

## Title:

The interface between financial performance and sector regulation compliance, towards sustainability.

## Synopsis:

The paper looks at the water services regulatory compliance requirements versus financial compliance to inform overall sustainability. Financial sustainability cannot be attained when surety of supply at appropriate tariff with related service standards cannot be secured. The focus will be on Water Service Authorities in South Africa.

## Introduction

There is an increasing awareness in South Africa that water is a limited resource and that careful management should be applied when dealing with this scarce resource. Water lost from potable water distribution systems remains a major issue when examining the overall water wasted throughout the country. It is of utmost importance that Water Service Authorities (WSAs) in South Africa have a comprehensive understanding of their levels of leakage and other aspects of non-revenue water and begin to implement measures to reduce them.

There has been extensive reform in order to attune it more closely with the new realities local service provision in the post-apartheid era. An important component of this process has focused on municipal budgetary reform. This paper looks at the financial sustainability in a comparative analysis approach. The comparison will be between the Auditor General Results, Regulatory Performance Measurement System results, and Municipal Strategic Self-Assessment results

The figure below represents a modification to the IWA water balance for South African circumstances. It was felt that this modification is necessary because water that is billed for is not necessarily automatically paid for by users in South Africa.

**South African context- Water Balance:**

System Input Volume	Authorised Consumption	Billed Authorised Consumption	Billed Metered Consumption		Potential Revenue Water	Free basic
		Unbilled Authorised Consumption	Billed Unmetered Consumption	Unbilled Metered Consumption		Unbilled Unmetered Consumption
Water Losses		Apparent Losses	Real Losses	Unauthorised Consumption	Non Revenue Water	Non- Recovered revenue
				Customer Meter Inaccuracies		
		Leakage on Transmission and Distribution Mains				
		Leakage on Overflows at Storage Tanks				
		Leakage on Service Connections up to point of Customer Meter				

**An Overview of each of the above mentioned system**

⊕ Regulatory Performance Management System Results

The Regulatory Performance measurement System (RPMS) is a DWA initiative which was rolled-out nationally in 2008. The system is a regulatory tool that measures Water Services Authorities on 11 key performance indicators (KPIs) derived from the National Water Services Regulatory Strategy. Indicators by definition are used to point to areas of strength and weakness in an organisation, through the use of KPI scores. The KPIs are broken down into component measures to refine measurement of broader areas of business as described by the 11 KPIs. The aim of the system is to determine the compliance of Water Services Authorities (WSAs) with national norms and standards and to identify performance and performance trends, and consequently improving business practise and service delivery in the water sector.

The data provided for 2009-2010 revealed significant weaknesses in the areas of water use efficiency, financial performance and strategic asset management. Component analysis of **Financial Performance (KPI 9)** indicates that the weakest area is ‘average debtor days’. In terms of Strategic Asset Management (KPI 10) the weakest areas are replacement saving and operation maintenance expenditure.

The objectives of the system are as follows:

- To improve business practice with regard to water services delivery in local government
- To improve local government compliance with national standards and norms
- To improve the impact of DWA's regulatory processes through ensuring that responses to non-compliance are uniform and standardized across South Africa
- To ensure that the data collected from local government is verifiable, accurate and useful to other processes, and will deliver a benefit to local government through strategic feedback on problem areas

#### NATIONAL PERSPECTIVE (South Africa)

KPI No	Description	KPI Score 09/10	KPI Score 08/09	Regional KPI Score	WSA Regional Comparison	Required Score	Compliance Assessment
1	KPI 1: Access to water supply	3.325	3.23	3.174	0.151	3	
2	KPI 2: Access to sanitation	3.445	2.842	3.445	-0.001	3	
3	KPI 3: Access to Free Basic Water	4.061	3.774	4.158	-0.098	3	
4	KPI 4: Access to Free Basic Sanitation						
5	KPI 5: Drinking Water Quality Management						
6	KPI 6: Wastewater quality management						
7	KPI 7: Customer service quality	4.1	3.5	3.093	1.007	3	
8	KPI 8: Institutional effectiveness	4.958	4.258	3.187	1.771	3.5	
9	KPI 9: Financial performance	3.464	1.396	1.993	0.221	4	
10	KPI 10: Strategic asset management	4.083	4.5	3.147	0.937	3	
11	KPI 11: Water use efficiency	0	0	0.571	-0.571	3	

