

## GENERAL

Holders of this certificate will have an understanding of the contribution that they make to the successful application of the principles of asset management in their organization.

Their contribution will be generally operational within well defined processes and procedures.

CPAMs are responsible for implementing aspects of asset management projects and programs in an operational sense, for:

- Bringing knowledge to bear from specific disciplines to develop solutions to problems and issues, and
- Ensuring that technical considerations are properly integrated and risks managed appropriately.

A CPAM must demonstrate Level 2 competencies and meet all the requirements of the AM Council's Certification scheme, in relation to projects and activities that involve the following:

## KNOWLEDGE AND UNDERSTANDING

A knowledge background equivalent to that required for the Level 2 competencies, as determined by the AM Council.

Where the person seeking accreditation has a primary engineering background, an accredited three or four year Engineering diploma or degree or recognised alternative, with knowledge in one or more fields of engineering will apply. Where an applicant has another primary background, a similar requirement will exist.

In general, the applicant's knowledge and understanding will include the ability to:

- Tackle asset management problems using defined processes to make reliable predictions of outcomes; and
- Ensure that specific aspects of a project are soundly based in theory.
- Understand how new developments relate to established practice and to other disciplines with which they may interact.

## COMPETENCY SETS

General competencies include:

- Addressing encountered issues and problems, within those encompassed by standards and codes of practice for professional asset management.
- Engagement with asset management issues and resolution of problems arising from interactions between such issues, including interaction with other asset management disciplines.
- Some integration of functional elements to form a consistent system.
- Ability to conceptualise alternative approaches, define the risks and benefits of each.

The specific competencies relevant to CPAM are in the Appendix.

## RESPONSIBILITY FOR OUTCOMES

CPAMs are able to manage specific aspects of project/enterprise outcomes in a range of contexts, namely.

- Interactions between aspects of the asset management system and the environment in which it operates, and some integration of social, legal, environmental and economic intended outputs/outcomes.
- Effective interaction and integration with other disciplines and professions for specific asset management activities requiring detail professional knowledge.
- Interpreting possibilities, within the constraints of an approved process, to society, business, and government, and ensuring that policy decisions are properly informed.

## MANAGEMENT ROLES

A CPAM may assist in managing teams appropriate to the above responsibilities.

In asset management roles, a CPAM should ably implement requirements across specific facets of asset management, namely:

- Identifying, assessing and managing risk, in relation to clients, users, the community and the environment;
- Ensuring that costs, risks and limitations are properly understood with respect to the desirable outcomes; and
- Recognising limits to own knowledge and seeking advice to supplement own knowledge and experience.

## APPENDIX: SPECIFIC COMPETENCIES FOR CPAM

### Asset Management Principles

#### *Capabilities*

Maintains customer focus and relationships

#### *Learning Organisations*

Core Applies Decision Making Processes and Procedures  
Accesses the Internet  
Applies problem solving techniques  
Accesses and Interprets Technical Data and Information  
Composes workplace documents

#### *Level of Assurance*

Supervises Configuration Management  
Applies Configuration Management Processes and Procedures  
Maintains Configuration Management Documentation  
Applies Asset Management Processes and Procedures

#### *Output Focus*

Designs and develops text documents

### Asset Management Processes

#### *Financial*

Participates in quality processes  
Core Participates in environmental work practices  
Applies Life Cycle Cost Processes and Procedures  
Prepares Specifications for the Supply of Materials and Services  
Applies Asset Valuation Processes and Procedures  
Applies Basic Accounting Methods  
Core Participates in safety work practices

#### *Leadership and Culture*

Creates and uses spreadsheets  
Participates in workplace change  
Accesses and uses resources  
Communicates in the workplace  
Creates and uses databases  
Contributes in a Team Environment

Gives and receives workplace feedback  
Allocates Resources to Projects  
Pursues continuing professional development

