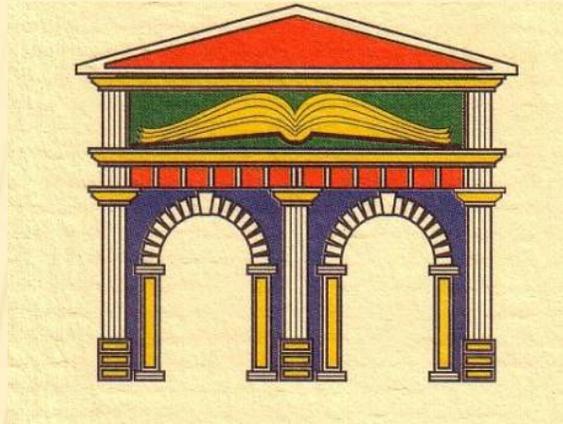


# M·A·M·S

## MUNICIPAL ASSET MANAGEMENT SYSTEMS



### *The Pillars of Municipal Asset Management*

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# INTRODUCTION

- Accounting for fixed assets at municipalities have gone through some drastic changes over the past 40 years. It included the realisation that the physical management of assets has a direct result on financial results, and legislation promulgated since 1994 changed the way assets are intended to be managed.
- The British Rail System, with it's "Fund accounting" was utilised up to the 1980's.
- The Fund accounting was replaced with what was termed the IMFO – Standard.
- Some prescriptions were issued regarding the format of asset registers (data base/management systems), and inventories were maintained by the various departments within a municipality, with, in many instances, no reconciliation between technical/engineering records and the financial disclosures. Descriptions of assets made it difficult, if not impossible, to physically verify the individual asset components.
- There was no coordinated effort to manage all the assets of the municipality, and conflicts arose frequently between the financial and technical divisions.



# Constitution Of The Republic Of South Africa No. 108 Of 1996:

## Powers And Functions Of Municipalities - Section 156 (4)

The national government and provincial governments must assign to a municipality, by agreement and subject to any conditions, the administration of a matter listed in Part A of Schedule 4 or Part A of Schedule 5 which necessarily relates to local government, if—

- (a) that matter would most effectively be administered locally; and
- (b) the municipality has the capacity to administer it.

(5) A municipality has the right to exercise any power concerning a matter reasonably necessary for, or incidental to, the effective performance of its functions.



# LG: Municipal Systems Act 32 Of 2000

## 76. Mechanisms for provision of services

A municipality may provide a municipal service in its area or a part of its area through-

(a) an internal mechanism, which may be-

- (i) a department or other administrative unit within its administration;
- (ii) any business unit devised by the municipality, provided it operates within the municipality's administration and under the control of the council in accordance with operational and performance criteria determined by the council; or
- (iii) any other component of its administration; or
- (v) any other institution, entity or person legally competent to operate a business activity.



## LG: Municipal Systems Act 32 Of 2000

### 76. Mechanisms for provision of services (contd.)

A municipality may provide a municipal service in its area or a part of its area through-

- (b) an external mechanism by entering into a service delivery agreement with-
  - (i) a municipal entity;
  - (ii) another municipality;
  - (iii) an organ of state, including
    - (aa) a water services committee established in terms of the Water Services Act, 1997 (Act 108 of 1997); [Item (aa) substituted by S. 40 of Act 51/2002]
    - (bb) a licensed service provider registered or recognised in terms of national legislation; and
    - (cc) a traditional authority;
  - (iv) a community-based organisation or other non-governmental organisation legally competent to enter into such an agreement, or
  - (v) any other institution, entity or person legally competent to operate a business activity.



## Municipal Finance Management Act (MFMA): Section 63

- 1) The accounting officer of a municipality is responsible for the management of –
  - a) The assets of the municipality, including the safeguarding and the maintenance of those assets; and
  - b) The liabilities of the municipality.
- 2) The accounting officer must for the purpose of subsection (1) take all reasonable steps to ensure –
  - a) That the municipality has and maintains a management, accounting and information system that accounts for the assets and liabilities of the municipality;
  - b) That the municipality's assets and liabilities are valued in accordance with standards of generally recognised accounting practice; and
  - c) That the municipality has and maintains a system of internal control of assets and liabilities, including an asset and liabilities register, as may be prescribed.



