



NATSPEC



IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

AUS-SPEC OVERVIEW AND CASE STUDIES

Case Studies



Great Lakes Council



The City of Salisbury

NATSPEC BACKGROUND

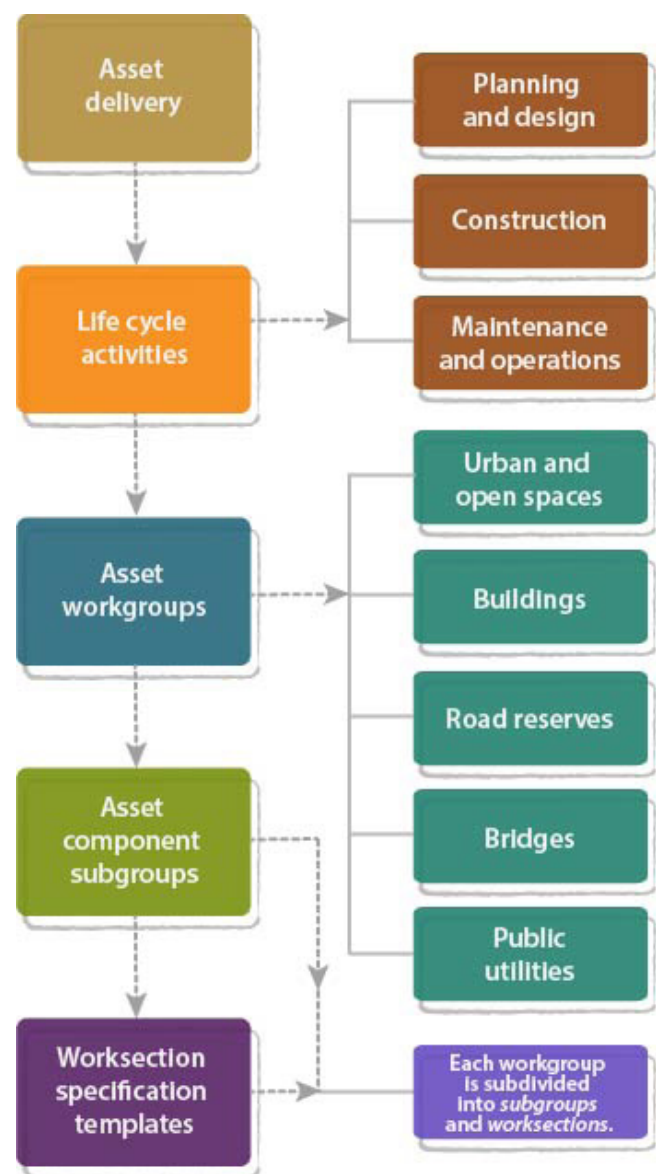
NATSPEC is a national not-for-profit organisation whose objective is to improve the construction quality and productivity of the built environment through leadership of information. It is responsible for the development and maintenance of NATSPEC (the National Building Specification system), AUS-SPEC (the Australian Local Government Specification) and the National BIM guide and associated documents (for Building Information Modelling). It is impartial and is not involved in advocacy or policy development and is owned and endorsed by Government and industry organisations.

- NATSPEC is the only comprehensive Australian national specification system that is regularly updated to reflect the latest changes in regulations and standards. It provides specification templates for architects, interior designers, landscape architects, structural engineers and service engineers.
- AUS-SPEC is for the life cycle management of local government assets and a joint venture between NATSPEC and IPWEA. Specification templates for the design, construction and maintenance of parks, urban and open space, buildings, roads and bridges, and public utilities are updated annually.
- The National BIM Guide and associated documents assist clients, consultants and stakeholders to clarify their BIM requirements in a nationally consistent manner.

AUS-SPEC LOCAL GOVERNMENT SPECIFICATION

AUS-SPEC is the national local government specification system for the life cycle management of assets. It is a joint venture between IPWEA and NATSPEC who are responsible for delivering the national, construction specification system endorsed by government and professional bodies. IPWEA initiated the development of AUS-SPEC in 1995-1996 to assist Councils in providing competitive services via internal and external contracts.