#### REGIONAL PERSPECTIVE (Limpopo province)

Level: Regional - Limpopo						
KPI No	Description	Regional KPI Score	National KPI Score	Regional - National Comparison	Required Score	Compliance Assessment
1	KPI 1: Access to water supply	3.634	3.334	0.3	3	
2	KPI 2: Access to sanitation	3.209	2.565	0.644	3	
3	KPI 3: Access to Free Basic Water	4.372	4.063	0.309	3	
4	KPI 4: Access to Free Basic Sanitation					
5	KPI 5: Drinking Water Quality Management					
6	KPI 6: Wastewater quality management					
7	KPI 7: Customer service quality	2.641	2.967	-0.326	3	
8	KPI 8: Institutional effectiveness	3.569	3.109	0.46	3.5	
9	KPI 9: Financial performance	1.767	2.011	-0.244	4	
10	KPI 10: Strategic asset management	3.083	2.329	0.754	3	
11	KPI 11: Water use efficiency	0.455	0.604	-0.149	3	

## 🌱 Municipal Strategic Self-Assessment Results

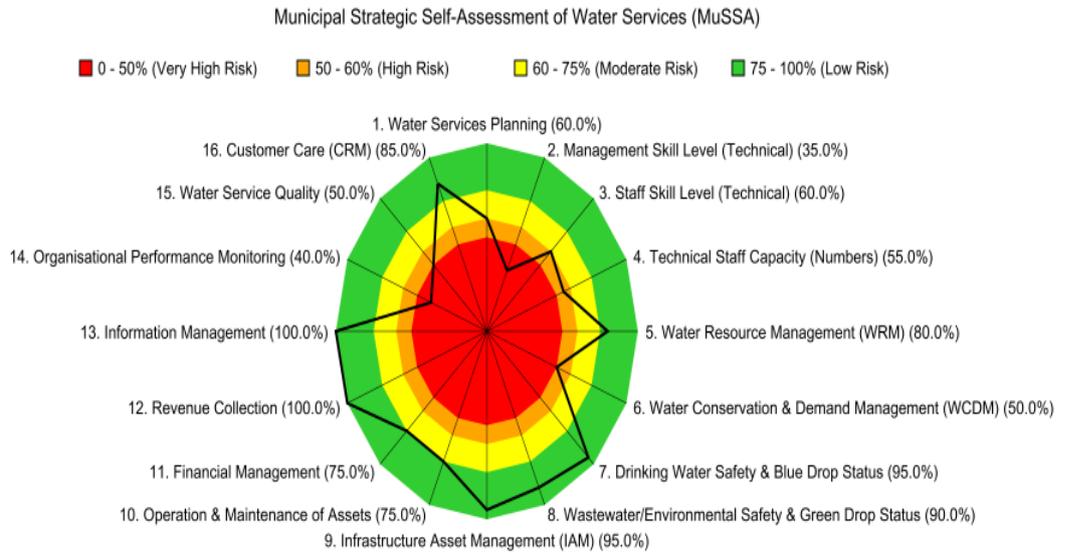
The MUSSA is a web-based municipal strategic self assessment, management and development tool used to guide the rapid self-assessment of the overall Water Services Business Health status, and specifically highlight explicit areas of vulnerabilities (and the root cause thereof) threatening the municipalities ability to provide sustainable, effective and efficient water services delivery. It is based on a non-audited self-assessment of the municipality by the municipality across 16 key Vulnerability Indicators, and thereby assists the municipality to identify development gaps for appropriate executive and legislative actions. It also provides informative outputs in an easily understandable common language of communication between technical and non-technical municipal officials and office bearers, whilst supporting and informing national regulatory needs, national sector planning needs, and monitoring and evaluation of the sector.

