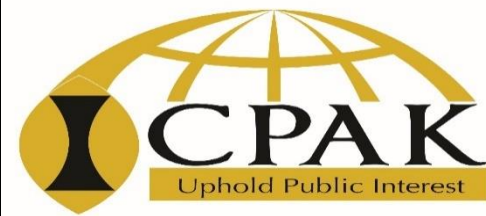


THE 3rd ASSET MANAGEMENT SEMINAR

Developing and Implementing Asset Life Cycle Delivery Activities

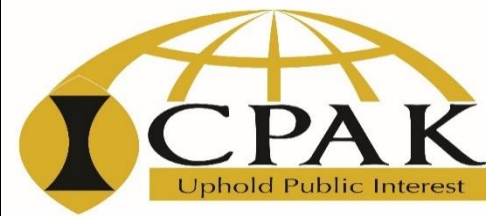
Flamingo Beach Resort and Spa - Mombasa, 6th – 8th September 2017

Agenda



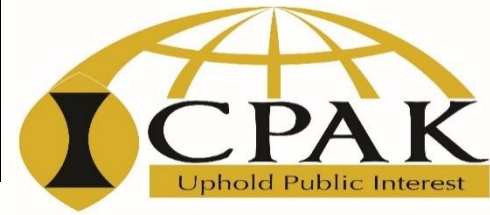
- Operational Definitions
- AM Paradigm
- Legal Perspective of AM
- Financial Perspective of AM
- Asset Life Cycle Delivery Activities
- The Kenyan Experience(Public Sector)

Asset



- Any item of economic value owned by an entity.
Resources controlled by an entity as a result of past events and (from which future economic benefits are expected to flow)
- Two guiding features in the definition;
 - It has or will have a value
 - It will provide benefits from its use over the period of its useful life
- Public sector is about providing public goods and services to the communities(individual or collective consumption)- requires use of assets

How do we get from.....

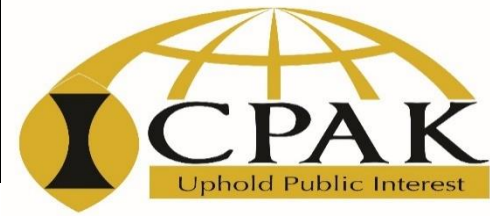


.....from this

...to this?



How do we get from.....

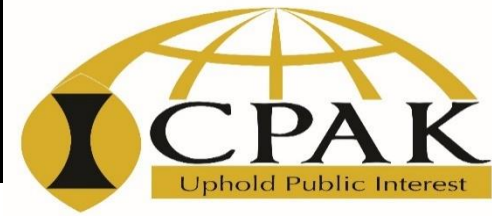


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How do we get from.....

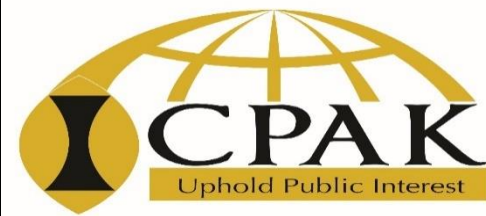


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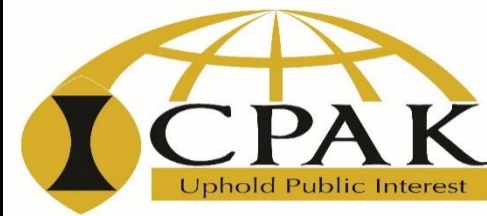
Asset Management



There are various definitions of AM

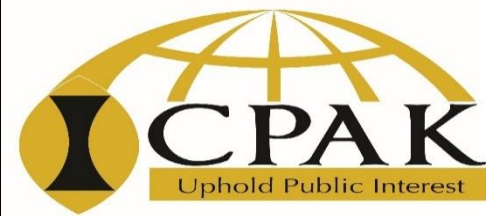
- “The life cycle management of physical assets to achieve the stated outputs of the enterprise”. *AM Council, Australia*
- “A systematic process of maintaining, upgrading, and operating assets and providing tools to facilitate a more organized and flexible approach to making the decisions necessary to achieve the public’s expectations”. *Organization of Economic Cooperation and Development(OECD), 2001*

