

USING AUS-SPEC FOR ASSET MANAGEMENT

INTRODUCTION

Ongoing planned maintenance of physical assets reduces life cycle costs and increases asset life. This TECHnote provides guidance on using the AUS-SPEC specification system for asset management.

NATIONALLY CONSISTENT FRAMEWORKS

A series of nationally consistent frameworks were developed by Local Government Planning Ministers' Council (LGPMC) to provide minimum requirements for asset and financial management and planning by local government across Australia. This development supports improved management of assets such as roads, water and sewerage, drains, footpaths, public buildings and the like, which Local Government provides for the community.

ASSET MANAGEMENT FRAMEWORK

An asset management framework drives the implementation of asset management and aligns with Council's strategic objectives. It consists of:

- AM policy: Outlines principles, requirements and responsibilities for AM and is linked to the Council's strategic objectives.
- AM strategy: Outlines AM objectives, practices, action plans, audit and review processes.
- AM plan: Outlines asset description, levels of service, demand forecast and life cycle activities.

LIFE CYCLE ACTIVITIES

The life cycle activity of an asset is defined as the activity commencing with the identification of the need and terminating with the decommissioning of an asset.



Asset life cycle activities
(Source IIMM)

AUS-SPEC is a specification system for the life cycle management of assets and is aligned to the NATSPEC National Classification System, which has been widely adopted by the construction industry. AUS-SPEC can be used for the following life cycle activities, as defined in IIMM:

- **Asset planning:** Defines the most effective solution to meet the services required by the community. Use Workgroup: 00 PLANNING AND DESIGN which covers development and subdivision of land, design of waterfront development, bushfire protection, design of roadways and design of public utilities.
- **Asset Creation/Acquisition:** Includes works that create a new asset, or works which upgrade or improve an existing asset beyond its existing capacity using capital expenditure. This may result from growth, or social or environmental needs. Assets may also be acquired at no direct cost to the Council e.g. donated assets. AUS-SPEC focuses on the technical aspects and processes of how to plan, design and construct new assets using the following:

Design worksection Templates provide guidance and procedures for those involved in the design of civil infrastructure for Local Government, both internally (Council staff) and externally (Consultants and Developers). The worksections support uniform design practices for civil infrastructure works. For Design, use Workgroup: 00 PLANNING AND DESIGN.

Construction worksection Templates are suitable for both quality control and integrated management contracts associated with most Council's engineering activities. These worksections have been developed to assist Local Government control the quality of works performed by contractors and developers. For Construction, use Workgroups: 01, 02, 03, 11 and 13.



Definition

Life cycle asset management encompasses all asset management strategies and practices associated with an asset or a group of assets that results in the lowest life cycle cost.

(Source IIMM)

Abbreviations

AIFMM: Australian Infrastructure Financial Management Manual

AM: Asset Management

IIMM: International Infrastructure Management Manual

IPWEA: Institute of Public Works Engineering Australasia

NAMS.AU: National Asset Management Strategy Committee



Courtesy: Dubbo City Council



Courtesy: Adelaide City Council



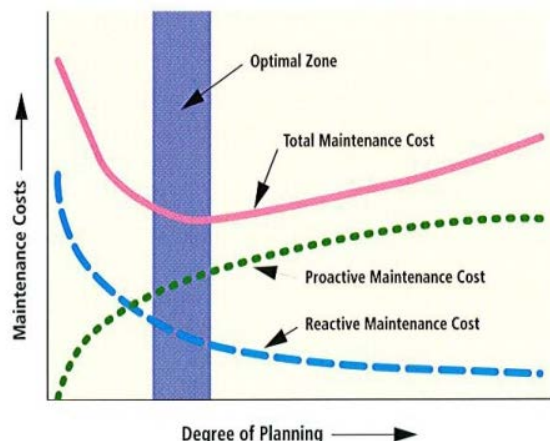
Courtesy: Gold Coast City Council



Courtesy: Great Lakes Council

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- **Operations and maintenance:** Operations are active processes of utilising an asset which will consume resources such as manpower, energy, chemicals and/or materials (e.g. cleaning, mowing
- etc.). Maintenance is all the actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal. Over time, the AUS-SPEC asset maintenance system provides Councils with records of asset inspections, defects, programmed and prioritised works and monthly work completed reports, which improve a Council's maintenance history and asset inventory. AUS-SPEC maintenance activity specifications cover both unplanned and planned maintenance. For Maintenance and Operations, use Workgroups: 14-18.