The MuSSA can be updated at any time by the municipality, yet is used as an annual municipal survey mechanism by the national Department of Water Affairs. DWA uses the annual MuSSA survey outputs as a means to engage with the municipality and sector partners in order to put in place a Vulnerability Abatement Plan addressing the issues raised via the MuSSA. The main Vulnerability Abatement planning phases covered include (i) defining the current situation, (ii) mapping where the municipality would like to be, (iii), scheming requisite strategic actions, and (iv), putting in place mechanisms for gauging success. It is a complement to regulatory based measurements, such as Blue Drop, Green Drop and the RPMS by assisting municipalities, water services sector partners and DWA to identify critical municipal areas requiring support.

The objectives of the system are as follows:

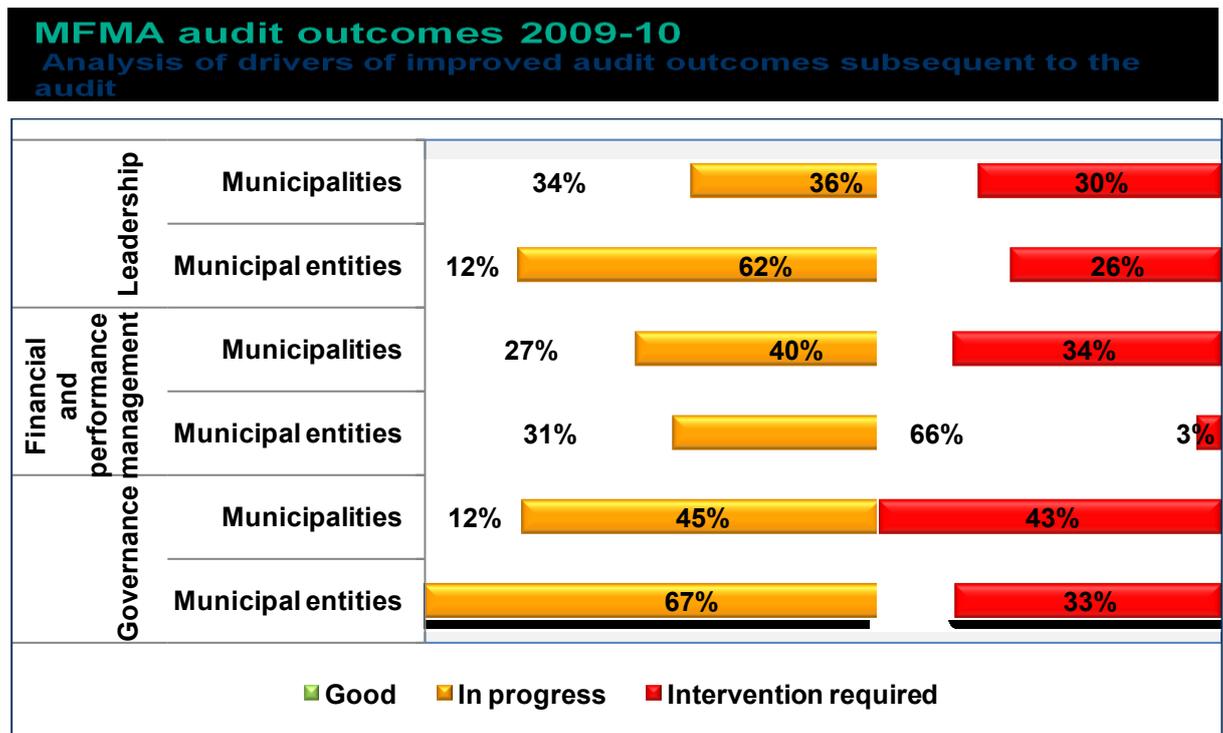
- Support Local Government development through assessing municipalities Water Services Business Health and the flagging of vulnerabilities.
- Benchmark the status and vulnerability of Local Government Water Services Business Health against local, regional & national established standards.
- Inform regional & national policy-makers on the state of Water Services Business Health in Local Government.
- Contribute towards the implementation of South Africa's national Local Government Turn around Strategy.

