
Your Ref:
Room 201, Bram Fischer Building

Our Ref:
Date: 25 March 2021

The Speaker
Cllr. Mxolisi Siyonzana

ADOPTION OF THE CITIES INFRASTRUCTURE DELIVERY AND MANAGEMENT SYSTEM AS AN INTEGRATED ASSET MANAGEMENT SYSTEM OF MANGAUNG METRO MUNICIPALITY

1. Purpose

The purpose of the submission is to request council to adopt and approve the Cities Infrastructure Delivery and Management System (CIDMS) as the integrated asset management approach and system of Mangaung Metropolitan Municipality (MMM).

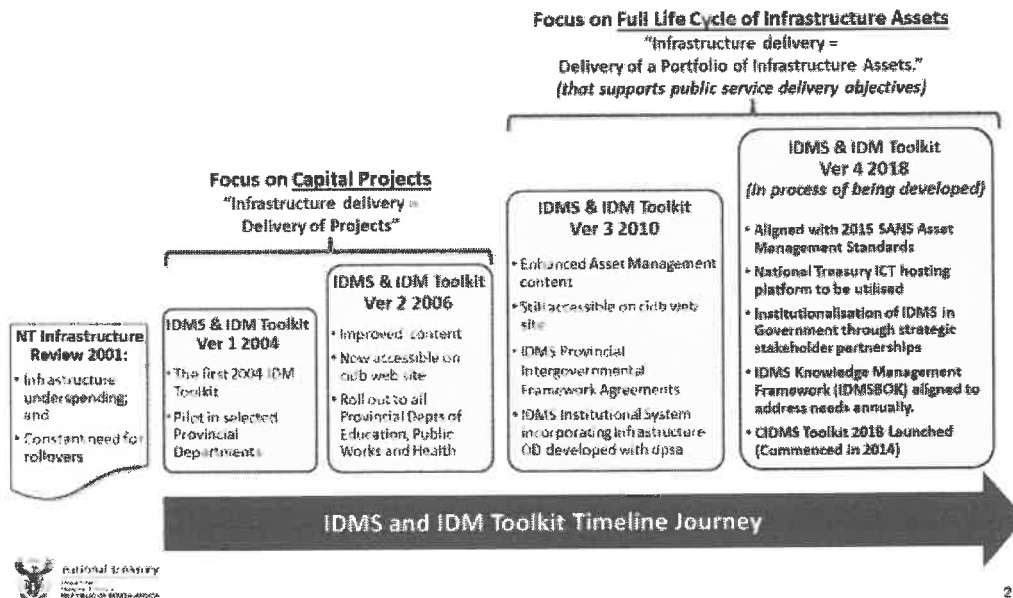
2. Problem Statement

South Africa's eight metropolitan cities accommodate 64% of the population and produce 57% of the country's economic output. Underpinning these activities are large and diverse asset portfolios with a collective current replacement cost in excess of R 600 billion, excluding the value of investment properties. These assets provide mobility and access, potable water, energy, a clean and safe environment, and a variety of social services. Despite the many benefits of cities, they are, in South Africa and elsewhere, characterised by sprawl, fragmentation, disproportionate consumption of non-renewable resources, high levels of environmental pollution and various social ills. cities increasingly face challenges of changes in demand, improving spatial efficiency, maintaining global competitiveness and adapting with climate change.

3. Background

In 2001, a National Treasury review of infrastructure service delivery systems recommended that a framework be developed to guide and structure the management of infrastructure delivery, resulting in the development of the Infrastructure Delivery Management System (IDMS). Four versions of the IDMS and supporting Toolkits have been developed since the first release in 2004, moving from an initial infrastructure project management focus, to that of an infrastructure asset management focus.

Journey of the IDMS and the IDM Toolkit



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The Cities Infrastructure Delivery and Management System (CIDMS) is a collaborative initiative between the National Treasury (City Support Programme) and the eight metropolitan municipalities to achieve better infrastructure asset management. To this end, National Treasury has developed the CIDMS toolkit that must be adopted by the metros as part of the urban planning and reform process (It was piloted eThekweni, Johannesburg and Cape Town).

