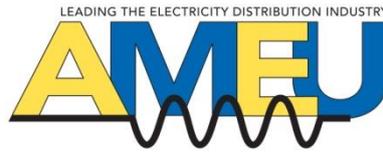


ASSET MANAGEMENT REGULATORY COMPLIANCE CHALLENGES



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1. Introduction

Asset management in utilities are exposed to a plethora of legislative and statutory requirements as well as a myriad of frameworks, guidelines, norms and standards in addition to other pressures for compliance. It is easy to lose sight of the actual service delivery function in trying to achieve compliance to these requirements. The Local Government Turnaround Strategy describes this dilemma as follows: *“Due to the onerous compliance regime (referred to above), many municipalities have tended to focus much of their energies on fulfilling compliance requirements rather than focusing on the critical issues of service delivery and enhancing performance.”* This paper attempts to describe these requirements and to find a common set that if met, will lead to a maximum level of compliance.

2. Background

The electricity industry all over the world is grappling with the challenges of providing access to clean, reliable and affordable electricity in addition to addressing major environmental challenges such as climate change. Government’s goal to extend access to electricity to all citizens of South Africa has not yet been met and communities across the country have expressed concerns about access to electricity services and the affordability and quality thereof. This paper is written against a backdrop of significant national concern over how to meet the growing demand for electricity, Eskom’s major increases in the price of electricity and municipal entities’ responsibilities for corporate governance and asset management.

Expectations in respect of Local Government are clearly stipulated in South African legislation. These range from the Constitution and the Bill of Rights to legislation developed specifically for local government such as the Municipal Structures Act, the Municipal Finance Management Act and the Municipal Systems Act. Moreover, strategic transformation imperatives in municipalities have to be aligned with national government priorities, such as the Five-Year Local Government Strategic Agenda (2006) and the Cabinet Lekgotla (2007) strategic priorities.

The factors influencing asset management are presented against an historical background of extensive reforms in the electricity sector since the 1980s – dating from the De Villiers Commission, to the Eskom Conversion Act of 2001, to the commitments by government to the separation of generation, transmission and distribution. The advent in 1994 of a democratic dispensation in South Africa resulted in refocusing

the electricity sector in order to respond to the electricity demands of the broader South African society which did not have the benefits from electricity.

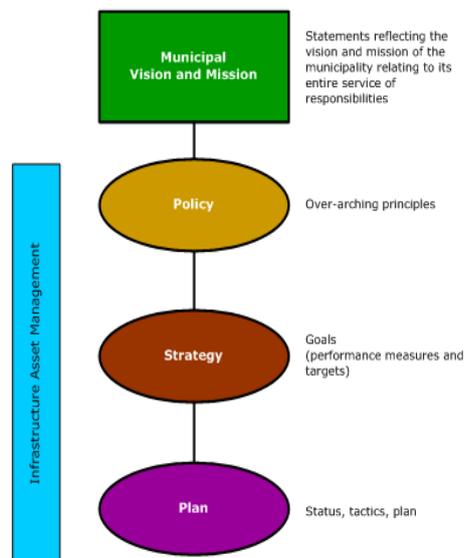
During May 2008 EDI Holdings presented to ASGISA the challenges pertaining to electricity distribution related asset maintenance, refurbishment and strengthening. Following the Electricity Distribution Maintenance Summit in 2008, EDI Holdings has developed a new Approach to Distribution Asset Management (with the acronym ADAM) that aims to identify and develop strategies to address maintenance, refurbishment and funding gaps. However, the skills shortage and funding to implement ADAM has hampered this and other processes.