AUS-SPEC is aligned to the NATSPEC National Classification System, which has been widely adopted by the construction industry. The AUS-SPEC system provides tools, technical specifications templates, a framework and processes to document requirements for asset life cycle activities. AUS-SPEC provides a range of specifications for buildings, roadworks, urban and open spaces and public utilities. The system supports technical and contractual consistency between Councils yet allows flexibility to edit and add project specific requirements where necessary.



AUS-SPEC Asset Classification Structure

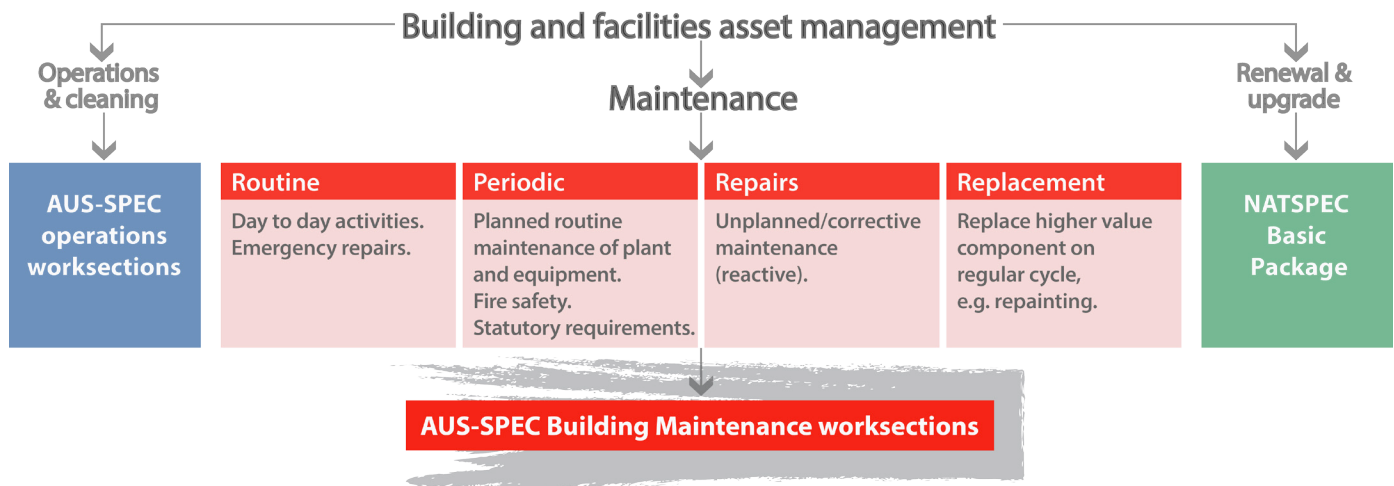
SPECIFYING BUILDING AND FACILITY MAINTENANCE

Good maintenance, like good design, can be difficult to define. Part of the uncertainty is that maintenance may refer to the whole system as well as its component parts. For example, maintaining an air conditioning system may involve inspections (e.g. to AS 1851 *Routine service of fire protection systems and equipment*) without having to change anything, whilst maintaining a building may involve replacing parts, such as defective windows, or repairing partitions. The AUS-SPEC building and facility maintenance system is based on the definition of maintenance in IIMM (International Infrastructure Management Manual). Actions include regular inspections, repairs, minor replacement of components to eliminate the cause of defects and to avoid excessive repetition of maintenance effort, but not upgrading the asset.

AUS-SPEC building and facility maintenance system

Effective maintenance of buildings and facilities requires maintenance strategies and maintenance management systems, captured in the maintenance plan. The AUS-SPEC Maintenance System can be used to compile documentation for a maintenance contract as shown in the figure below and includes the following:

- NATSPEC Maintenance reference specification for repair and replacement of building fabric and structure, and periodic maintenance and repairs of building services. It is available in pdf format.
- AUS-SPEC building and facilities maintenance General requirements, Contract schedules, and Building and facility maintenance plan specification templates
- AUS-SPEC Activity specification templates for defining, performance criteria and repair and replacement criteria.
- Project schedules for defining scope of work and project specific requirements.