## Municipal Finance Management Act (MFMA): Section 78

- (1) Each senior manager of a municipality and each official of a municipality exercising financial management responsibilities must take all reasonable steps within their respective areas of responsibility to ensure -
  - (a) that the system of financial management and internal control established for the municipality is carried out diligently;
  - (b) that the financial and other resources of the municipality are utilised effectively, efficiently, economically and transparently;
  - (c) that any unauthorised, irregular or fruitless and wasteful expenditure and any other losses are prevented;
  - (d) that all revenue due to the municipality is collected;
  - (e) that the assets and liabilities of the municipality are managed effectively and that assets are safeguarded and maintained to the extent necessary;
  - (f) that all information required by the accounting officer for compliance with the provisions of this Act is timeously submitted to the accounting officer; and
  - (g) that the provisions of this Act, to the extent applicable to that senior manager or official, including any delegations in terms of section 79, are complied with.
- (2) A senior manager or such official must perform the functions referred to in subsection (1) subject to the directions of the accounting officer of the municipality.



# ASSET MANAGEMENT

- Fixed **Asset**
  - Movable or immovable, (tangible/intangible);
  - Owned or under control;
  - Reasonable expectation to derive economic benefits, or use in service delivery;
  - Over period beyond one financial year; and
  - Cost or fair value can be measured reliably.
  
- **Manage** - the management of all phases in the life cycle of each asset.



# Assets Life Cycle

## **Planning:**

Service delivery that drives the need for assets including input into the IDP, budget and assets management plans- MFMA section 19(2) and MSA section 74 (2).

## **Acquisition:**

Purchase, construction or manufacture of new assets.

## **Operating/Maintenance:**

Operation of assets, maintenance/refurbishment, enhancement /rehabilitation, depreciation and impairment.

## **Disposal:**

Timing and disposal actions including the disposal costs and specific requirements of disposal.



# The Four Pillars Of Asset Management



## Effective Management of Assets for Municipalities

Supervision:  
Asset  
Management  
Committee  
(Team)

Management  
Unit:  
Operational  
Personnel  
(Dedicated and  
Ancillary)

Guidelines:  
Legislation,  
Strategies,  
Plans, Policies  
and  
Procedures

System/s:  
Physical,  
Documentary  
and Digital  
Controls



# Asset Management Committee – Pillar 1

The **purpose** of the Committee is to provide guidance and oversight to the municipality to assess and monitor the:

- Impact of the asset management strategies;
- Governance and implementation of plans, policies and procedures;
- Internal control environment and document management;
- Standard of financial management and reporting; and Improvement of audit results.
- Effective management of assets to achieve the required service in the most cost-effective manner.
- Safeguarding and maintenance of the assets.
- Implementation and maintaining of an effective and efficient management, accounting and information system that accounts for the assets at municipality.
- GRAP compliance when valuing and accounting for the municipality's assets.
- Internal control systems of assets, especially physically, including an asset register, as prescribed.



# Activities Of The Asset Management Committee (AMC)

The AMC will achieve the desired results of the vision through:

- Establishment (and capacitation) of the Asset Management Unit.
- Review and approval of Asset Management Strategy, Plans, Policy and Procedures.
- Decision on the Asset management System to be used (compliant to GRAP and MSCOA), and periodic review.
- Review of the business plans supporting the acquisition of assets to be constructed, during the Demand management processes, including the development of maintenance plans.
- Appointment (and capacitation) of departmental asset controllers.
- Review of all asset transactions, including reconciliations between systems.
- Review of physical verification results (and recommended actions).
- Review of condition assessment indicators (and recommended actions).
- Review of monthly update by the Project Management Unit on all projects relating to Assets Under Construction.
- Review of monthly report by Technical services on assets acquired from operations and maintenance processes.
- Review of monthly maintenance expenditure (against plans/budget).
- Control over the disposal of assets:
  - ❖ Assets Disposal Policy; and
  - ❖ Secure location for (awaiting) disposal of assets.