3. Understanding the context of asset management

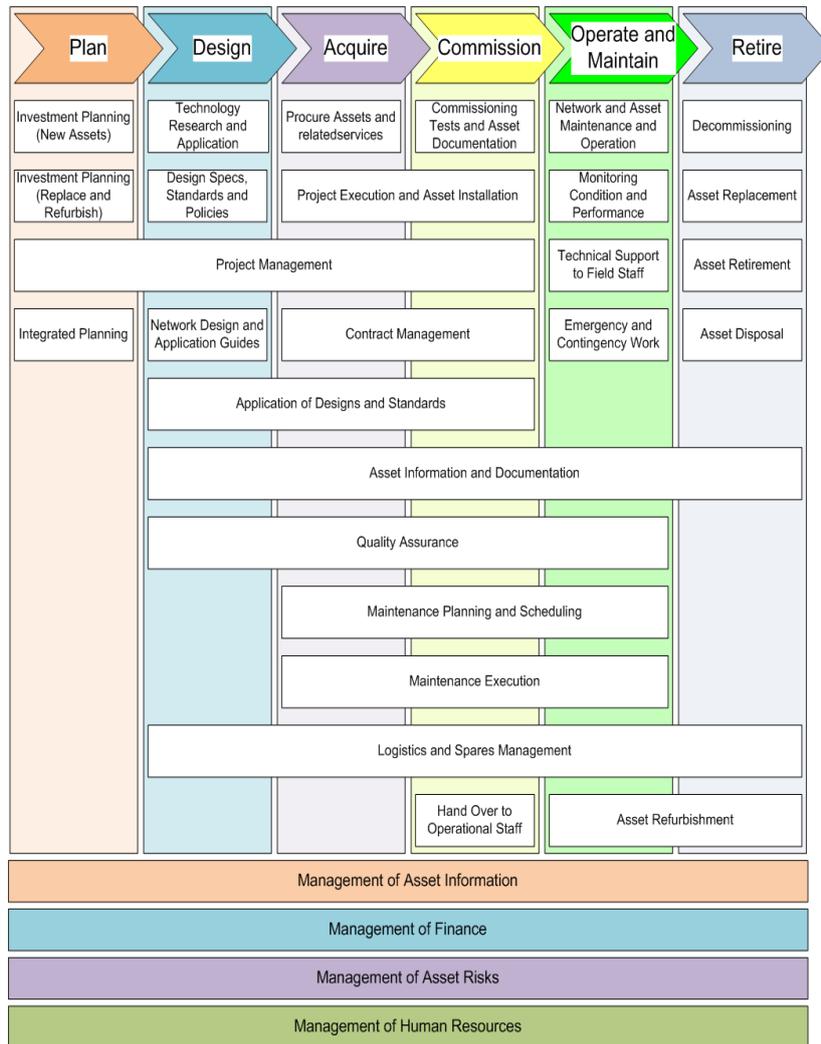
NRS 093-1 and PAS 55 define asset management as “*the systematic and coordinated activities and practices through which an organization optimally manages its physical assets, and their associated performance, risks and expenditures over their life cycle for the purpose of achieving its organisational strategic plan*”. It contains the following three basic elements.

-  **Asset Provision** – making sure that the most appropriate asset is acquired for a specific application and also making sure that the asset is effectively disposed of (in a responsible manner) at the end of its useful life.
-  **Asset Operation** – making sure that assets are operated in the most appropriate way that allows the asset to perform to its maximum capacity.
-  **Asset Care** – making sure that assets are looked after in the most appropriate way that will ensure continued performance at its originally intended design capacity.

The organisational context of asset management within municipalities is depicted in the following diagram.



The asset management process centres around the asset lifecycle and its intention is to ensure the delivery of a function at a minimum life cycle cost. The life cycle elements are described in NRS 093-1 and summarised in the following figure.



4. Asset Management Standards and Legislation

There are numerous acts, standards, guidelines and regulations all impacting on the management of a municipality’s assets. They have been developed to concretise government’s vision of municipal infrastructure, namely:

-  long-term sustainability and risk management;
-  service delivery efficiency and improvement;
-  performance monitoring and accountability;
-  community interaction and transparent processes;
-  priority development of minimum basic services for all; and
-  financial support from central government.

These main asset management drivers are:

-  PFMA/MFMA.
-  GRAP 17.
-  DPLG Guidelines for Infrastructure Asset Management in Local Government 2006-2009.
-  National Treasury Guidelines (various).
-  Regulator reporting requirements.
-  GIAMA (Currently not applicable to local government).
-  NRS 093-1: 2009 Asset Management of Electricity Infrastructure.
-  British PAS 55 standard.
-  ANZAC Infrastructure Maintenance Manual.