Asset Management



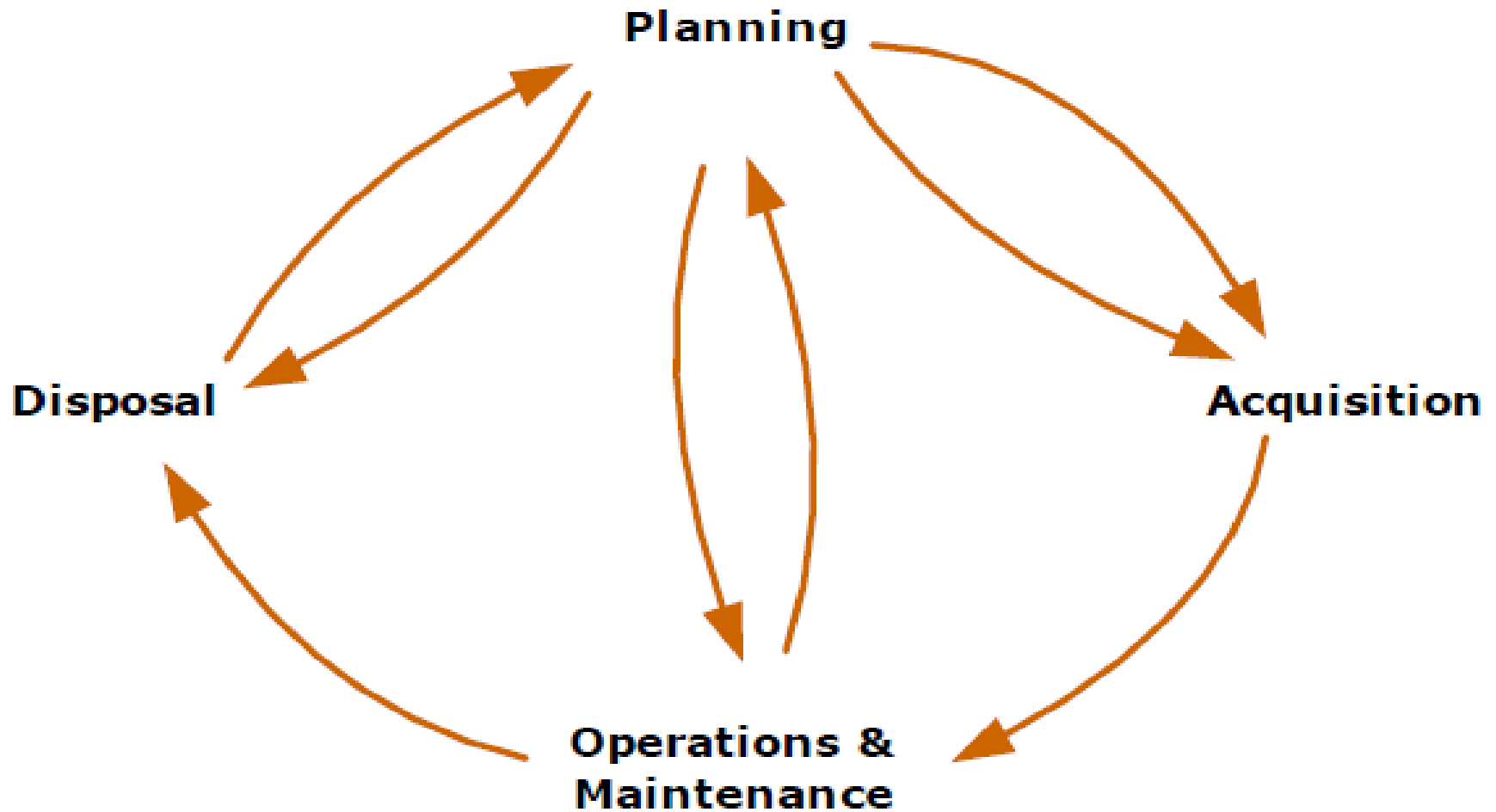
- An integrated approach to monitoring, operating, maintaining, upgrading, and disposing of assets cost-effectively, while maintaining a desired level of **service**. *(Report on international asset management practices, 2014,; Asset Management for water and sanitation sector in South-East Europe Hydro Engineering Institute Sarajevo-HEIS, GIZ & ORF)*
- “...activity that ensures that the asset base of an organization is optimally structured in the best corporate interest of the entity concerned”. *Royal Institute of Chartered Surveyors (RICS)*