## Asset Management Committee

- Municipalities where an Asset Management Committee were established experience the improvement in standards immediately, and the exchange of knowledge within the teams, with reference to the different aspects of assets, especially the physical nature within a spatial environment, and the impact of physical changes on financial results, led to a better understanding regarding the challenges going forward for all role players.
- A typical example of the relationship between physical and financial is the effect of impairment to an asset, which has a ripple effect in that; the value of the asset reduces, there is an expense recorded in the operating account against income, and the service delivery capacity of the asset reduces. In many cases this can be as the result of deferred (postponed/neglected) maintenance



# Municipal Responsibilities

## Section 63 and 78 of the MFMA – Asset and liability management

Accounting officer - responsible for the management of assets, including safeguarding and maintenance, supported by Senior managers.

### Assets Management Policy guidelines

- **All managers** – Responsible for assets in department
- **Asset Controllers** – Movables in departments
- **CFO** - Curator of System, Financial reports
- **AMU** – Updating of system, Physical verifications
- **PMU/Technical** – Project Management, Updating costing & Maintenance of Infrastructure
- **SCM/Expenditure Accountant** – Reconciliation of expenditure monthly
- **Planners** – Strategies and Plans



## Asset Management Unit (AMU) – Pillar 2

- Group name for the individuals providing the technical/practical skills required to manage the various types and classes of fixed assets of a municipality; the “engine room” of asset management.
- The multi-disciplinary requirements of asset management extends beyond financial management, and responsibility and accountability must be assigned to all the appropriate managers.
- AMU responsible to the Office of the Municipal Manager is best placed to coordinate the functions exercised by the various managers responsible for assets in the respective departments, as well as the contributions from the various functional departments regarding updating the asset data base, management plans and physical control.



# Local Government Capital Asset Management Guideline Of 2008

Asset managers (AMU) should ensure that:

- appropriate systems of physical management and control are established and carried out for all assets;
- the municipal resources assigned to them are utilised effectively, efficiently, economically, and transparently;
- proper accounting processes and procedures are implemented in conformity with the municipal financial policies and the MFMA to produce reliable data for inclusion in the municipal asset register;
- any unauthorised, irregular, fruitless or wasteful utilisation and losses resulting from criminal or negligent conduct are prevented;
- the asset management systems, processes and controls can provide an accurate, reliable, and up-to-date account of assets under their control;
- they are able to manage the asset plans, budgets, purchasing, maintenance and disposal decisions and justify that they optimally achieve the municipality's strategic objectives;
- manage the asset life-cycle transactions to ensure that they comply with the plans and legislative and municipal requirements.



## Asset Management Unit: Manager

- Develop and oversee the implementation of the asset management system, including: the establishment of the Asset Management Unit (AMU), and municipal policies and procedures.
- Develop and maintain the strategic and annual asset management plans aligned with the municipal strategies, the Integrated Development Plan (IDP), budgets and SDBIP, in consultation with the public where applicable.
- Develop asset needs assessment, acquisition management, operational and disposal plans.
- Verify the spatial plans to the physical asset and update with changes, for example; renewals and enhancements.
- Establish and execute a performance measurement system to evaluate the effective utilisation of assets.



## Asset Management Unit: Officer/Accountant

- Develop and maintain asset registers, including; acquisitions, maintenance management, transfers, and valuations.
- Develop and maintain the lease register.
- Execute and monitor the implementation of the asset acquisition, maintenance, and disposal plans.
- Plan and execute the asset verification, investigate, and report on variances, make necessary recommendations to resolve discrepancies, and update the asset register.
- Develop, implement, and manage mechanisms to safeguard assets.
- Prepare a monthly reconciliation with the supporting schedules of the asset registers to the relevant accounting records and resolve uncleared items.
- Report on asset management information as required to internal and external stakeholders.
- Develop and manage the implementation of immovable asset management plans, including; a strategic needs assessment, acquisition plan, operations plan, and immovable asset surrender plan.
- Manage valuations for immovable assets and update the asset register.