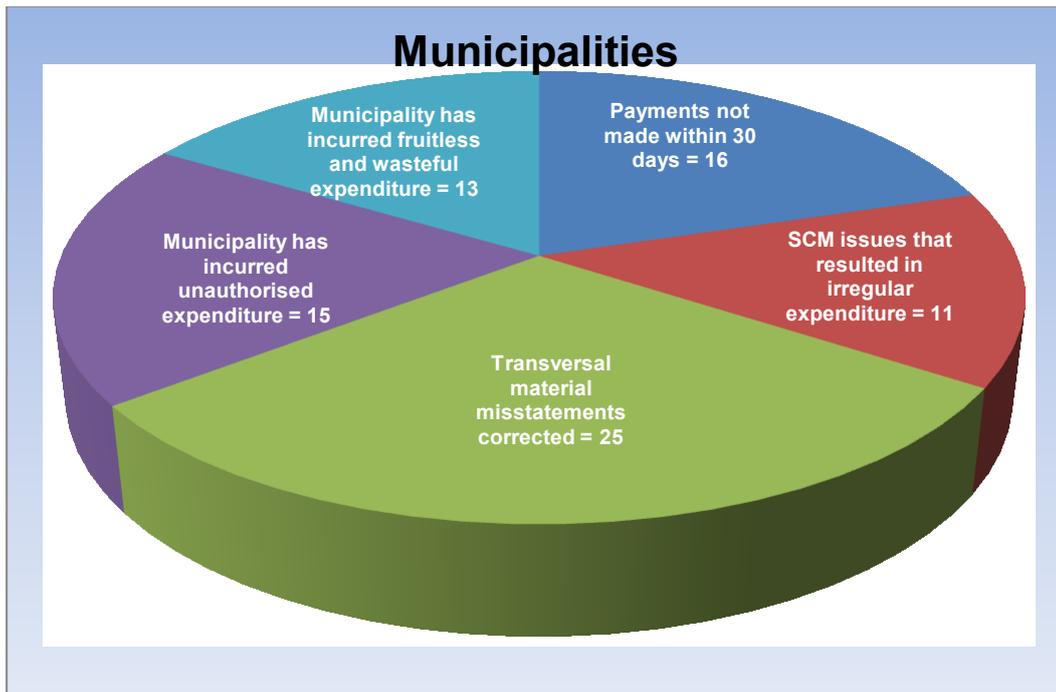
**REGIONAL Perspective:**



**Auditor-General results**

The Auditor-General has a constitutional mandate and, as the Supreme Audit Institution (SAI) of South Africa, it exists to strengthen our country’s democracy by enabling oversight, accountability and governance in the public sector through auditing, thereby building public confidence.





**The objectives of the system are as follows:**

Preparation and submission of audit reports is the logical outcome of every audit. According to Article 163 of the Constitution, Auditor-General's reporting responsibilities are primarily directed towards providing the Parliament with information it needs to evaluate the performance of the Executive. However, the Public Finance and Accountability Act also gives Auditor General the responsibility to report to the Executive on any matter relating to management of Public Finances including any important irregularities revealed by audit.

The importance of the reports submitted by the Auditor-General to the Parliament and to the Executive cannot be over-emphasised. These summarise the findings of the audits performed by the Office of the Auditor-General and contain important and critical information for the parliamentarians and the Executive to act upon. Parliamentarians want relevant information on whether the objectives of specific programs and themes are being achieved or on how well the various Government agencies are doing.