Asset Management

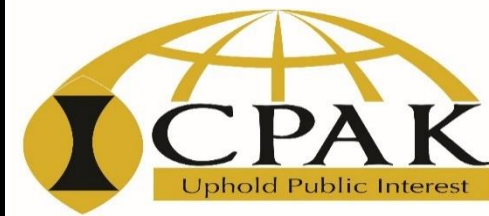


- ISO 55000 defines asset management as “coordinated activity of an organization to realize value from assets”. Goes beyond just maintenance of physical equipment or maximizing of yield
- ***Asset management*** is the process of decision making, planning and control over the acquisition, use, safeguarding and disposal of assets so as to maximise their service delivery potential and manage the related risks and costs over their entire life

Asset Management

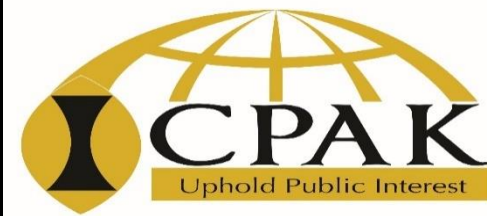


Fundamentals of AM



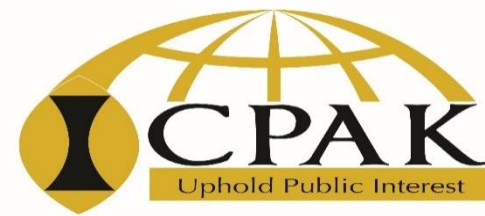
- Encompasses **all asset types**, tangible, intangible, individual components or complex systems
- Encompasses all activities involved in the assets' life cycle-from;
 - initial identification of requirements or opportunities
 - acquisition/creation
 - operations or utilization activities
 - asset stewardship plus
 - any remaining liabilities or care/maintenance responsibilities, to
 - renewal or disposal

AM Paradigm



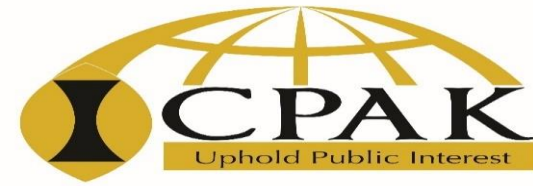
- AM provides a new perspective on an organization and a basis for innovative organizational development -this is key especially due to resource constraints
- The release of the standard for Asset Management - ISO 55000:2014 by the International Standards Organization in January 2014.
 - highlights the growing importance of asset management in creating value for asset intensive companies
 - growing understanding of the strategic role of robust asset management
- AM organizations- taking a more holistic approach to their financial, operational and technical functions and how they contribute to the strategic aims of companies

AM Paradigm



- ISO 55000 explicitly places assets in a value context, widening the definition of ‘asset’ to include: *“Something that has potential or actual value for an organization”*.
- That value can be tangible or intangible, financial or non-financial, and includes consideration of asset risk and liabilities
- The ISO 5500x family comprises three documents
 - **ISO 55000** provides an overview of asset management and the standard items and definitions to be used
 - **ISO 55001** outlines the requirements specification for an integrated, effective system for assets
 - **ISO 55002** provides guidance on how to implement a compliant system