In addition, the following has a significant impact on asset management in a municipal environment:

-  OHS Act
-  Municipal Systems Act
-  Municipal Structures Act
-  Electricity Regulation Act
-  Electricity Act
-  Electricity Pricing Policy
-  ASGISA
-  National Treasury Asset Management Framework
-  Various National Treasury Regulations (R773)
-  NERSA Licensing Requirements
-  EDI Ringfencing Requirements
-  Internal Municipal Requirements (IDP, CMIP)
-  NRS 047 and NRS 048
-  COSO Guidelines for Risk Management
-  Environmental Management Framework
-  Environmental legislation
-  Medium Term Revenue and Expenditure Framework
-  Public Sector Risk Management Framework
-  Provincial Growth and Development Strategy
-  Provincial Spatial Development Framework
-  National Treasury Asset Management Framework
-  Sector Specific requirements i.e. water plans, energy efficiency plans, etc.
-  Industry Guide to Infrastructure Service Delivery Levels and Unit Costs (MIG)

These documents all contain legislation or guidelines that differ from each other. These differences are making it difficult to achieve regulatory and standards compliance in asset management. The remainder of this paper focuses on the commonalities between the requirements and highlights the differences hindering compliance.

5. Government Immovable Asset Management Act, No. 19 of 2007 (GIAMA)

GIAMA has been the focus of attention when asset management has been discussed. It applies to National and Provincial Government and organs of state, where "organ of state" means any department of state or administration contemplated in paragraph (a) of section 239 of the Constitution of the Republic of South Africa, of 1996, but excluding the department or administration in the local sphere of government. The act is not applicable to members of the AMEU at the moment, and thus will not be discussed in detail. It describes the principles of immovable asset management and stipulates that asset management plans must be compiled. It describes the contents of the asset management plans and the duties of officials as related to asset management.

6. Documents stipulating technical requirements

6.1 NRS 093-1: 2009 Asset Management of Electricity Infrastructure

NRS 093 is based on the British PAS 55: 2008 Asset Management. It is an adaptation of PAS 55 to cater for unique electricity related processes, but focuses less strongly on the strategic element of asset management. Up to now, only part 1 of NRS 093 has been published and accepted. Part 1 contains minimum requirements for asset management in the South African electricity distribution industry. It is envisaged that it will be followed by:

-  Part 2: Guidelines for implementation.
-  Part 3: Financial management of assets.
-  Part 4: Information systems requirements.

Financial management is not yet addressed, but the document does contain a section stipulating the compilation of an asset register. The set requirements fall short of compliance with MFMA and GRAP 17, however the information will form a comprehensive subset of MFMA/GRAP 17 requirements. It will need to be expanded to achieve full compliance.

The GRAP 17 guidelines state that a full verification of assets is required, while NRS only requires a condition assessment of critical assets. As for asset information, additional information over and above the specified NRS information will be required for GRAP compliance.

In general, NRS 093 focuses on assets specifically, not on the use of assets to achieve service delivery. Reporting on NRS 093 performance will be in accordance with the NRS 048-2 specification requirements. NRS 093 redefines the life cycle stages of assets, but compliance to NRS will ensure compliance to PAS 55 in this aspect.

6.2 NRS 047: Quality of Service and NRS 048: Quality of Supply

NRS 047 and NRS 048 do not specifically address assets, but compliance to the requirements of these specifications will be difficult to achieve without applying solid asset management principles. Their main thrust is the "customer experience" in terms of service and supply. Compliance to these specifications will

not ensure compliance to the conditions stated in other asset management related documents, but they do support all the other regulatory requirements.

6.3 Occupational Health and Safety Act No. 85 of 1993 (OHS Act)

Safety issues form an integral part of an asset management system and should be a built in function of the system. The OHS Act requires the “owner” to maintain a structure (including infrastructure) in such a manner that the structure remains safe for continued use. Asset management is a way to ensure compliance with the Act and its regulations.

In addition, the OHS Act requires the keeping of maintenance records. These records are to be made available to an inspector upon request.

Effective application of asset management principles will assist in compliance with the OHS Act and this act supports all other regulatory requirements. Compliance to the OHS Act will however not ensure compliance with other legislation.

6.4 Regulation 773 (NOTICE 1190 2008): Compulsory Norms and Standards for Reticulation Services

R773 does not seem directly asset related, but it will have a significant impact on the asset base. R773 was promulgated in response to the energy crisis and covers aspects of energy efficient lighting, hot water systems, heating, ventilation and cooling and the implementation of smart metering. These regulations are due for implementation by 1 January 2012, except for the sub regulations on energy efficient lighting which should have been implemented by 1 January 2010.

In addition, the regulation states that the supply of electricity to customers may only be reduced or controlled during capacity or network constraints. Load control to achieve savings on bulk purchases is not allowed.

