account and cash flow	<ul style="list-style-type: none"> • Calculated by linking to the totals in: <ul style="list-style-type: none"> – Water income – Sewer income – Opex (Operating costs and depreciation) – Capex

Annex 6.3: Unaccounted for water plans

UfW Plans assist utilities to improve their performance in terms of reducing water loss. The following strategy is recommended:



This strategy applies equally to Apparent and Real Losses; accurate measurement and customer/billing data and water loss information are necessary.

UfW Pilot District Meter Area (DMA) Plans can be developed for each utility. The methodology used is:

1. To identify existing UfW reduction activities
2. In consultation with local operational staff, study the water network plans and identify potential DMAs
3. Visit the potential sites, check the geographical features, existing meters and/or chambers, (potential) boundary valves and possible restrictions (busy highways, private land, etc)
4. Collate data on the zone characteristics
5. Calculate the required meter size using meter manufacturer's guidelines
6. Evaluate the potential for pressure management
7. Install equipment
8. Mark boundary valves with a clear identifier
9. Update network plans
10. Record DMA data
11. Commission the DMA
12. Undertake an annual review to assess the effectiveness of the strategy.

The establishment of DMAs, routine verification of meters, analysis of flows into the DMAs, accurate billing, and regular water balance calculations (at DMA level) are the only effective ways to reduce unaccounted for water within the distribution system.

Annex 6.4: Summary of performance improvement plans for reduction of unaccounted for water

Utility	UfW Plan	Equipment Plan	Training Plan	Other Activity	Team Comments
NWSC (Uganda)	Reduce from 30 % to 15% by 2009	Agreed to purchase additional leak detection equipment	Additional training in proactive leakage detection will be necessary if UfW targets are to be achieved	Establishment of an UfW unit to concentrate on leak detection and repair	An ambitious target. Will be constrained by financial limitations rather than enthusiasm
KIWASCO (Kenya)	Reduce from 60% to 20% by 2008	Acknowledged the need for additional equipment	The Dedicated UfW unit will need training	Investigate meter reading estimates to see if realistic	A very ambitious plan, and unless considerable external support is available then targets unlikely to be achieved
WASA (Lesotho)	Reduce from 37% to 25% by 2009	No commitment in the Plan	No commitment in the Plan	Responsibilities of relative actions identified but target dates still to be established	Whilst UfW reduction is realistic, unlikely to be achieved until greater commitment to resources is given
MWAUWASA (Tanzania)	Reduce from 45% to 37% by 2008	Commitment to prior and bulk purchasing	An implied commitment	Now has a Operations and Maintenance Strategy Plan	A realistic reduction plan. Limited finance could constrain achievement
SONEB (Benin)	No targets set but an implied reduction to 25%	Commitment to purchase from 2005 Budget	Incorporated in 2005 Budget	Responsibility and targets set	Progress will be dependent upon adequate finance being available
SNDE (Congo)	No targets set but an implied reduction to 25%	Some equipment acquired but additional necessary	An implied commitment	Responsibility and targets set	Severe financial constraints limit what may be possible

Source: STWI/WEDC (2005)