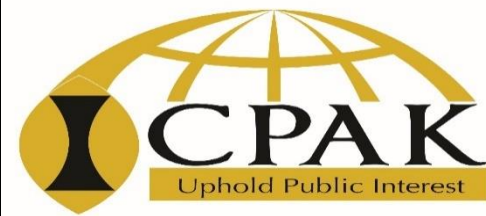
AM Paradigm



- Organizations are developing a comprehensive and long term view of how the various asset classes **compliment** each other across time and function
- There is a perceptive change from the management of an asset to a **whole life view** of the management of the **contribution** it makes and the **value** it provides in cooperation with other assets.
- **Question to ask....**
How can assets be best used to meet organizational objectives?
- **Answer lies on...**
 - What the organization owns
 - Why it was acquired
 - What condition it is in
 - Where it is located
 - What opportunities it provided
 - What risks it entails

This process will uncover synergies among assets and provide additional method of measuring organizational performance

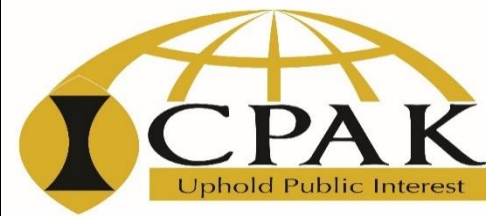
AM Plan



- ***Asset management plan*** – a plan for managing and organisation's infrastructure and assets to deliver an agreed standard of practice in a cost-effective manner now and in future
- AM Plan should be developed for all asset classes with a view to operating, maintaining and renewing assets in the most cost-effective manner, while providing a specified level of service
- It can be divided into two areas;
 - Asset operations plan
 - Asset maintenance plan

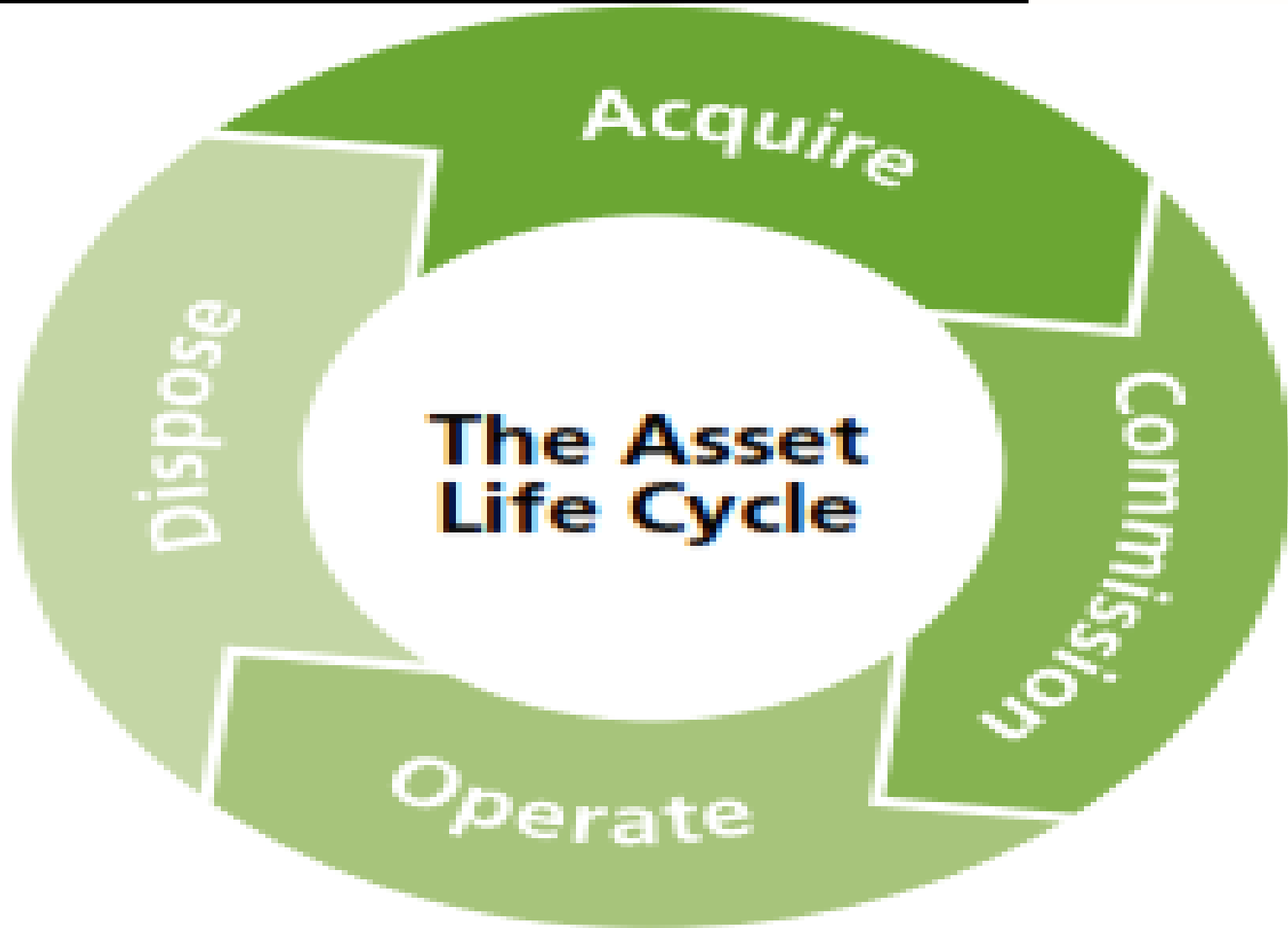
ISO 55000 & Asset Management Landscape (GFMAM)