AUS-SPEC CASE STUDY: GREAT LAKES COUNCIL

Stuart Small, Projects and Contracts Engineer at Great Lakes Council, has been using the AUS-SPEC specification system for the design, construction and maintenance of local government assets since 2002. Recently, Stuart used AUS-SPEC for a project to extend the Tea Gardens Industrial Estate, construct a new Waste Transfer Station and prepare the new Works Depot site. At \$5.1 million, this was by far the largest project undertaken by this Council situated on the mid-north coast of NSW.

With AUS-SPEC Templates, Stuart was able to clearly and concisely document requirements for clearing and grubbing the site; constructing a tip shop building, a large steel roof structure, roadways, concrete hardstand, a vacuum sewerage system and stormwater drainage, and extending the water reticulation supply, the electricity supply and the telecommunications network. Small highlights the ease of using and sharing AUS-SPEC documents with the contractors and the time and money saved. He says he only had a fortnight to complete the specification and other tender documents and explains that although this was made up of long days, “it’s very quick and I would have been in there for months trying to write it from scratch”.

“The technical specification template is there and it’s so clear, there’s no ambiguity [...]. On that particular job there was some variation in regards to the ground conditions which the technical specification could not cover,” Small says. This variation only accounted for approximately five per cent of the entire project, which he describes as “minimal”.

Extension of the Tea Gardens Industrial Estate

This included the extension of one road, the construction of another and the creation of 12 industrial subdivision lots. Four lots were fully constructed and the remaining eight were partially constructed to enable the continued operation of the council’s existing Works Depot.

Associated works included the following:

- Construction of a large open stormwater drainage line.
- Construction of a vacuum sewerage system.
- Extension to the water reticulation supply.
- Extension to the electricity supply.
- Extension to the telecommunications network.



Waste transfer station

New Waste Transfer Station

This comprised the construction of a tip shop building, a large steel roof structure providing weather protection, a large concrete hard stand area, access and circulating roadways measuring roughly 350 m long, and the necessary supporting infrastructure. The steel roof structure covers the concrete hardstand area and is 46.6 m long x 19.6 m wide, and is typically between five and six metres high and open on all sides. Council subcontractors undertook bitumen sealing and asphaltting on the project site under the direction and control of the contractor. Council supplied the nominated materials that it had readily available on contract.

Preparation for the new works depot site

The site works for the new works depot were limited to:

- Clearing and grubbing the site.
- Fencing the boundary.
- Construction of utility connections to the nominated points.

AUS-SPEC CASE STUDY: PARKS MAINTENANCE

Historically, maintenance of the community's infrastructure has been done on a reactive basis that does not support sustainable asset management. The City of Salisbury, South Australia, used the AUS-SPEC specification for Local Government to document the maintenance contract requirements for 104 parks and reserves in the 620 ha Mawson Lakes Development.

The AUS-SPEC maintenance system allowed Council to:

- Efficiently prepare tender documentation including Conditions of Tendering, Conditions of Contract, Appendices, Specifications and Tender Response Schedules.
- Calibrate service levels across a number of activities and asset classes with their parks and recreation areas maintenance and operations budget.
- Collect records of asset inspections, defects, programmed and prioritised works and monthly works completed reports.
- Progressively improve management of asset maintenance, with control and historical data.
- Manage risk through a systematic approach to maintenance of Council assets.

The AUS-SPEC maintenance system is consistent with current legislative requirements for Local Government asset reporting as it generates records of asset inspections, defects, programmed and prioritised works and monthly completed reports as a condition of Contractor payment.

The specification templates provide default response times and intervention levels for maintenance activities which can be made available for community consultation and edited to balance the available funds and community expectations. This allowed Council to better scale the level of service for any combination of funding scenarios.