Balancing planned and unplanned maintenance (Source IIMM)

- **Asset monitoring/condition/performance:** AUS-SPEC provides a framework for performance requirements of Council assets, defines the technical level of service, response times and compulsory intervention levels to systematically program asset maintenance. AUS-SPEC covers most of the maintenance activities of local government assets. Management plans for planned and unplanned maintenance of various assets provide a proactive approach to maintenance. For asset monitoring/performance, use Workgroups: 14-18.
- **Renewal/rehabilitation/replacement:** Renewal is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original condition. For asset renewal and rehabilitation, a combination of AUS-SPEC construction and maintenance worksections may be required. Use Workgroups: 01, 02, 03, 11 and 13 to 18.

Relationship between AUS-SPEC and IPWEA (IIMM and AIFMG)

To assist Councils' implementation of the nationally consistent frameworks, the maintenance management system of AUS-SPEC should be integrated with Council's asset management plans and long term financial plans. IPWEA/NAMS.AU provides guidelines (IIMM and AIFMG), tools and templates to assist Local Government to develop asset management systems and integrate asset management with their corporate and financial planning. According to AIFMG, classification of an asset is 'one of the most important steps in financial reporting, asset accounting and asset management'. The NATSPEC National Classification System, in alignment with the AIFMM asset hierarchy, can link with GIS (Geographic Information System) and can assist in providing relevant information to the asset managers, finance managers and service managers. AUS-SPEC maintenance management plans can be linked to the asset management plans and financial management plans through the NATSPEC National Classification System or the Activity codes of Maintenance specifications.

Conclusion The AUS-SPEC specification system is a major information source for asset management which complements the IIMM. AUS-SPEC provides tools, *Templates*, the framework and processes to assist at various asset life cycle activities. The AUS-SPEC maintenance system assists Local Government to achieve an optimal balance between the costs of planned and unplanned maintenance. AUS-SPEC encourages a proactive approach to asset maintenance rather than a reactive approach.

Relevant publications

IPWEA AIFMM

IPWEA IIMM

IPWEA Practice Note 4: Asset Management for Small, Rural or Remote Communities – Small Communities

IPWEA Practice Note 6: Long-term Financial Planning

National Sustainability Framework for Financial Planning & Reporting & Asset Planning & Management
www.lgam.info/nsffrapm

NATSPEC National Classification System www.natspec.com.au

Relevant TECHnote

NATSPEC TECHnote GEN 018
Using AUS-SPEC for Asset maintenance

Relevant Workgroups

00 PLANNING AND DESIGN

01 GENERAL

02 SITE, URBAN AND OPEN SPACES

03 STRUCTURE

04 ENCLOSURE

05 INTERIOR

06 FINISH

07 MECHANICAL

08 HYDRAULIC

09 ELECTRICAL

10 FIRE

11 CONSTRUCTION - ROAD RESERVE

13 CONSTRUCTION - PUBLIC UTILITIES

14 MAINTENANCE AND OPERATIONS - URBAN AND OPEN SPACES

15 MAINTENANCE AND OPERATIONS - BUILDINGS

16 MAINTENANCE AND OPERATION - ROAD RESERVE

17 MAINTENANCE AND OPERATIONS - BRIDGES

18 MAINTENANCE AND OPERATIONS - PUBLIC UTILITIES

20 CONVEYING