Legal Perspective of AM

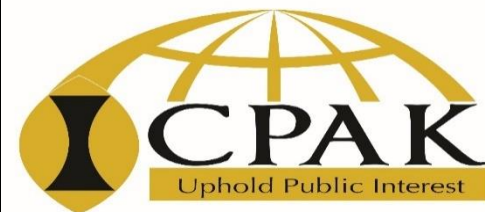


- The law and applicable regulations advices on the design and execution of,
 - asset related transactions
 - Acquisition and or creation
 - operations and maintenance, and
 - disposal
- It addresses optimization of the management of asset portfolios
- It advices on suitable contracts and documentation
- Advices on legal aspects and requirements relating to construction, leases

Asset Life Cycle



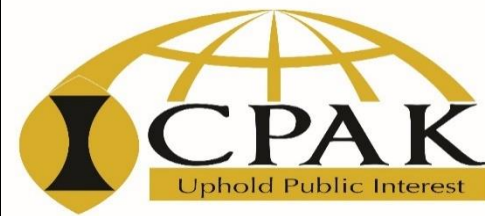
Asset management Plans



The organization shall establish, document and maintain asset management plan(s) to achieve the asset management strategy and deliver the asset management objectives across the following life cycle activities:

- Acquisition, Creation, or enhancement of assets;
- Utilization of assets;
- Maintenance of assets;
- Decommissioning and/or disposal of assets.

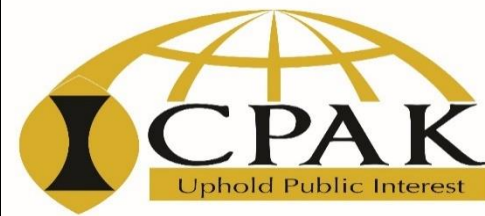
Implementation of asset management plan(s) Life cycle activities



Tools, facilities and equipment.

- The organization shall ensure that tools, facilities and equipment are maintained and, where appropriate, calibrated.
- The organization shall establish and maintain process(es) and procedure(s) to control these maintenance and calibration activities, where such tools, facilities and equipment are essential for:
 - The implementation of its asset management plan(s);
 - Achieving the required function(s) and performance from its assets or asset systems;
 - The monitoring and measurement of performance and/or condition

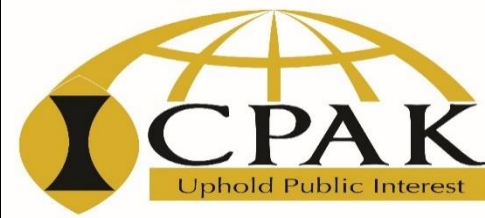
Implementing Asset Life Cycle Delivery Activities



The Lifecycle Delivery Activities Group contains the following Asset Management Subjects:

- Technical Standards & Legislation
- Asset Creation & Acquisition
- Systems Engineering
- Maintenance Delivery

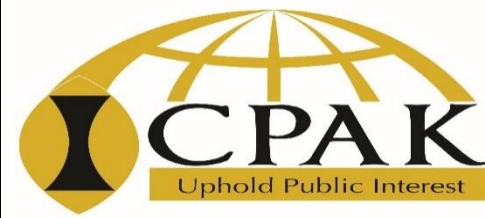
Implementing Asset Life Cycle Delivery Activities



Cont....