## **Configuration Management**

### *Engineering Change*

Core     Prepares Cost Justification Proposals  
           Applies Engineering Change Processes and Procedures

## **Continuous Improvement**

### *Process Audit*

           Applies Root Cause Analysis Methods  
           Applies Lean Thinking Methods  
           Applies Technical Compliance Management Processes and Procedures

### *Process Change*

           Applies Process Change Processes and Procedures  
Core     Participates in improvement processes

### *Process Monitoring*

Core     Applies Data Analysis Methods  
           Analyses Condition Monitoring Data  
           Analyses Performance Indicators  
           Prepares General Reports  
           Participates in the incidents investigation  
           Maintains Problem Reporting and Incident Recording Documentation  
           Applies Statistical Process Control Methods  
Core     Applies Problem Reporting and Incident Recording Processes and Procedures

## **Demand Management**

### *Demand Analysis*

           Communicates with Stakeholders  
           Applies Asset Solution Processes and Procedures  
           Applies Demand Analysis Processes and Procedures  
           Applies Demand Management Processes and Procedures

## **Integrated Support**

### *Computer Support*

           Utilises Computer Systems  
Core     Maintains Integrated Support Documentation  
           Implements Computer Systems

### *Spares*

           Maintains Materials Cataloguing Documentation  
           Applies Materials Cataloguing Methods  
           Plans Distribution of Spares and Supplies  
           Applies Inventory (Spare Parts) Level Methods

### *Support Analysis*

           Applies Technical Data and Information Processes and Procedures  
           Applies RCM Analysis  
           Applies FMEA/FMECA Analysis  
Core     Applies Reliability Analysis Methods

- Applies Reliability Modelling Methods
- Applies Supply Chain Processes and Procedures
- Applies Support Analysis Processes and Procedures
- Applies Asset Renewal Methods
- Applies Regulatory Frameworks Processes and Procedures
- Prepares Operating Instructions
- Applies Asset Renewal Processes and Procedures
- Maintains Supply Chain Documentation
- Applies Integrated Support Processes and Procedures

## **Operations and Maintenance**

### *Maintenance Management*

- Applies Maintenance Management Processes and Procedures
- Plans Shutdowns
- Forecasts Maintenance Work
- Plans Minor Projects
- Schedules Maintenance Work
- Allocates Resources to Maintenance Work
- Supervises Maintenance Work
- Forecasts Maintenance Costs
- Utilises Computerised Work Management System
- Plans Maintenance Work
- Maintains Maintenance Management Documentation
- Prepares Maintenance Work Instructions
- Applies Work Management Processes and Procedures

### *Maintenance Planning*

- Develops Preventive Maintenance Tactics

### *Operations Management*

- Supervises Operations Work
- Maintains Operating Documentation
- Plans Operations Work
- Applies Operations Management Processes and Procedures
- Schedules Operations Work

## **Systems Engineering**

### *Commissioning*

- Maintains Commissioning Documentation
- Applies Commissioning Processes and Procedures
- Supervises Commissioning Work

### *Concept Exploration and Validation*

- Applies Reliability Test Plans
- Applies Research
- Prepares Investment Options Proposals
- Designs Reliability Test Plans
- Applies Concept Exploration Processes and Procedures

### *Construction*

- Applies Construction Processes and Procedures
- Prepares Construction Reports
- Maintains Construction Documentation

Allocates Resources to Construction Work  
Plans Construction Work  
Supervises Construction Work

*Create/Dispose*

Plans Asset Disposal Work  
Applies Asset Disposal Processes and Procedures

*Design*

Documents Design  
Applies Design Verification and Validation Processes and Procedures  
Plans Design Verification and Validation Work  
Applies Design Processes and Procedures  
Applies Technical Design Methods  
Maintains Design Verification and Validation Documentation

*Needs Definition*

Applies Needs Definition Processes and Procedures

*Specification*

Applies Specification Processes and Procedures