Mawson Lakes

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

- AIFMG: Australian Infrastructure Financial Management Guidelines
- 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



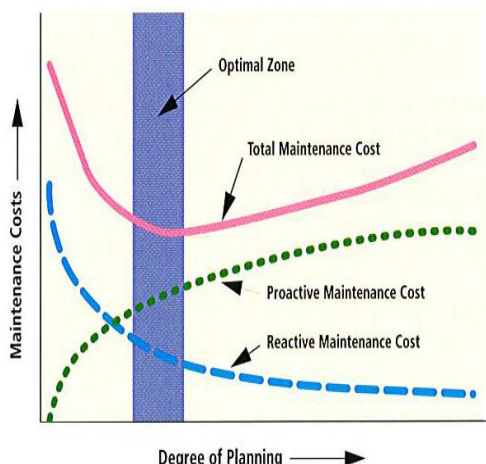
Courtesy: Gold Coast City Council



Courtesy: Great Lakes Council

USING AUS-SPEC FOR ASSET MANAGEMENT

• **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)

Maintenance Pyramid
(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 aspects of the maintenance pyramid. 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 AIFMG 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 Practice Note 4: Asset Management for Small, Rural or Remote Communities
- IPWEA Practice Note 6: Long-term Financial Planning
- LGPMC Local Government Sustainability Frameworks
- www.lgam.info/nsffprpm
- 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
- 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

USING AUS-SPEC FOR ASSET MAINTENANCE

INTRODUCTION

This TECHnote describes the philosophy and components of the AUS-SPEC maintenance system for urban and open spaces, buildings and facilities, road reserves, bridges and public utilities.

The AUS-SPEC system supports a proactive approach to maintenance based on:

- Programmed maintenance.
- Quality management.
- Competitive principles.

It can be adapted for documenting routine, periodic and urgent maintenance, using in-house service agreements or external contracts, or a combination of both.

ROLES AND RESPONSIBILITIES

Under the AUS-SPEC maintenance system, the roles and responsibilities are allocated as follows:

- The Principal (Council) specifies the maintenance requirements and assesses the quality capability of the Contractor/Service provider.
- The Contractor/Service provider controls the processes and methods, verifies conformance and provides the products and services. Quality inspection is a separate activity to verify the performance of the completed maintenance work.
- The Principal's Superintendent audits the maintenance system, methods and end product, during the course of the Contract.

AUS-SPEC MAINTENANCE SYSTEM

The AUS-SPEC maintenance system includes reference documents and a series of *Templates*, known as worksections, classified according to the NATSPEC National Classification System. The *Templates* can be edited to suit a particular project reflecting the asset maintenance management policy of the Council. They include:

- **Reference documents:** Including **TECHguides**, which assist in the preparation of maintenance contract documentation.
- **General requirements (Maintenance):** Outlines the work and defines the measurement and payment.
- **Contract schedules:** Includes schedule of asset network, facility data sheets, maintenance frequency, schedule of rates and dayworks rates, lump sum components, etc.
- **Maintenance Plan:** Nominates anticipated activities and confirms agreement with the Principal's requirements and the method of operation by the Contractor. The plan is prepared by the Principal and completed with input from the Contractor/Service provider. It consists of two parts:
 - **Part 1:** Outlines the maintenance performance policy, maintenance organisation and activity specifications. Part 1 is to be included with the Tender documentation and is to be read in conjunction with the General requirements included in the Tender documentation.
 - **Part 2:** Includes management procedures and maintenance planning. This part of the plan is based on the structure of a Quality manual and Quality plan; however the simplified format does not require third party verification or extensive documentation by the Contractor/Service provider.
- **Proformas:**
 - Non-conformance management forms, Maintenance Defect Register, Work Order form, Hold Point release form, Damage report and repair form, etc.
- **Maintenance worksections:**
 - **Activity specification:** Sets out the requirements for a particular activity including scope, work method, inspection requirements, special requirements, hold points and checklists.
 - **Activity contract requirements:** Sets out the performance/service level requirements (recording level, response time, intervention levels, MMS reporting units and method of payment for a particular activity (Lump Sum/Schedule of rates/Day Works). The AUS-SPEC defaults should be revised by Council, in line with the Council Asset Management policy.



Examples of Local Government asset maintenance services



Routine park maintenance



Maintenance of Council buildings



Inspections



Identifying defects



Traffic control



Resealing a local road

USING AUS-SPEC FOR ASSET MAINTENANCE

Benefits of AUS-SPEC maintenance system

The AUS-SPEC maintenance system is a professional, best practice approach to maintenance which allows Councils to:

- Calibrate service levels with their maintenance and operations budgets.
- Prepare documentation for in-house and/or private maintenance contracts.
- Collect records of asset inspections, defects, programmed and prioritised works and monthly works completed reports.
- Progressively improve management of asset maintenance, with control and historical data.
- Benchmark with other organisations using AUS-SPEC as work processes and outcome are essentially the same.
- Manage risk through a systematic approach to maintenance of Council assets.