The implication of these two factors in combination is an increase in capital expenditure requirements with its associated expenses and a simultaneous increase in the cost of bulk services. This will affect the affordability of the electricity service.

Compliance to this regulation will not be affected by or lead to compliance with any other legislation.

6.5 DPLG Guidelines for Infrastructure Asset Management in Local Government 2006-2009

This document draws on the Australian and New Zealand experiences as per the International Infrastructure Maintenance Manual. This document is at a more operational level than NRS 093. It introduces the concept of an asset hierarchy and proposes the use of straight line depreciation of assets.

The document utilises a different criticality measure as the one stipulated in NRS 093, implying that compliance to both documents can only be achieved by running parallel systems. In addition the proposed useful lives of assets differ from those used in other documents, for example the National Treasury Guidelines on Asset Management.

7. Documents stipulating financial requirements

7.1 Local Government: Municipal Finance Management Act No 56, 2003

The overarching objective of this Act is to secure sound and sustainable management of the fiscal and financial affairs of municipalities and municipal entities. It covers the full spectrum of municipal financial management and allocates certain roles and responsibilities to officials. There are a number of sections dealing with assets and asset management. The most relevant of these will be discussed.

Section 63 (1) states that the accounting officer of a municipality is responsible for the management of the assets of the municipality, including the safeguarding and the maintenance of those assets. This leads to the stipulations in section 63 (2) that the accounting officer must take all reasonable steps to ensure that the municipality has and maintains a management, accounting and information system that accounts for the assets and liabilities of the municipality; that the municipality's assets and liabilities are valued in accordance with standards of generally recognised accounting practice; and that the municipality has and maintains a system of internal control of assets and liabilities, including an asset and liabilities register.

The accounting officer must furthermore ensure that the municipality or municipal entity for each financial year prepares annual financial statements which fairly presents the state of affairs of the municipality or entity, its performance against its budget, its management of revenue, expenditure, assets and liabilities, its business activities, its financial results, and its financial position as at the end of the financial year.

Senior managers and other officials of municipalities are given the responsibility to ensure that the assets and liabilities of the municipality are managed effectively; that assets are safeguarded and maintained to the extent necessary; and that all information required by the accounting officer for compliance with the provisions of this Act is timeously submitted.

The format and contents of the asset register is prescribed in GRAP 17.

7.2 Standard of Generally Recognised Accounting Practice: Property Plant and Equipment (GRAP 17)

The **GRAP Implementation Guide for Municipalities 25 September 2008** is used as the main source of information for this section.

GRAP 17 focuses strongly on the compilation of the asset register for immovable assets. It states the following:

“Most municipal Assets Registers in respect of infrastructure assets are inadequate. This is due to historical factors and the use of the fund accounting system. Property, plant and equipment that are classified as “Infrastructure Assets” will typically be long-life assets. It is likely that such assets will need to be re-valued on a regular basis when accounting standards are updated, as depreciation is not an appropriate measure of the consumption of such assets.”

The minimum content of the asset register is stipulated as:

-  Acquisition date of the asset;
-  Descriptions of individual items;
-  Expected useful lives of individual items;
-  Historical cost or fair value of individual items of property, plant and equipment or the fair value of assets received as donations;
-  Depreciation rates;
-  Location;
-  Department or service using or controlling the asset;
-  Identification reference for verification (bar code);
-  Accumulated depreciation per item;
-  Impairment losses per item;
-  Carrying value of the asset;
-  Funding source;
-  Revalued amounts for land and buildings, revaluation date;
-  Residual values;
-  Insurance arrangements; and
-  Is the asset pledged as security (Yes/No)?

The following process for populating the asset register is prescribed:

-  Ensure that all PPE are capitalised and recorded as soon as acquired;
-  If the asset is constructed over a period of time, record expenditure as work-in-progress until it is available for use;
-  Bar code all items of PPE with a unique identification number upon delivery to the municipality;
-  Undertake a physical verification of the assets. The AR should be the end result of the physical verification;
-  Certify that all assets contained on the AR have been physically verified;
-  Review the remaining useful life of all items of PPE at 30 June;
-  Prepare a schedule of the remaining useful life for each asset;
-  Identify items with a shorter remaining useful life than the one reflected on the AR;
-  Override and amend the useful life column in the AR; and
-  Reveal assets that should be financially impaired as well as the related impairment expense and accumulated impairment. (Impairment is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset's future economic benefits through depreciation).