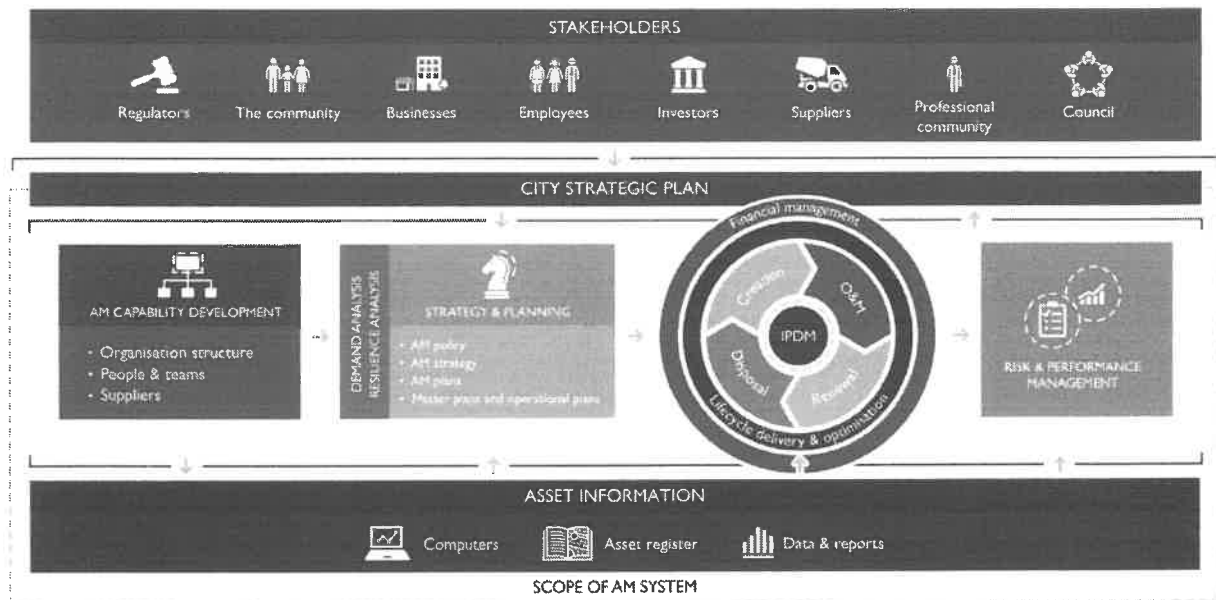
The CIDMS Toolkit presents a bespoke asset management system that complies with the requirements of SANS 55000/1 (Asset Management), ISO 10845 (Construction Procurement), accounting standards relevant to asset management, financial reporting requirements relevant to budgeting, expenditure and reporting on asset activities, as well as with South African legislative and policy requirements for the urban built environment. In addition to ISO 55001, the CIDMS meets the requirements of Generally Recognised Accounting Practice (GRAP) with respect to the accounting for assets, and with the requirements of the municipal Standard Chart of Accounts (mSCOA) regarding budgeting, expenditure and reporting on assets and service delivery activities. The lifecycle delivery system is based on the National Treasury's Standard for Infrastructure Procurement and Delivery Management that in turn is normatively based on ISO 10845: Construction Procurement. It also provides the techniques necessary for infrastructure planning as required by SPLUMA.

The toolkit assists cities to identify the need for infrastructure over multiple planning horizons, to evaluate the merits of infrastructure investment proposals, to support procurement and delivery of infrastructure, and to sustainably manage infrastructure within an integrated infrastructure asset management framework. Some of these include asset data models, spatially-based customer profiling, demand analysis and future allocation techniques, a spatially-based capital development cost premium atlas, aligning the asset management risk management system with the broader corporate risk management framework, advances in investment planning, and a fit-for-purpose programme delivery system.

4. Discussions

4.1 CIDMS Overview

The CIDMS comprises all key elements dictated by ISO 55001, including strategy and planning, asset information, decision-making, capability development, lifecycle delivery, and risk and performance management, as follows:



Incorporating all of these requirements within CIDMS ensures that asset management policy, processes and information systems link with those of other functions (e.g. finance and HR), creates the space for asset management to serve an integrating function within a city, and to foster an asset management culture throughout the city. Importantly, the CIDMS creates a common dictionary for built environment professionals and finance practitioners alike and recognises that asset management is a multi-disciplinary body of knowledge practiced by engineering and technical professionals, urban planners, finance practitioners and other disciplines such as information specialists.

4.2 CIDMS Scope and Content

The CIDMS Toolkit comprises 12 modules as shown in Figure 2 below.

Module 1: Describes key national requirements for urban infrastructure, and establishes the normative framework for CIDMS.

Module 2: Introduces the CIDMS and describes the approach to identifying stakeholders and their requirements, and to establishing asset management policy and strategy.

Module 3: Presents the asset data model and provides guidance on the profiling of infrastructure for purposes of developing a state of city assets report that establishes current infrastructure capabilities, risks, constraints and lifecycle needs.

Module 4: Provides the approach and techniques used to profile customers, determine their needs, and to establish levels and standards of service with respect to infrastructure and community service packages.

Module 5: Focusses on future demand, inclusive of estimating and spatially apportioning future demand as well as demand management strategies for all major infrastructure services. Module 5 also emphasises the need for sustainable practices, planning for climate change resilience and the adoption of green infrastructure technologies as appropriate.

