The SAAMA Certification for Individuals: The Road Ahead

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Background

• Asset management is a rather new and evolving knowledge area
• Basic ‘building blocks’ are well known but new elements are under development
• Many of the elements of asset management are included in programs like engineering management, technical management and maintenance management
• Standards/guidelines/frameworks are now available, e.g. ISO 55000, PAS 55, GFMAM Landscape, etc.
The Need for Certification in South Africa

• Asset Management is new knowledge area
• Two qualifications have been defined by National Treasury
  – Asset Manager
  – Asset Management Practitioner
• Asset managers and practitioners need to be competent in the execution of asset management functions
• They also need recognition for theoretical knowledge and practical experience
Asset Management Frameworks: ISO 55001

• The sections of the ISO 55001 standard are covered by many of the 39 subjects of GFMAM Landscape

• ISO 55001 Outline
  – Context of the organisation (39)
  – Leadership (18, 27; 29; 30)
  – Planning (4; 5)
  – Support (15)
  – Operation (17)
  – Performance evaluation (35; 36; 37)
  – Improvement (20)

(Source: www.iso.org)
Global Forum on Maintenance and Asset Management

• The GFMAM was formed in 2010 to bring together various experts, practitioners, academics and other professional people that are active in the field of asset and maintenance management.

• The vision of GFMAM is “[t]o be a worldwide community of organisations providing leadership for maintenance and asset management communities.”

• The primary mission of GFMAM is “to develop and promote knowledge, standards and education for the maintenance and asset management professions.”

• To fulfil this mission the GFMAM developed the Asset Management Landscape document.

(Source: www.gfmam.org)
Framework for Asset Management Landscape

ISO 31000

Engineering Competences

Conceptual Models

Awards

Finance Standards

ISO 55000 series, PAS 55, Other AM standards & AM Processes

Knowledge & Practices

The Core

Asset Management Principles

Scope - 39 Asset Management Subjects

MBA

Qualifications

Training

Other Competence Frameworks

EFQM

Assessment Methodology

Knowledge

(Source: www.gfmam.org)
The GFMAM 39 Subjects

- First Landscape Document released in 2011
- Review of document initiated in 2013
- Landscape 2 document April 2014
- Some subjects combined for Ver. 2
- Some subjects deleted
- A few new subjects defined
- Minor name changes
- Subject descriptors added for all 39 subjects
Subject Descriptors – Management of Change (example)

• **Definition:**
  - An organization’s processes for the identification, assessment, implementation and communication of changes to people, processes and assets

• **Context:**
  - Management of Change describes policies and processes for dealing with changes to physical assets their management systems or supporting resources. This subject also includes elements of mitigating the impact of change

• **Artefacts:**
  - Documented Management of Change Process
  - Change Management Register
  - Change Management Plan

(Source: www.gfmam.org)
GFMAM Certification Project

• **Objective**
  – GFMAM initiated the Certification Project to research the certification schemes managed by member professional associations around the world, compare and describe them as a starting point to investigate whether and how alignment may be pursued

• **Qualification vs. Certification**
  – Qualification is viewed as a confirmation of knowledge
  – Certification is viewed as a confirmation of competence (both knowledge and skills)
Asset Management Council - Australia

• The Asset Management Council offers 4 levels of certification based on their competency framework for Asset Management at entry level, operational, tactical and strategic levels.

• Assessment of competence is managed through a documented and reviewed self-assessment process.

• Four levels of certification
  – CFAM - Certified Fellow in Asset Management
  – CSAM - Certified Senior Practitioners in Asset Management
  – CPAM - Certified Practitioner in Asset Management
  – CAAM - Certified Associate in Asset Management

(Source: www.amcouncil.com.au/certification/)
Institute of Asset Management - UK

- The IAM has established a Certificate and a Diploma in Asset Management by defining course titles, learning outcomes and lengths of study.
- IAM accredits bodies to design and deliver the programs of study.
- The IAM administers an exam to assess candidates for the final qualification.

