Integrated Strategic Asset Management

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Why asset management

• The goal of asset management is to meet a required level of service in the most cost-effective way through the creation, acquisition, operation and maintenance/renewal and disposal of assets to provide for present and future customers and communities.

• The life-cycle approach is central to asset management by taking account of the total cost of an asset throughout its life.

• A better service, not a better asset, is a key indication of successful asset management.

(IPWEA, 2002)
Introduction

- Australia has a conservative estimated 600B$+ in built assets
  - Geographically dispersed & population sparse
  - Crucial for the nation to function
  - Replacement is expensive & major undertaking
  - Exacerbated by extreme climatic conditions
  - Replacement, maintenance & optimal use - not widely planned or budgeted for

- Strategic management required
  - Demands integration!
Other challenges & issues

- **Asset service organisations deal with**
  - Resource scarcity
  - Degrading environments
  - Climate change adaptation
  - Sustainability requirements
  - More stringent regulations
  - A greater reliance on a multi-agency delivery model
  - Internally dispersed units & processes

- **Other factors**
  - More sophisticated citizens
  - Changing demographics
  - Government budgets increasingly restrained
  - Technological advances – human errors!

- **Calls for internal & external organisational /systems integration**
Strategic
Integration

• Refers to the combination of parts so that they work together or form a whole

• BUT:
  – Different levels
  – Different types
  – Different foci
  – Different approaches
Integration: Big Picture

- Top down
- Bottom up

Breadth of initiatives

Strategic/policy level
- Administrative/managerial level
- Practitioner level

Local
Regional
State

Competition
Cooperation
Coordination
Collaboration
Amalgamation

7/11/2014
Keast, December 2013
The processes of the ISAM framework are presented here as a network map

- Each node represents a coordinator for each of the functions of asset management
- The ties between the nodes are the relationships that must exist for efficient service delivery
- The network map provides a blueprint for an ‘ideal’ model for organisations to use in strategic asset management
- The aim is to structure organisational charts and processes in the most efficient manner possible for service delivery
Asset Governance & Management through the ISAM Guide

Guide to Integrated Strategic Asset Management

Pedoman Sistem Terpadu Pengelolaan Aset yang Strategis
• Asset management is an extended process that covers the life of the asset.

• Organisations with assets in the early stages of development may not have identified all of the necessary people responsible for later functions.

• In this instance the strategic planning functions are undefined, as are the service delivery and evaluation functions.
Those networks that are not fully integrated, where the different functions are not connected, will be missing the links between them.

The links between “Acquisitions Planning” and both “Operations Planning” and “Maintenance” in the top right hand corner are missing.

The lack of these connections make it harder for these functions to co-ordinate or share information.
Integrated Strategic Asset Management: One Guide

Southern Cross University

7/11/2014

Keast, December 2013
Environmental Factors

• Environment affects assets, their functions and their safety

• Risk management provides adequate responses

• Sustainable management reduces the ecological footprint

Community Needs and Expectations

• A key to understand the needs for assets and services

• Critical activity: stakeholder management
Whole-of-Government Policy Framework

- Whole-of-Government Policy
  - Use government resources to make decisions and prioritise services to meet community needs and expectations

- Whole-of-Government Model
  - Provides overall direction for Asset Management
  - Gives effect to government policy decisions
  - Improves consistency and control
  - Provides cost effective and efficient service delivery

Organisational Strategic Management

- Gives effect to whole-of-government policy
- Involves an understanding of governance, corporate policy and corporate objectives
Framework Components

Service Delivery Strategic Planning

• Provides high value service delivery outcomes
• Considers sustainability principles
• Is guided by asset management policy and objectives
• Is implemented through asset management strategy

Service Delivery Tactical and Operational Planning

• Implementation of an organisation’s asset management strategy
• Acquisition, Operations, Maintenance and Disposal plans
Framework Components

Service Delivery

• Creation, maintenance, renewal, upgrade and disposal of the assets
• Clear assignment of responsibility and accountability

Evaluation

• Measuring asset performance
• Reporting
• Reviewing
• Auditing
Framework Components

Knowledge Management

- Underpins the capacity to develop new ways of creative responses
- Improves decision making
- Increases productivity
- Knowledge management tools:
  - Asset Register
  - Asset Data

Organisational Management

- Optimises service and asset management outcomes through:
  - Leadership
  - Change management
  - Organisational competencies and skills
  - Asset management culture
So – integrated – or not?
Capability Maturity Model

Keast, December 2013
• It is important to understand Asset Management cultures to improve performance

• The output is a diagram of the competing demands within asset management organisations
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Why Strategic

• The benefits of a strategic approach to establishing asset management policy and application include:
  • Better allocation of limited resources
  • Improved alignment of assets with services & community expectations
  • Reduced demand for new assets through better integration of service & asset planning
  • Improved processes & accountability for capital & recurrent works
  • More effective use & maintenance of existing (& future) assets
  • Use of non-asset solutions to meet service demand
  • Increased use of sustainable development solutions
Why internal integration?

- Integrating expertise with an holistic approach to maximize value for the life of your assets.
- Asset (& other personnel) work concurrently to identify and resolve conflicts that could add cost or impair productivity.
- Enables the exploitation of synergies that add efficiency, boost output, and extend the economic life of the asset.
- With integrated models, you have access to information that reduces cross-disciplinary uncertainties and mitigates the need for corrective reactions.
- A well designed integrated asset management system will contribute significantly to business profitability.
- Costs of creating & maintaining an integrated approach is typically less than potential losses.
Why national?

- Vast nation – geographically dispersed assets & populations

- To sustain & genuinely advance productivity, growth & well-being
  - Harness & leverage all resources, including those geographically dispersed & population sparse
  - Limit
• Conditions in contemporary society call for integration of assets
• All levels – especially within organisations / service systems
• Strategic & deliberate
  – Does not happen by magic & requires
• New approaches, tools and processes
• Dexterous management & dispersed leadership