## Asset Management Unit: Governance Department

- The Budget and Treasury Office: Budget shall ensure that all acquisitions of a capital nature are allocated to the correct accounts in the ledger.
- The Budget and Treasury Office: Expenditure shall ensure that all additions recorded in the Assets Management System are reconciled monthly to the actual expenditure recorded in the financial management system.
- Project Management Unit shall ensure that the Assets Management unit receive information monthly regarding all projects, from inception to completion.
- Planning Office shall ensure that geographical information is updated and referenced to the assets data.
- Supply Chain Management Unit shall dispose of assets in accordance with the provisions in the Supply Chain Management (SCM) Policy.
- Human Resources Office shall ensure that every asset resignation form is counter signed by the Asset Management Unit before processing the termination of service.



# Asset Management Unit: Service Departments

The manager of each department shall ensure that

- employees in their Department adhere to the approved Asset Management Policies and Procedures.
- an employee with delegated authority has been nominated to implement and maintain physical control over assets in his / her Department (movables and immovables).
- assets are properly maintained in accordance with their respective asset maintenance plans.



MAMS

MUNICIPAL ASSET MANAGEMENT SYSTEMS

## Guidelines For Asset Management – Pillar 3

- High level prescriptions regarding the treatment of assets were included in the Municipal Finance Management Act (MFMA) Act 56, 2003.
- Generally Recognised Accounting Practice (GRAP):
  - ❖ Property, Plant and Equipment (GRAP 17)
  - ❖ Investment Property (GRAP 16),
  - ❖ Intangible Assets (GRAP 31)
  - ❖ Heritage Assets (GRAP 103)
  - ❖ Agricultural assets (GRAP 27)
  - ❖ Assets held under a finance lease (GRAP 13) and,
  - ❖ Inventory under certain circumstances (GRAP 12).
- Local Government Capital Asset Management Guideline in 2008
- Accounting Guideline on GRAP 17 – Property, Plant and Equipment (June 2012)
- Standard Operating Procedures for Municipalities (May 2016)
- International Infrastructure Management Manual (IIMM) was updated in 2011, in line with ISO 55000
- Infrastructure Development Management System (IDMS)



# Guidelines For Asset Management: Statutory

## **MFMA Section 19. (2)**

*Before approving a capital project in terms of subsection (1)(b), the council of a municipality must consider—*

- (a) the projected cost covering all financial years until the project is operational; and*
- (b) the future operational costs and revenue on the project, including municipal tax and tariff implications.*

## **MSA Section 74.**

*(1) A municipal council must adopt and implement a tariff policy on the levying of fees for municipal services provided by the municipality itself or by way of service delivery agreements, and which complies with the provisions of this Act and with any other applicable legislation.*

*(2) A tariff policy must reflect at least the following principles, namely that (see Act for full text).*



# Guidelines For Asset Management: Strategy

The Strategy will include:

- development of the overall guidelines for meeting demand, including the level of service for each function.
- Setting the parameters for the business plans relating to the construction or acquisition of assets.

A clear understanding of asset life-cycle costs is crucial for the development of cost-effective asset management plans and options. The duration of an asset life-cycle is determined by the useful life of an asset, which is often shorter than its economic life.

These costs must be analysed in the planning phase in compliance with MFMA section 19(2) and Municipal Systems Act (32/2000) section 74 (2), which will include input into the IDP, Budget, Procurement plans, SDBIP and asset management plans.



## Asset Management Policy

- The compilation of the Asset Management Policy includes decisions where national directives (especially GRAP) gives a choice to the municipality, like; disclosure method for the value of PPE and Investment Property, Depreciation method and Calculation of Impairment of assets.
- The policy cannot contradict national directives but must disclose municipal preferences and choices within that framework, and add decisions not necessarily provided for in national directives.
- The policy must be approved by council and provides an essential link between Legislation and Strategy to the procedure manual for implementation.