(Source: www.iam.org)
Possible Certification Levels for South Africa

- **Certified Associate in Asset Management**
  - awareness of the Competency Elements that comprise the Asset Management, understands contribution they make to successful application of principles of asset management in their organization

- **Certified Practitioner in Asset Management**
  - achievements in Asset Management, contributes to successful application of principles of asset management in their organization

- **Certified Senior Practitioner in Asset Management**
  - significant tactical contribution, a degree of synthesis of strategies and higher level objectives

- **Certified Fellow in Asset Management**
  - strategic contribution, high degree of synthesis, ability to solve complex asset management problems
A survey in 2013 identified the 10 most important subjects of Landscape 2 (sample size = 110):

- S2: Asset Management Strategy
- S17: Reliability Engineering
- S18: Asset Operations
- S5: Asset Management Plan
- S16: Maintenance Delivery
- S4: Strategic Planning
- S6: Capital Investment Decision Making
- S1: Asset Management Policy
- S7: Operations & Maintenance Decision Making
- S28: Asset Management Leadership
Survey on 39 Subjects of Landscape 2

- A survey in 2014 identified the 10 most important subjects of Landscape 2 (sample size = 63):
  - S2: Asset Management Strategy & Objectives
  - S1: Asset Management Policy
  - S4: Strategic Planning
  - S5: Asset Management Planning
  - S13: Systems Engineering
  - S27: Asset Management Leadership
  - S31: Risk Assessment & Management
  - S7: Operations & Maintenance Decision-Making
  - S6: Capital Investment Decision-Making
  - S16: Reliability Engineering
SAAMA Certification for Individuals

- An applicant will be tested on theory and practical experience
- Theoretical testing – possibly two routes
  - Applicant presents documents that indicate successful completion of compulsory and elective subjects at recognised institutions
  - Applicant passes a test, e.g. a multiple choice questionnaire (closed book) plus an essay on a specific topic
- Practical experience
  - Written report on work experience in asset management
  - Brief reports by at least two referees
Proposed Process for Application

• Applicant obtains and reads relevant documentation, guidelines and instructions from SAAMA (website)
• Documents related to successful completion of 20 compulsory subjects (degrees, diplomas, certificates) are collected
• Proof of successful completion of another 10 elective/discretionary subjects are collected
• Applicant collects proof of his/her practical experience with references and writes a report using a standard template
• All documentation including the report is submitted online
Process for Application (cont’d)

• SAAMA administration checks if all documents are in order and dispatches to examination board
• Examination board scrutinises report on practical work and contacts references
• If application is successful, administration compiles the certificate and mails to applicant (or send by e-mail)
• If the application is rejected, reasons and improvement actions are provided to the applicant
• Applicant can resubmit after certain time lapse
Choice of Compulsory Subjects

• The final choice of compulsory subjects could be made by considering:
  – Results of 2 surveys in 2013 & 2014
  – Subjects included in current offerings of tertiary institutions and private service providers
  – Curricula of UK and Australian educational programs
  – Curricula for Asset Manager and Asset Management Practitioner training as proposed by National Treasury
  – Inputs from various stakeholders in industry (asset intensive industries)
  – Collective experience of SAAMA council members
Certification – Next Steps

• Register certification project, with deliverables and milestones, as a formal SAAMA project
• Define basic rules and guidelines for certification
• Finalise the list of compulsory subjects
• Engage service providers and check alignment of courses to compulsory subjects
• Develop database and website for online application and document storage
• Develop brochure/flyer for marketing
• Launch certification
Conclusion

• Certification of asset managers and practitioners is necessary in South Africa
• SAAMA should play a leading role in developing a certification system for asset management
• SAAMA could also act as the certification body that can administer the ongoing process of initial certification and re-certification after some time period has elapsed (e.g. 2 years)
• Guidelines should be provided to training service providers to develop suitable educational programs
References