COMPILATION OF CONTRACT DOCUMENTS

Appropriate AUS-SPEC worksections can be selected using SPECbuilder, the specification compilation software, and customised for specific projects. The compilation of the contract documentation for parks, buildings and road reserves is shown in the following **Contract compilation table**:

Document compilation	Parks and open space maintenance	Buildings and facilities maintenance	Road reserve maintenance
Section A	TENDER INFORMATION		
	0122 Information for tenderers (AUS-SPEC) 0123 Conditions of tendering (AUS-SPEC)		
Section B	CONTRACT DOCUMENTS		
Volume 1: CONDITIONS OF CONTRACT	0147 Conditions of contract General conditions of contract		
	Annexure to General conditions of contract		
	Special conditions of contract (Refer to TG402, TG404 or TG406 as appropriate)		
Volume 2: TECHNICAL SPECIFICATIONS General requirements	1401 General requirements - parks and open space (Maintenance)	1501 General requirements - building and facility (Maintenance)	1601 General requirements – road reserve (Maintenance)
	Schedules	1402 Contract schedules - parks and open space (Maintenance)	1502 Contract schedules - buildings and facilities (Maintenance)
Quality system or Quality control requirements	1403 Parks and open space maintenance plan (PMP) 1404 Annexures to PMP	1503 Building and facility maintenance plan (BFMP) 1504 Annexures to BFMP	1603 Road reserve maintenance plan (RMP) 1604 Annexures to RMP
	Technical specification - Parts (as required)	Activity specification	Activity specification and NATSPEC Maintenance Reference
Appropriate workgroups 14, 17 and 18.		Appropriate workgroup 15.	Appropriate workgroups 14, 16, 17 and 18.
Volume 3: ASSET DEFINITION INFORMATION DRAWINGS	Maps of the Asset network and Asset data sheets		
	Project drawings, Plans and Schedule of activities		
	Standard drawings		
Volume 4: TENDER SUBMISSION DOCUMENTS	0124 Tender submission documents		
	1403 Parks and open space maintenance plan (PMP) Part 1	1503 Building and facility maintenance plan (BFMP) Part 1	1603 Road reserve maintenance plan (RMP) Part 1
Associated documents (Additional documents to the contract)	Parks and open space maintenance history	Building and facilities maintenance history	Road reserve maintenance history
	Council's WHS Policy		

Relevant documents

TECHguides for Maintenance Contracts

TG401 Guide to parks and open space maintenance system and documentation

TG402 Guide to adapting asset delivery documentation to parks and open space maintenance

TG403 Guide to the building and facility maintenance system and documentation

TG404 Guide to adapting asset delivery documentation to building and facility maintenance

TG405 Guide to road reserve maintenance system and documentation

TG406 Guide to adapting asset delivery documentation to road reserve maintenance

Maintenance Workgroups

01 GENERAL

14 MAINTENANCE AND OPERATIONS – URBAN AND OPEN SPACES

15 MAINTENANCE AND OPERATIONS – BUILDINGS

16 MAINTENANCE AND OPERATIONS – ROAD RESERVE

17 MAINTENANCE AND OPERATIONS – BRIDGES

18 MAINTENANCE AND OPERATIONS – PUBLIC UTILITIES

USING AUS-SPEC FOR CONTRACT DOCUMENTATION

INTRODUCTION

This TECHnote provides an overview on using AUS-SPEC for standard and period supply and service contract documentation for the life cycle management of assets. The AUS-SPEC system assists users to manage each stage of the contract cycle: project initiation; project delivery; compilation of contract documents; contract management and administration; operation; maintenance and asset management.

PROJECT DELIVERY AND PROCUREMENT

Local government typically procures the following:

- **Building and construction services** involving major works (e.g. construction of an aquatic centre or construction of a road) or minor works (e.g. repairs to a footpath or resurfacing a car park).
- **Supply of services** including supply of equipment or material.
- **Period supply and services** including construction or non-construction services over a fixed period of time (e.g. linemarking of roads, security surveillance, bituminous surfacing or weed treatment).
- **Consultancy services** including design and documentation.

