

## The IAM Endorsed Assessor Scheme

# SCHEDULE OF REQUIREMENTS

The IAM Endorsed Assessor Scheme comprises: this document together with the 'IAM Endorsed Assessor Scheme', the 'EA Code of Practice' and the Application Form.

<b>Definitions</b>	
Assessment	means the provision of assessments based on the requirements identified from time to time by the IAM including, in particular, the SAM and the Schedule
Audit	<i>systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled</i> (ISO 19011, 3.1).
Auditor	<i>person who conducts an audit</i> (ISO 19011, 3.8) for an EA in delivery of EA Services
Audit criteria	set of policies, procedures or requirements used as a reference against which audit evidence is compared (ISO 19011, 3.2) and for the EA scheme means, in particular, the SAM and the Schedule
Certification	Provision of written assurance (a certificate) by an independent third party that a management system conforms to the requirements of ISO 55001 or PAS 55.
Client	means a person: to whom it is contemplated EA Services may be provided; to whom EA Services are being provided; and/or to whom EA Services have been provided
Code	means the Endorsed Assessor Code of Practice and any documents expressly referred to in it. The Code of Practice shall prevail in the event of any conflict unless the IAM expressly states otherwise in writing
Code of Conduct	means the current version of the Code of Conduct applicable to any category of member of the IAM from time to time.
Endorsed Assessor / EA <sup>1</sup>	means the scheme of that name administered by the IAM
EA Services	the provision of services as an Endorsed Assessor (including Assessment, Certification and Gap Analysis) pursuant to the Endorsed Assessor Scheme and any guidance issued by the IAM from time to time
Endorsed Assessor Scheme	means the scheme of that name administered by the IAM
Gap analysis	means assessment to establish the extent to which an organisation's management system conforms to the requirements of ISO 55001 or PAS55.
GFMAM Competency Specification	means the ' <i>Global Forum on Maintenance &amp; Asset Management Competency Specification for an ISO 55001 Asset Management System Auditor/Assessor</i> ' (available free from the GFMAM

<sup>1</sup> This is unrelated to the European abbreviation EA (European co-operation for Accreditation) or the formal accreditation of conformity bodies.

<b>Definitions</b>	
	website)
IAM	means the Institute of Asset Management (registered number 05056259) of St Brandon's House, 29 Great George Street, Bristol, BS1 5QT; and IAM Trading Limited (registered number 04990747) of the same address
ISO 19011	means ISO 19011:2011 'Guidelines for auditing management systems'
ISO 17021:2011	means ISO/IEC 17021:2011 – ' <i>Conformity assessment — Requirements for bodies providing audit and certification of management systems</i> '
ISO 17021-5	means ISO/IEC 17021-5 ' <i>Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 5: Competence requirements for auditing and certification of asset management systems</i> '
ISO 55001	means ISO 55001:2014 ' <i>Asset management - Management systems – Requirements</i> '
SAM	means the IAM's Self Assessment Methodology which can be used for assessment of ISO 55001 or PAS55 (download free from the Self Assessment Methodology page on the IAM website)
PAS55	means BSI PAS 55-1:2008 'Specification for the optimized management of physical assets'
Schedule	means this document

## **Scope**

1. This document sets out the minimum requirements for competence, consistency and impartiality for bodies seeking to be accepted as IAM Endorsed Assessors in order to carry out either third-party gap analysis and/or certification in relation to ISO 55001 or BSI PAS 55:2008

## **Principles**

### **General**

2. The overall aim of certification is to give confidence to all interested parties that a management system fulfils specified requirements.
3. ISO 17021:2011 identifies certification of management systems as third-party conformity assessment that provides independent demonstration that the management system of an organization
  - a) conforms to specified requirements,
  - b) is capable of consistently achieving its stated policy and objectives, and
  - c) is effectively implemented.
4. The aim of IAM Endorsement is to give confidence to all parties that an EA meets specified requirements in undertaking third-party assessment of a client's asset management system.
5. This document takes account of the guidance on auditing good practice described in ISO 19011, the generic requirements in ISO 17021:2011 for auditing and certification of management systems, and the specific additional requirements in ISO 17021-5 for

the competence of personnel involved in the certification of asset management systems. The IAM does not seek to apply all the requirements of ISO 17021:2011 to members of the EA scheme.