- Reliability Engineering and Root Cause Analysis
- Asset Operations
- Resource Management
- Shutdown/Outage Management
- Incident Response
- Asset Rationalisation & Disposal

Implementing Asset Life Cycle Delivery Activities



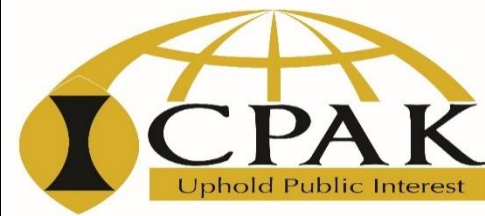
1. Acquire

- Planning, designing and procuring an asset.
- Proper application of these activities ensures that the asset is fit for purpose.

2. Commission

- Installing / creating or building the asset and ensuring that it is fully functional.
- Higher incidence of failure after first installation / building of an asset (infant mortality)
- Commissioning stage in the life cycle to oversee the initial operation of the assets.

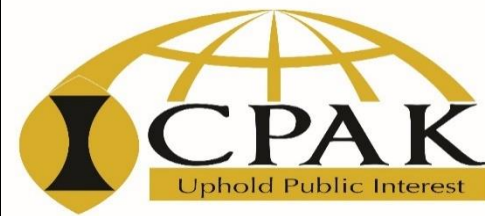
Implementing Asset Life Cycle Delivery Activities



3. Operate

- Bulk of the life cycle for an asset during which it provides the function for which it was designed.
- Asset should be subject to appropriate monitoring, maintenance, refurbishment and potential upgrade to meet any change in condition or operational requirement.
- For many assets, this phase is decades long. It may even be centuries. It is the phase that many engineers are most familiar with.