The expectation in these guidelines is that all assets should be verified annually. This will place a significant burden on the municipality, especially in the larger municipalities such as the metro's. A significant portion of the asset value lies in underground cables, with the MV cable network comprising of between 30% and 40% of asset value in a large municipality. These assets cannot be verified by physical inspection.

The guidelines furthermore recommend the barcoding of all assets. The estimated cost and duration of such a project in a metro supplier would be in the region of R40 million and take up to three years to complete. It is debatable if the benefits of such a process would outweigh the cost.

Acquisition dates are crucial to determine accumulated depreciation. These dates are often difficult to obtain, especially in older networks. A number of options to determine the acquisition dates are proposed:

-  Check old accounting records, such as internal advances registers, external loan registers and approved budgets.
-  Identify the items of property, plant and equipment without acquisition dates and visually inspect and evaluate the assets to determine a likely acquisition date.
-  Assume that the municipality has owned these assets for periods that are longer than their useful lives and that they are fully depreciated.

In many instances only global amounts are recorded in the current Asset Registers. Acquisition dates and historical cost prices for each infrastructure asset will need to be recorded to enable the calculation of depreciation.

An asset created by developers and which becomes part of the municipal infrastructure has to be recorded and taken into the asset register at fair value. Once in the asset register, the asset will be treated the same as any other assets.

The MFMA/GRAP 17 requirements pose significant compliance challenges to municipalities. International experience shows that it can take up to eight years to comply with this legislation. The challenge in the current economically and capacity constrained environment is huge.

7.3 NERSA reporting guidelines

The NERSA reporting guidelines describes the accounting system required for compliance in some detail, including the asset register requirements. An accounting system complying with the MFMA and GRAP 17 should however also be compliant to the NERSA reporting guidelines.

7.4 EDI Ringfencing exercise and toolkit

The EDI ringfencing exercise has produced asset registers and valuations with varying degrees of accuracy amongst utilities. The asset registers mostly do not comply with GRAP 17 requirements. Global figures are used for many asset categories, and assets with different useful life expectancies are grouped together. Individual assets cannot always be identified.

The EDI toolkit adds value in setting up a basic asset hierarchy and utilising a common set of replacement values and useful lives. The useful lives do however differ from those proposed in other documents.

8. Conclusion and Recommendations

This paper highlighted some of the strengths and weaknesses in the current regulations, standards, guidelines and approaches for asset management in electricity distribution utilities. Skills shortages, funding constraints, aging infrastructure and varying regulatory demands are major challenges to managing the electricity assets in municipalities. A unified approach to tackling the issues is required. It is recommended that an AMEU workgroup on asset management be formed. The workgroup should focus on the alignment of processes and standards to enable MFMA and GRAP compliance without duplication of effort (e.g. EDI vs. GRAP). The workgroup should establish the following collective standards:

-  standard for replacement equipment;
-  expected useful life standard;
-  measurement criteria for condition of assets;
-  impairment indicators; and
-  provide regular updates of replacement values.

9. References

-  ASGISA - Accelerated and Shared Growth Initiative of South Africa
-  Constitution of the Republic of South Africa, Act 108 of 1996
-  COSO guidelines
-  Electricity Act 41 of 1987
-  Electricity Pricing Policy of 2008 (EPP)
-  Electricity Regulation Act, 4 of 2006
-  Government Immovable Asset Management Act, 2007
-  GRAP 17 Property Plant And Equipment (GRAP Implementation Guide for Municipalities 25 September 2008)
-  Guidelines for Infrastructure Asset Management in Local Government (2006 – 2009).
-  International Infrastructure Management Manual
-  Local Government Capital Asset Management Guideline
-  Local Government Turnaround Strategy
-  Municipal Finance Management Act 56 of 2003
-  Municipal Structures Act 117 of 1998
-  Municipal Systems Act 32 of 2000
-  National Spatial Development Perspective
-  National Treasury Asset Management Framework
-  NRS 093-1: 2009 Asset Management of Electricity Infrastructure
-  Occupational Health and Safety Act 85 of 1993
-  PAS 55: 2008 Asset Management
-  Public Sector Risk Management Framework
-  Regulatory Reporting Manual - Electricity
-  The Municipal Planning and Performance Management Regulations, Regulation 796 of 2001 to the Systems Act
-  Treasury Regulations for departments, constitutional institutions and public entities