6. The GFMAM Competency specification sets out the minimum knowledge and comprehension for personnel to assess conformity to ISO 55001. The competence requirements conform to the requirements and recommendations in ISO 17021-5 and ISO 19011. The IAM fully supports the GFMAM specification, and the requirements of this EA scheme are designed to facilitate conformance to the specification.
7. ISO 17021:2011 identifies 6 principles for inspiring confidence in certification: Impartiality; competence; responsibility; openness; confidentiality; responsiveness to complaints. The EA scheme has been developed to also reflect these principles. Impartiality and competence are covered in more detail in the body of this document.
8. This document does not give specific requirements for all situations that can occur. The principles described should be applied as guidance for decisions that may need to be made for unanticipated situations.
9. The IAM will expect EAs to adopt internationally accepted good audit practices for their assessment processes, including training of their auditors in good audit practice
10. The IAM reserves the right to independently verify that the requirements of the EA scheme are being met and that assessments achieve the standard required.
11. It is a requirement that that an EA maintains a register of individuals, who are their competent auditors and can demonstrate that these auditors meet the requirements in this specification.
12. Use of the IAM's SAM is not mandatory. Where reference is made to the use of the SAM, it is acceptable for another tool / question set to be used that can be shown to be at least as good as the SAM for this purpose. However, the prospective EA must make clear its approach and bears the burden of proof for the equivalence to be demonstrated in its application.

## **Responsibility**

13. The client organization is responsible for ensuring conformity with the requirements of ISO 55001 or PAS55. The EA is responsible for assessing objective audit evidence upon which to base a gap analysis recommendation, or a certification decision. Note that an assessment is based on sampling within an organization's management system and therefore does not guarantee 100 % conformity with requirements.

## **Openness**

14. To gain confidence in the integrity and credibility of certification the EA may, if required, need to provide access to, or disclosure of appropriate and timely non-confidential information about its audit and certification processes together with the certification status of any organization. In order to demonstrate openness, this may include information about the conclusions of specific audits to specific interested parties

## **Confidentiality**

15. For the EA to assess conformity to ISO 55001 or PAS55, it is recognised that client confidential information may be required. It is essential that an EA keeps confidential any such information so deemed by the client.

## Responsiveness to complaints

16. Clients using an EA to carry out gap analysis or certification assessments will reasonably expect to have any associated complaints investigated. If these are found to be valid, they should be appropriately addressed and a mutually satisfactory resolution achieved.

## Standards & Methodology

### Specification

Assessments within the scope of the EA Scheme will be against either ISO 55001:2014 or BSI PAS 55-1:2008

### Approach

#### **Requirement**

17. The verification and evaluation of audit evidence should be consistent with the SAM. Where questionnaires are used as part of an assessment they should, at a minimum, include the SAM question set and indicative criteria for assessment of the extent of conformity to the requirements of ISO 55001 or PAS55.

#### **Notes & Guidance**

Assessment organizations may supplement question sets with their own material, provided that this does not introduce additional requirements to those set out in ISO 55001 or PAS55, or conflict with those requirements. For example it is acceptable for assessment to include assessing conformity to more than one standard simultaneously. The exercise may also have objectives which are wider than solely an assessment of conformity.

### Certification Decisions

#### **Requirement**

18. Certification decisions will be based on evidence of conformance to the requirements of ISO 55001 or PAS55 to Level 3 of the SAM, within an accepted tolerance of minus 0.5 i.e. to 2.5.

19. When the score for an ISO 55001 or PAS55 element is in the range above 2.5 but below 3, in order for an organization to be certificated it must be able to demonstrate effective plans are in place to achieve a 3 rating within a maximum of 2 years (the EA may choose to set a shorter period).

20. These action plans shall be monitored for effectiveness during EA surveillance visits and evidence must be available to demonstrate a movement towards a 3 rating within the specified period.

#### **Notes & Guidance**

Where adequate evidence exists, it is acceptable for auditors to discount 'outlier' question responses, and make some adjustment to criteria provided adequate evidence based justification is made.

## Completeness

### **Requirement**

21. Certification assessment will include audit against all the requirements of ISO 55001 or PAS55 and will include the whole asset management system. This includes demonstrating the integration and connectivity of asset management activities across the business vertically and horizontally.

22. The scope of the certificate should be based on a defined set of assets, and the activities required to manage the performance of the assets over their life cycle, or the organisation's period of responsibility for the assets. It is therefore not permissible to grant an ISO 55001 or PAS55 certificate for one department or functional contributor (such as the maintenance department) which has responsibility for only one aspect of managing the assets.

### **Notes & Guidance**

This requires that all 27 elements of ISO 55001 or 28 elements of PAS 55 are examined and that all key processes and parts of the organization responsible for managing assets are included in the assessment.

In particular the concept of 'alignment' (ISO 55001) or 'line of sight' (PAS 55) is an important indicator of a structured approach. Although a relatively new asset management system is unlikely to be delivering full benefits it should be the role of the audit team to confirm the organisation is implementing, monitoring and controlling these processes.

## Duration of certification and surveillance

### **Requirement**

23. Duration of certification should be for a maximum of 3 years, with additional surveillance visits as appropriate to verify actions required from initial reviews or 'work in progress' is progressed as agreed.