# Asset Management Procedure Manual

The actions to be included in the procedure manual will include steps required in at least the following aspects:

- Responsibilities by various role-players
- Planning management functions – (Acquisition, Operational, Maintenance, Replacement, Condition Assessments, Disposal)
- Acquisition of assets
- Transfer of assets
- Disposal of assets (Including Policy and Committee)
- Funding sources identification (as per mSCOA)
- Depreciation (Method, Timing, Updating)
- Assessment of Values (Revaluations, Amendments and Impairments)
- Replacement
- Asset Risk Management –(Insurance, Other)
- Maintenance of Assets (Plans and Manuals)
- Physical Verification – (Movables and Immovables)
- General Requirements (Disclosure requirements, Termination procedures)



# Procedure Manual

The final procedure manual must have extensive referencing to enable integration with the Job Descriptions of all personnel tasked with duties relating to the management of assets.

The integration of these documents will ensure:

- All required tasks have been assigned,
- There is a clear understanding by each staff member of their responsibilities, and
- There is an easy way to establish control and supervision over all aspects of assets management.



# Asset Register/Management System – Pillar 4

NT Guideline 2008: An asset register is a complete and accurate database of the assets that is under the control of a municipality and that is regularly updated and validated.

- Identification & Location - What and where is this asset, and who does it serve?
- Accountability - Who is accountable and how it is being safeguarded?
- Performance – What is its intended and actual level of service?
- Accounting – How is it accounted for? This should include: valuation basis; depreciation parameters.
- Management & Risk – How is it managed? How critical is it? This should include some maintenance, engineering and operational data and may be summarised from sub-systems.
- Acquisition and disposal – Transactional source (Audit Trail).