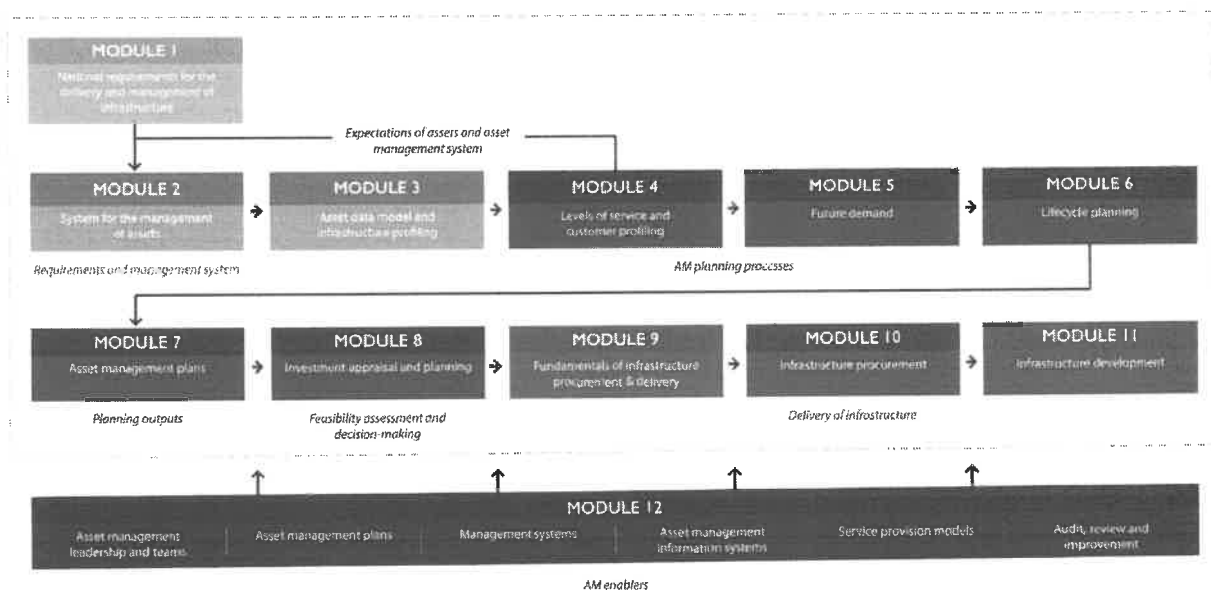
Module 6: Provides processes and techniques for developing lifecycle strategies and plans per asset portfolio.

Module 7: Offers guidance on the preparation of asset management plans and how these feed into and are directed by the city strategic asset management plan. A key output is the city infrastructure programme delivery plan and aligned performance plan.

Module 8: Provides the approach and methodology for infrastructure investment appraisal and prioritisation. This module defines benefits and costs for major infrastructure services. It offers investment appraisal techniques at the level of project proposals. Module 8 also presents a multi-criteria analysis system to enable prioritisation.

Modules 9 – 11: Articulate the infrastructure procurement and delivery system, inclusive of contracting methods, processes, controls and governance arrangements. This suite of modules also provides guidance on the packaging of programmes and projects in line with the requirements of mSCOA.

Module 12: Describes asset management enablers. It defines key roles, competencies and organisational arrangements for asset management. It describes the approach to the review and improvement of the asset management system, offers guidance on the packaging of asset management plans, and presents high-level functionality requirements for asset management information systems.



5. Key Institutional implications

Financial: The current asset management system must be configured to include all the components of the CIDMS and be cascaded across the municipal departments. The cost implications of such an exercise must still be determined.

Human Resources: The CIDMS establishes a platform for asset management competency requirements across the municipality. It is critical that key staff members are trained on the CIDMS through both accredited and non-accredited training.

Communication: The CIDMS must be communicated across all municipal departments through tailored induction workshops.

6. Conclusion

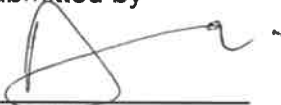
The CIDMS represents the largest reform in the history of local government infrastructure in the country to date. The CIDMS Toolkit presents evolving, scalable best practice urban infrastructure asset management practices within municipalities. It will assist the municipality to improve the management of the asset portfolios to deliver value to our community, to scope and plan appropriate infrastructure interventions and make sound decisions on infrastructure investments, to develop long-term weighted and prioritised project pipeline and to support the spatial transformation.

7. Recommendations

It is recommended that:

- (a) Council adopts the CIDMS as the asset management system of the municipality,
- (b) The City Manager be delegated to implement the CIDMS within the municipality,
- (c) The City Manager formally request National Treasury (CSP) for technical support to implement the CIDMS.

Submitted by



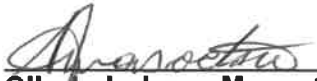
Mlondolozzi Ndlovu
HOD: Engineering Services

Recommended for approval



Adv. Tankiso Mea
City Manager

~~Approved/ Not Approved~~



Cllr. Lebohang Masoetsa
Executive Mayor (Acting)