24. Surveillance visits should be at a frequency of not less than annually and may be needed more frequently if there are significant improvement issues requiring attention.

### **Notes & Guidance**

It is not unusual for minor non-conformances or 'scope for improvement' to be observed at the time of the initial assessment. Verification of improvement actions is not mandatory but verification of actions arising from non-conformances is required.

It would be expected that EAs have in place a process for verification and confirming that actions are being progressed within an acceptable time frame consistent with good auditing practice.

# Rigour

## Sample size and coverage

### **Requirement**

25. The depth and coverage of the assessment should be sufficient to ensure that audit findings are verified by factual evidence or, when relying on questionnaire responses, from a statistically robust sample.

26. The assessment for initial certification should include a sufficiently wide selection of employees and sources to demonstrate an unbiased picture of asset management as it is understood and applied both 'horizontally' across the organisation's functions/assets and 'vertically'.

27. At re-certification a reduced but still representative selection of employees and sources can be acceptable. The size and form of the sample should be influenced by the results of surveillance visits.

28. For both initial and re-certification assessments the EA shall keep records explaining why the particular representative sample was selected.

### **Notes & Guidance**

Appropriate sampling should be used to provide confidence in audit findings.

The sample size will depend on the size and complexity of the organization. Typically, an initial assessment should include 20-40 interviews using the SAM question set plus additional group sessions or surveys to verify more widely the findings of the interviews, and explore the implementation of the AM system.

Interview samples should normally contain a true cross section of staff (long standing experienced staff and new arrivals) and not be 'hand picked' staff who are closely involved with developing the AM system.

It is important that checks are made that understanding and practice are in place through the organization – i.e. it is necessary to question not only the policy makers but also those responsible for putting it into practice. Organizations that do not conform to requirements often have significant elements of the AM system missing – this is usually quickly identified and can make sections of the assessment unnecessary (e.g. no AM policy).

Assessment for re-certification may adopt a lighter touch with the form and size of the sample influenced by the findings of surveillance visits e.g. an organization that has been through a series of surveillance visits consistently demonstrating conformance to the requirements of ISO 55001 or PAS55 should expect a less intense re-certification assessment than one in which non-conformance have been regularly found.

ISO 19011 provides good practice guidance on the use of audit sampling

## **Data sources**

### **Requirement**

29. Assessment should use multiple sources of information to verify conformance. This will include documentary evidence, records, data sources (such as performance measures) and interview feedback.
30. Available fact-based evidence will be supplemented with information recorded from interviews using an objective approach consistent with sample size and coverage requirements set out above. Interviews will cover as a minimum the question set and responses identified in the SAM.

## **Competence**

### **Requirement**

31. Auditors must have the minimum level of asset management knowledge and understanding required by the GFMAM Competency specification. The way in which the IAM will verify this will be by auditors demonstrating:

- (a) knowledge and comprehension of asset management by successful examination in the IAM's Certificate of Asset Management or another qualification recognised in the EA Scheme.
- (b) at least 5yrs experience in asset management as a Level C, Leading Practitioner, in at least 2 of the IAM Competences Framework's 7 Key Roles.

32. Auditors should have personal knowledge of ISO 55001 or BSI PAS 55 and verifiable competence in objective audit or assessment processes

### **Notes & Guidance**

Where elements of the design of an organization's AM system do not conform to the requirements of ISO 55001 or PAS55, it is normally not appropriate to use the complete interview question set in the SAM – as other questions are dependent on the existence of these missing elements.

### **Notes & Guidance**

The IAM believes that assessment against ISO 55001 or PAS55 requires direct knowledge and experience of asset management in a range of roles.

Auditors should be able to demonstrate subject matter knowledge (beyond that contained in the ISO 55000 or PAS55 documents) and have first-hand experience of asset management responsibility.

Further information about the qualifications recognised for the EA scheme can be found in Appendix A

Further information on the IAM's asset management practitioner levels and the IAM Competency Framework's Key Roles can be found in Appendix B

## **The Assessment Team**

### **Requirement**

33. An assessment team will comprise at least 2 auditors supported if needed by technical experts. The auditors must satisfy the competence requirements of the EA Scheme.

34. Auditors should have adequate expertise to interpret industry sector terminology and adequacy (i.e. if the AM system is 'fit for purpose' for the nature of the business and scale of the application).

35. Cross-checking between auditors must be demonstrated, and scoring against the SAM or other tool / question set checked for consistency and objectivity.

### **Notes & Guidance**

Assessments must be led and directed by a competent auditor. The knowledge and skills of the competent auditors may be supplemented by additional assessment team members e.g. technical experts with specific knowledge of the client's business sector. The technical expert does not perform the role of an auditor.

The interviewing of staff and the interpretation of ISO 55001 or PAS55 requirements for assessing conformance requires the use of auditors experienced in asset management.