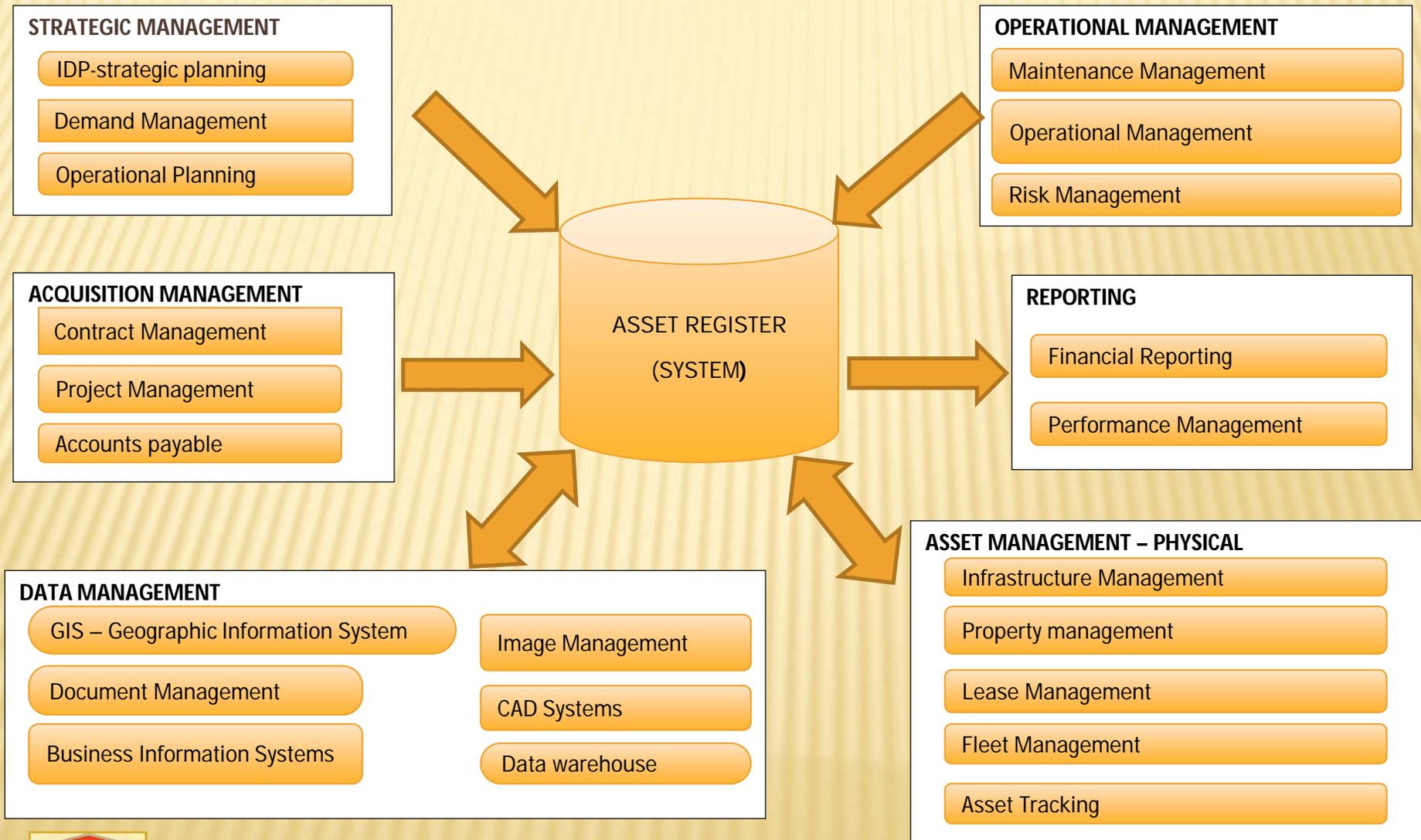


## Asset Register/System – (NT 2008)

- The asset register should not operate in isolation of other financial or management systems. It is an integral component of the financial management system and should be closely coupled to the general ledger to facilitate reporting.
- The particular architecture of each municipality's information systems will depend upon the organisational structure, information system development and asset management demands of that particular municipality.
- Where the asset register is not integrated with the general ledger and other systems, information from the asset register needs to be periodically transferred (using a manual or computerised interface) into the general ledger for the preparation of the financial statements and other system for management purposes.
- Ideally, in an integrated environment, the asset register should be linked to and accessible from a range of information systems, such as a geographic information system, document management systems and image databases.
- The diagram below (see next slide) illustrates how integrated management systems work and the essential role the asset register plays in facilitating various essential decision-making processes.



# System Requirements – 2008 (NT)



## MFMA Circular 80 –March 2016

### **Para 4. What Constitutes Minimum Compliance to *m*SCOA – Business Processes and System Functionality**

- Municipalities must ensure when examining the functionality of their current systems of financial management and internal control that it meets the minimum business processes and system requirements as stated in the objective of the *m*SCOA Regulation, namely; a system of financial management and internal control capable of providing for the uniform recording and classification of both municipal budget and financial information at a transaction level in the prescribed municipal standard chart of accounts, for both municipalities and municipal entities.
- Commercial or bespoke solutions are meant to assist officials within an organisation to generate information for management control and decision making purposes.



# Annexure B Of MFMA Circular 80 – Asset System

## ➤ **Manage the full asset life cycle**

- ❖ Manage the contract and build phase of the project by registering the component and rolling the accounting transaction up to the work-in-progress (WIP);
- ❖ Immediately after a completion certificate is received, unbundle assets and maintain the parent-child relationship between the main asset and its components
- ❖ Enable *table-to-floor* inspection sheets (electronic devices are preferred) as well as *floor-to-table* look-up methodologies
- ❖ Seamless integration with a Geographical Information System (GIS) or alternative mapping enabled graphical user interface