The Local Government Acts of the various states underpin the detailed tendering process and procurement procedures used by Councils. AUS-SPEC provides for the incorporation of state-based requirements into contract documentation and also references AS 4120 *Code of Tendering* which sets out the ethics and obligations of the Principal and Tenderers in the tendering process in the construction industry.

THE IMPORTANCE OF SPECIFICATIONS

Preparing the specification is a core process in tendering and contracting. It is an essential contract management document which sets out the Council's requirements to prospective suppliers and/or contractors. A clear, concise and unambiguous specification results in more accurate tender bids and fewer variation claims.

The AUS-SPEC specification *Templates* and associated guidance documents provide a framework for developing quality documentation for different procurement methods and types of contracts. They can be used to define:

- Outputs.
- Quality standards and standards of compliance.
- Method of payment.
- Risk identification and management.
- Procedures, roles and responsibilities.
- Dispute resolution processes.
- Requirements for Council's economic, social and environmental objectives.

COMPILATION OF CONTRACT DOCUMENTS

The AUS-SPEC contract document system is suitable for all Council services related to asset management including design, construction, maintenance and operations of urban and open spaces, buildings and facilities, road reserves, and public utilities.

Reference documents

Before compiling the documentation, refer to the following AUS-SPEC TECHguides for detailed guidance on contracts, technical specifications, tender submission requirements and sample documents.

- *TG102 Guidelines for Principals – standard contracts.*
- *TG103 Guidelines for Principals – period supply and service contracts.*
- *TG104 Guidelines for Principals – sample documents.*

Standard contracts

Identify the following contract requirements for the project:

- Conditions of tendering: Required for tender documentation only.
- Conditions of Contract: General conditions, Annexures and Special conditions of contract. SAI Global licence is required to use the Annexures of AS 2124 and AS 4000.
- Quality management system: Quality assurance or Integrated management.
- Method of payment: Schedule of rates or Lump Sum or a combination of both.



The Australian economy spends approximately \$7 billion per annum to resolve disputes in the construction industry. Concerns exist including the cost of tendering, lack of clarity of documentation and unequal allocation of risk.

- CRC Construction Innovation, Guide to leading practice for dispute avoidance and resolution: An overview

Relevant publications

Austrroads

AGPD01 Guide to project delivery Part 1: Overview.

AGPD02 Guide to project delivery Part 2: Planning and control.

AGPD03 Guide to project delivery Part 3: Contract management.

AGPD04 Guide to project delivery Part 4: Direct management of project works.

The compilation of the AUS-SPEC contract documentation for standard and period and supply contracts is in alignment with the Austrroads project delivery guides AGPD01-14.

USING AUS-SPEC FOR CONTRACT DOCUMENTATION

Period supply and service contracts

In addition, for period supply and service contracts, define the following contract requirements:

- Extent of service: Supply only, supply and deliver or supply, deliver and install/lay/place.
- Type of quality control: Quality control or Quality management system.
- Period of contract: e.g. 12 months with optional extension for 3 to 5 years or a longer term.
- Method of payment: Monthly payment, proportional payment, payment upon delivery.

SPECbuilder Live

Using SPECbuilder Live, the online specification compilation software, select the appropriate AUS-SPEC worksections and Office edited worksections to create a project specification. Edit standard clauses where necessary and customise the worksections to include project specific information. Complete any checklists and annexures to suit the needs of a particular project.

Project documentation

Assemble the project specific documentation in two sections:

- Section A – Tender documents. Assemble separately. For electronic tendering, a PDF file with all the information can be issued to the tenderers.
- Section B – Contract documents: Assemble contract documentation in 4 volumes as noted in the **Contract compilation table**.