Implementing Asset Life Cycle Delivery Activities

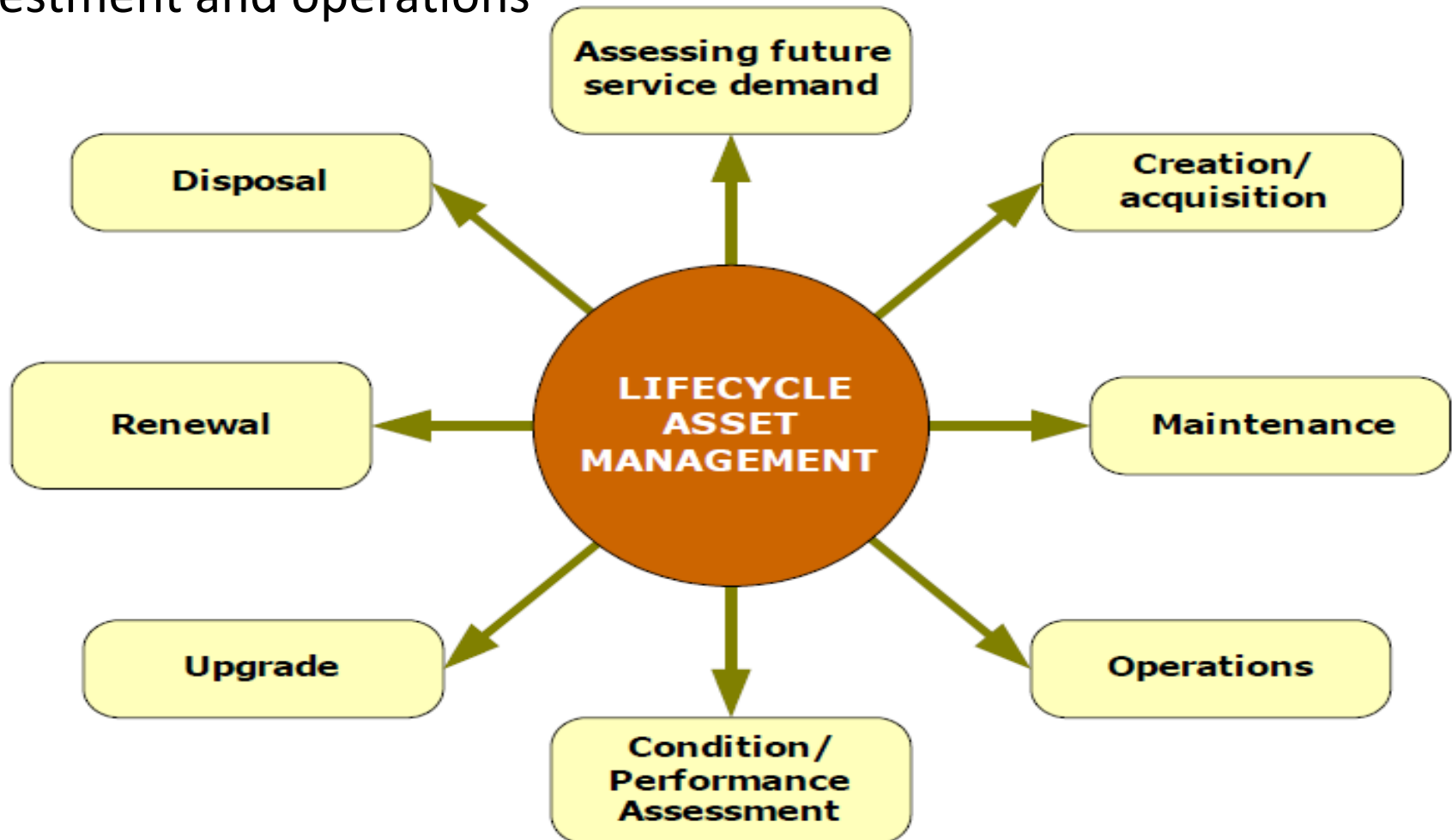


4. Dispose

- A key period within an asset's life - often the most overlooked phase.
- Key activities include the effective removal of the asset from operation; the disposal or recycling of the asset or its components; and the feed into the planning for the replacement asset (if a replacement is required) to determine the operational requirements based on the effectiveness of operation and the failure modes encountered.

Financial Perspective of AM

The entire life cycle of an asset will require some form of investment and operations



Cost Projections- full life cycle

- Feasibility study and groundwork investigation costs
- Construction and design or acquisition costs
- Operating costs
- Regular maintenance costs
- Depreciation costs
- Definitive replacement costs
- Cost of capital, disposal costs
- Risk abatement costs
- Renewal and rehabilitation costs and
- Revenue generating potential which includes factors like charges grants and fees



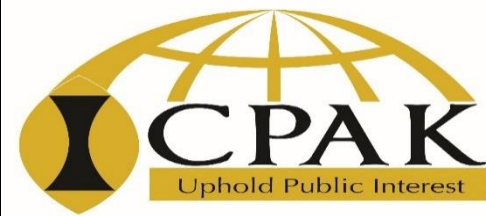
Principles

In effect, the process of asset management should result in a programme that is financially robust.

It's therefore important to;

- plan ahead
- ensure that the projects or groups of projects are financially sustainable not just affordable in the short term
- check that a capital investment today will not create a massive recurring/revenue expenditure headache in a few year's time
- use capital receipts to reinvest in assets that can help to reduce the future revenue budget where possible
- develop a pool of monies which can be invested in 'spend to save' schemes;
- change the financial profile of a project or programme as a result of an annual review

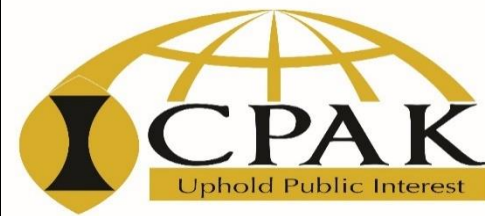
Financial Perspective of AM



Considerations for purpose of recording-relates to classification and applicable standards for each class