## **Objectivity and Independence of advice**

### **Requirement**

36. EAs must make all observations and recommendations free of commercial bias. Such observations and recommendations must be independently verifiable

37. Where any recommendation introduces an unavoidable conflict of interest, clear indication must be made of the relevant commercial interests of the EA and cannot be contingent upon any ongoing relationship or commercial commitments between the EA and the client.

### **Notes & Guidance**

The assessment should be strictly of conformance to ISO 55001 or PAS55 requirements.

It is often the case that EAs will also be asked to advise organizations on developing improvement plans. Clearly these may represent opportunities for commercial solutions.

Clear division needs to be in place between the certification process and consulting work associated with business development. (see the Code)



## **Impartiality**

### **Requirement**

38. It is acknowledged that a client paying for gap assessment or certification is a source of revenue for an EA and that this may be a threat to impartiality. To ensure confidence, it is essential that a EA's decisions be based on objective evidence of conformity or nonconformity with ISO 55001 or PAS55 and that its decisions are not influenced by any other interests.

### **Notes & Guidance**

The impartiality of the Auditors must be guaranteed.

Auditors undertaking certification assessments must not have been involved in providing consultancy for directing or advising on the design, implementation and training of the Client's asset management system. To ensure impartiality of these auditors, there must be separation from the EA staff that have been providing consultancy. If it is not possible to achieve this separation and the impartiality of the auditors, the EA should not undertake the assessment.

EAs shall not offer or provide internal audits to its certified clients.

Allowing a minimum period of two years to elapse between the end of management system consultancy, or the provision of internal audits, and a certification assessment can be one way of reducing the threat to impartiality to an acceptable level.

The remuneration of an EA's auditors must not depend on the number of assessments carried out, nor on the results of such assessments.

## **Appendix A**

### **Qualifications Recognised by the IAM for Auditors' Asset Management Competence**

There are presently 2 examinations which address the requirements of GFMAM's '*Competency Specification for an ISO 55001 Asset Management Auditor and Assessor*'.

#### **(1) The IAM Certificate in Asset Management**

The IAM Certificate consists of five Modules, the content of all of which must be covered for the full qualification:

- C1 Introduction to asset management
- C2 Asset-related risk
- C3 The asset management lifecycle
- C4 Asset information
- C5 Financial and business impact

The content of the IAM Certificate is directly linked to the IAM Competences Framework and is also mapped to:

- the specifications of ISO 55001:2014 and PAS55:2008,
- the IAM document 'Asset Management – An Anatomy'
- the GFMAM Asset Management Landscape.

Further information related to the IAM Certificate can be found on Qualifications pages on the IAM website.

#### **(2) Certified Asset Management Assessor (CAMA)**

The CAMA Exam was developed between the following organisations: ABRAMAN, the Asset Management Council, IFRAMI, PEMAC and SMRP.

Further information related to this examination can be obtained from one of these organisations.

## **Appendix B**

The first and second versions of the EA Schedule of Requirements, identified that *'assessors should have at least 5 years of senior asset management related experience'*

This third version of the Schedule of Requirements more clearly identifies what the IAM considers to be relevant *'senior asset management related experience'*, defining it as *'at least 5yrs experience in asset management as a Level C, Leading Practitioner, in at least 2 of the IAM Competences Framework's 7 Key Roles.'*

### **Practitioner Level**

The table of *'Definitions of Levels of Expertise'* on the IAM's website page for Individual Membership identifies 4 levels of expertise (Levels A-D), with the definition for Level C, Leading Practitioner, identified by the following:

- Will take technical decisions typically at project/ section leader/ senior consultant level and will be able represent the asset management discipline effectively in discussions with both professionals in other disciplines and senior management who may not have asset management experience or knowledge.
- The Leading Practitioner may make a significant contribution to the development of an organisation's Asset Management Policy and Strategy and be responsible for the development and/or implementation of Asset Management Plans and the performance of operational assets under his or her control.
- A Leading Practitioner may be responsible for checking the output of staff working at a lower level. Some of a Leading Practitioner's work will normally be subject to authorisation/ review by a person working at a higher level or an acceptance process by an informed client.
- A Leading Practitioner may have responsibility for defining or devising training and development material or development plans for new entrants to the discipline.
- The Leading Practitioner will have some responsibility for the resources and budget associated with the work he or she leads.

### **IAM Competency Framework Key Roles**

There are 7 Key Roles in the IAM's Competences Framework

<b>Key Roles</b>	
1	Policy development
2	Strategy development
3	Asset management planning
4	Implement asset management plans
5	Asset management capability development
6	Risk management and performance improvement
7	Asset knowledge management

Further information about the roles can be found on the Competences Framework pages on the IAM's website.