## TARIFF SETTING

### INTRODUCTION

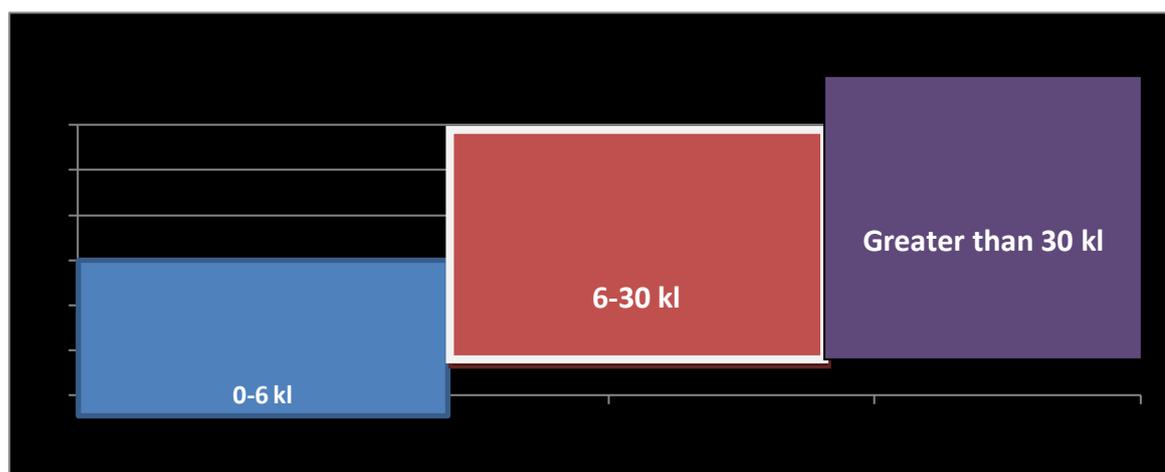
Section 10 of the Water Services Act (Act No. 108 of 1997) allows the Minister to set norms and standards for water services tariffs for Water Services Institutions (WSIs) when they supply potable water and sanitation services to citizens. The Act and the regulations were promulgated in 2002, with intention to guide WSI's on how to provide good services to citizens allowing them to decide how they actually set the tariffs.

The rule tries to promote tariffs that are:

- Fair to all citizens no matter where they live, what they do, how much they earn, etc. (socially equitable)
- All citizens can afford (financially viable); and
- Make sure that services can continue to be provided to citizens (environmentally sustainable)

At the same time, it was necessary to set certain rules for the most amount (maximum consumption rate) of water that may be used by households within the first block of the rising block tariff structure where the total amount of water used is not fixed (uncontrolled volume domestic connections).

### Tariff Structure



The tariff for the first block that is consumption between 0-6 kl per household per month, in a three-block tariff structure should be set as low as possible for affordability (set by the Water Service Institutions) and should be provided for free if a “Free Basic

Water” policy is being implemented. The second block is for “normal consumption” where the upper consumption limit of this block should be able to be accommodated within this block. The tariff charged for consumption in this block should ideally reflect the actual or average cost of water.

The third or top block is for “luxury consumption”. A household that uses water for luxury purposes such as for filling a swimming pool or that does not use water sparingly should be required to pay a higher than average price. The price should reflect the economic cost of water as a scarce resource.

### Example 1

The following example shows how to calculate the charge for different levels of use in a rising block tariff structure.

TARIFF BLOCK	CONSUMPTION LIMITS	TARIFF PER KILOLITRE
1	0 to 6 kl	FREE
2	Greater than 6 up to 30 kl	R2.50
3	Greater than 30 kl	R5.50

In this example, a household using 5 kl would pay no charge. A household using 20 kl in a month would get 6 kl for free and 14 kl at R2.50, with a total charge of R35.00 (R2.50 x 14). A household using 40 kl in a month would get 6 kl for free; 24 kl at R2.50 per kl and 10 kl at R5.50 per kl, with the total charge being R115.00 (R2.50 x 24 + R5.50 x 10).

### Calculating a tariff – Determination of Revenue Requirements

What regulation says:

A water service institution must, when determining its revenue requirements on which tariff for water services are based, take into account at least the need to-

- Recover the cost of water purchases;
- Recover overhead, operational and maintenance costs;
- Recover the cost of capital not financed through any grant, subsidy or donation;
- Provide for the replacement, refurbishment and extension of water services works; and
- Ensure that all households have access to basic water supply and basic sanitation.

Instead of Municipalities using the above scenario in calculating their tariff they simply look at how much they were charged per kl by Water Boards and add 5% to that and they regard that as their tariff. That's totally wrong and is not recommended rather use the proper tariff calculation as provided in the example above.

## Conclusion

It is believed that proper usage of the systems (Department of Water Affairs systems) discussed in this paper and provision of adequate data to the Auditor General as well as into those systems by Municipalities/ WSAs can improve the state of the Water sector. The other area that requires more attention is the Tariff setting, and during the tariff determination process users must be given time to input on the setting of the tariff. This in essence will uplift their willingness to pay as it usually prevails in particular cases. If proper tariff calculations can be followed instead of estimates, proper tariff collection mechanisms be determined, have a proper working relationship as well as willingness by all participating stakeholders, sustainability will then be certain.