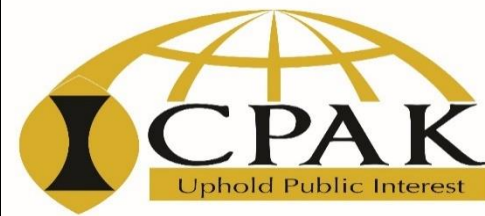
- Cost
- Depreciation
- Revaluation
- Asset impairment
- Insurance
- Disclosure

Asset Register



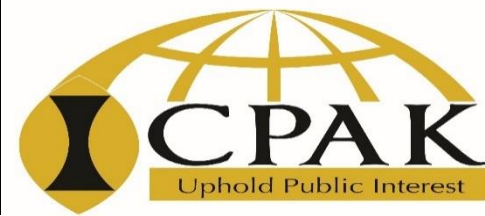
- Regardless of the size of the asset portfolio, it is important to maintain a record of each asset, both monetary and non-monetary information over the entire lifecycle of each asset for the purposes of;
 - accountability,
 - asset planning,
 - monitoring performance and
 - for assisting in legislative compliance and meeting accounting standards
- Asset registers enable entities to monitor the acquisition, operation and disposal of their assets

Risks to Implementing Asset Life Cycle Delivery



- 1) Not knowing what they have;
- 2) Over or under maintenance;
- 3) Improper operation;
- 4) Improper risk management; and
- 5) Sub-optimized asset management systems.

The Kenyan Experience



Issues observed so far

➤ **Land and Buildings**

- Ownership and sizes
- Disputes
- Encroachment
- Values
- Irregular disposal
- Debt swaps

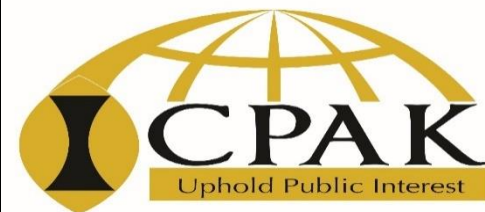
➤ **Vehicles**

Tracing(physically)
Grounded and
unserviceable
Logbooks missing
Charged as collateral
Irregular disposal

➤ **Computers& Accessories**

Could not be traced
Lack of records

The Kenyan Experience



➤ Equipment

- Most of the equipment in verifiable(physically).
- However, no values. Values extracted from the prior valuation reports, not reliable
- Cases of undelivered furniture

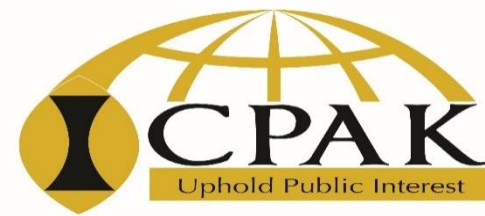
➤ Furniture

- No registers
- No tagging
- Excess
- Dumping

➤ Current Assets

- Unsupported balances
- No reconciliations
- Incomplete records

The Kenyan Experience



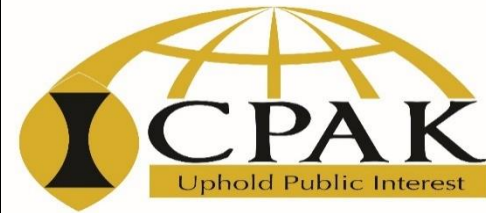
➤ Investments

- No certificates for (shares)
- No values
- Bank certificates not available(bank request)
- Agreements not available

➤ Projects(WIP)

- Completed but unutilized (*no certificates of completion*)
- Incomplete
- Never started(partial payments made)
- Terminated

Conclusion



- ‘Asset management is an essential component of good governance in both the private and the public sector’ and if we embrace it entirely it will make a difference in the lives of Kenyans

INTOSAI GOV 9160 (Exposure Draft) on Enhancing Good Governance for Public Assets-Guiding Principles for Implementation