## ➤ **Identification of Assets**

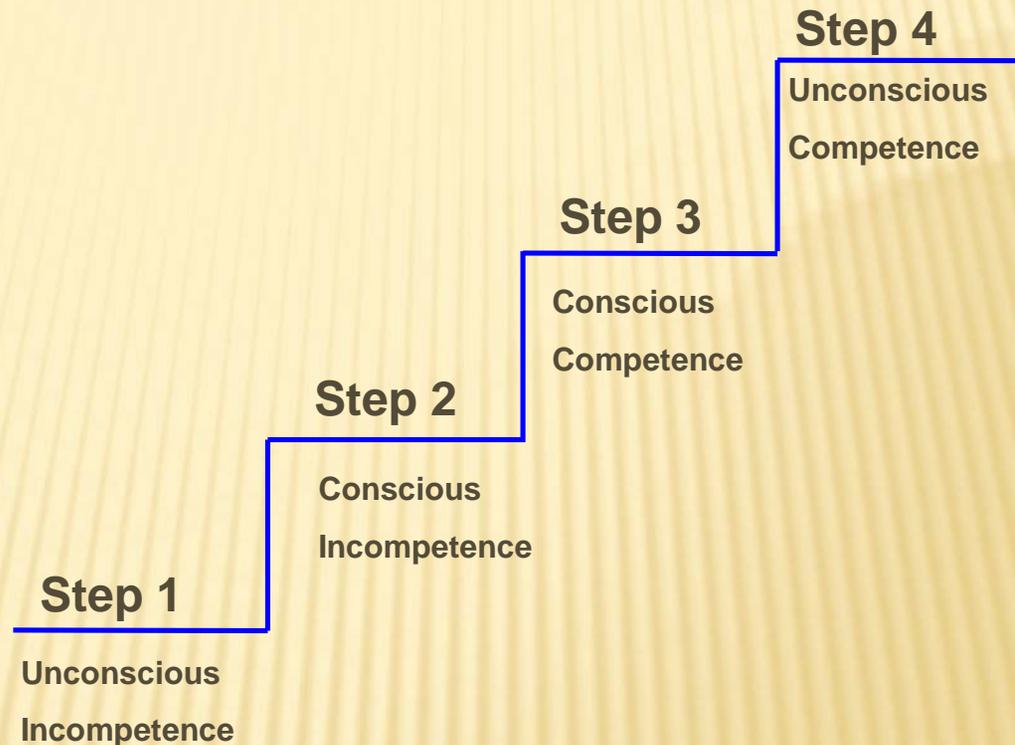
- ❖ Ability to identify and track assets in a hierarchy structure of departments, locations, components and sub-components.

## ➤ **Maintenance Strategies**

- ❖ Compile and monitor expenditure against the asset maintenance plans
- ❖ Ability to attach and insert links to Technical Documentation throughout the maintenance module



According To Maslow, Four Steps Are Involved In The Learning Process:



At Step 1,  
At Step 2,  
At Step 3,  
At Step 4,

**you don't know what you don't know.**  
**you know what you don't know**  
**you know what you know and can do it when you think about it.**  
**you know what you know and how to do it without having to think about it.**

## CONCLUSION

Municipal asset management is a developing science in our country and part of the improvement relies on the configuration of the various internal control structures, their coordination and cooperation.

The four pillars:

***Supervision,  
Management Unit,  
Guidelines, and  
System***

are essential in the process.

***It is up to us to make it work!***



# QUESTIONS?

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MAMS  
MUNICIPAL ASSET MANAGEMENT SYSTEMS

# MUNICIPAL ASSET MANAGEMENT SYSTEMS (MAMS)

- ❖ The company is involved since 1986 in the updating of asset registers. The asset details were originally updated in handwritten registers, but with the introduction of computerized solutions spreadsheets were used for many years. The decision was however made to formulate a management system as a coded program.
- ❖ Exodus is an asset management program written in South Africa specifically for the recording and control of Municipal Assets, the original program developed in MS Access (2005), implemented at several Municipalities, and was upgraded to a Visual Basic (VB) version in 2011 and implemented at a further 3 municipalities.
- ❖ An extensive upgrading process was undertaken, and the enhanced program (java/sql) is available, which includes facility for Inter-phasing with financial system/s, Continuous Valuation/Assessment of assets, Barcode printing and scanning, with an audit trail for operator sessions.
- ❖ The System provides for recording of assets under construction and componentisation of infrastructure.
- ❖ The system can be custom made for individual requirements.