Contract compilation table

Contract volumes	Standard contracts	Period supply and service contracts
Section A	TENDER INFORMATION	
	0122 Information for tenderers 0123 Conditions of tendering	
Section B	CONTRACT DOCUMENTS	
Volume 1 CONDITIONS OF CONTRACT		
	0147 Conditions of contract (e.g. AS 2124)	
	Annexure to General conditions of contract	
	Special conditions of contract	
Volume 2 TECHNICAL SPECIFICATIONS		
General	0136 General requirements (Construction)	0134 General requirements (Supply) and/or 0135 General requirements (Services)
Quality assurance	0161 Quality (Construction)	0162 Quality (Supply) or 0163 Quality (Delivery)
Integrated management	0161 Quality (Construction) and 0167 Integrated management	
Checklists (for development of documents only)	0125 Standard contract checklists	0126 Period supply and service checklists
Specific requirements	Select other worksections as required. Refer to the National worksection matrix . Construction services: Workgroups 2, 3-11 and 13. Maintenance services: Workgroups 14-18.	
Volume 3 (Separate compilation not covered by AUS-SPEC)		
DRAWINGS and SCHEDULES	Project drawings	
	Standard drawings	
	Schedules	
Volume 4		
TENDER SUBMISSION DOCUMENTS	0124 Tender submission documents including Tender forms, Schedule of rates or Bill of quantities Tenderer's particulars, Declarations	
ADDITIONAL INFORMATION	For example, geotechnical information, environmental protection agency information and Council's WHS policy	

Relevant publications

TECHguides

General

- TG101 Guidelines for compiling documentation for contracts.
- TG102 Guidelines for Principals – standard contracts.
- TG103 Guidelines for Principals – period supply and service contracts.
- TG104 Guidelines for Principals – sample documents.

Maintenance

- TG 401 Guide to the parks and open space maintenance system and documentation.
- TG 402 Guide to adapting asset delivery documentation to parks and open space maintenance.
- TG 403 Guide to building and facility maintenance management system and documentation.
- TG 404 Guide to adapting asset delivery documentation to building and facility maintenance.
- TG 405 Guide to the road reserve maintenance system and documentation.
- TG 406 Guide to adapting asset delivery documentation to road reserve maintenance.

TECHreport

NATSPEC TR 06 Procurement: Past and present provides guidance on using NATSPEC for building construction and AUS-SPEC for infrastructure to suit different procurement and delivery systems. Integrating sustainable procurement with the general stages of the procurement process reduces adverse environmental, social and economic impacts of purchased products and services throughout the asset life cycle.

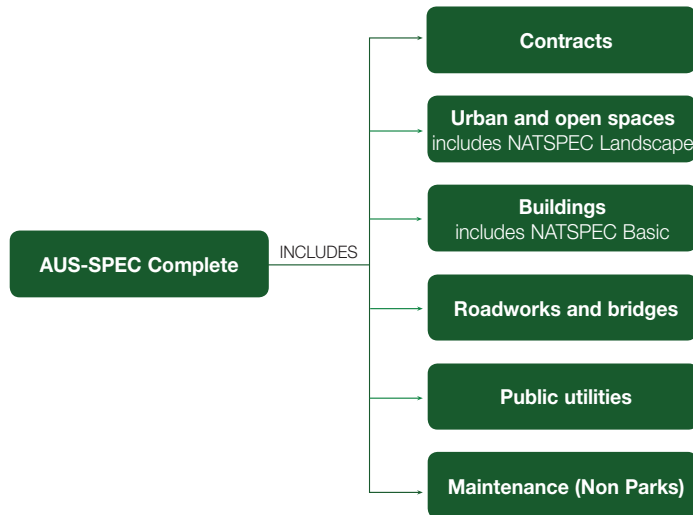
TECHnote

NATSPEC TECHnote GEN 018 Using AUS-SPEC for asset maintenance sets out the philosophy and components of the AUS-SPEC maintenance system.

Worksections

Refer to the [National worksection matrix](#) for selection of worksections.

AUS-SPEC PACKAGES



“Instead of reinventing the wheel, Councils should consider adopting nationally consistent civil specifications. AUS-SPEC, developed by IPWEA, is updated annually and provides national consistency of documentation, such that all involved in the design, construction and maintenance of Council assets are using the same language. It provides a library of design, construction and maintenance templates and allows the flexibility to edit and add Council specific and project specific information”

Chris Champion, CEO IPWEA 2000-2015



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