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### TECHNICAL REFERENCE Conformity assessment – Requirements for bodies providing audit and certification of management systems –

Part 5: Competence requirements for auditing and certification of asset management systems

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#### TECHNICAL REFERENCE

# Conformity assessment – Requirements for bodies providing audit and certification of management systems –

Part 5: Competence requirements for auditing and certification of asset management systems

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This Technical Reference was endorsed by the Management Systems Standards Committee on behalf of the Singapore Standards Council on 17 August 2017.

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The Working Group on Conformity Assessment (CASCO), appointed by the Management Systems Standards Committee to assist in the preparation of this standard, comprises the following experts who contribute in their *individual capacity*:

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#### **National Foreword**

This Technical Reference (TR) was prepared by the Working Group on Conformity Assessment (CASCO) under the direction of the Management Systems Standards Committee.

This standard is identical with ISO/IEC TS 17021-5:2014 published by the International Organization for Standardization.

Where appropriate, the words "Technical Specification" shall be read as "Technical Reference". The reference to International Standards shall be replaced by the following Singapore Standards:

International Standard	Corresponding Singapore Standard
ISO/IEC 17000	SS ISO/IEC 17000
ISO/IEC 17021	SS ISO/IEC 17021
ISO 55000	SS ISO 55000
ISO 55001	SS ISO 55001
ISO 55002	SS ISO 55002

This TR is a provisional standard made available for application over a period of three years. The aim is to use the experience gained to update the TR so that it can be adopted as a Singapore Standard. Users of the TR are invited to provide feedback on its technical content, clarity and ease of use. Feedback can be submitted using the form provided in the TR. At the end of the three years, the TR will be reviewed, taking into account any feedback or other considerations, to further its development into a Singapore Standard if found suitable.

Attention is drawn to the possibility that some of the elements of this Technical Reference may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

#### NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

#### Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of conformity assessment, the ISO Committee on conformity assessment (CASCO) is responsible for the development of International Standards and Guides.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

Draft International Standards are circulated to the national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of document:

- an ISO/IEC Publicly Available Specification (ISO/IEC PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;
- an ISO/IEC Technical Specification (ISO/IEC TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/IEC/TS 17021-5 was prepared by the *ISO Committee on conformity assessment* (CASCO).

ISO/IEC 17021 consists of the following parts, under the general title Conformity assessment — Requirements *for bodies providing audit and certification of management systems*:

- *Part 2: Competence requirements for auditing and certification of environmental management systems* [Technical Specification]
- Part 3: Competence requirements for auditing and certification of quality management systems [Technical Specification]
- Part 4: Competence requirements for auditing and certification of event sustainability management systems [Technical Specification]
- Part 5: Competence requirements for auditing and certification of asset management systems [Technical Specification]

The next revision of ISO/IEC 17021:2011 will reflect the different parts and will become ISO/ 17021-1

#### Introduction

This Technical Specification complements ISO/IEC 17021:2011. In particular, it clarifies the requirements for the competence of personnel involved in the certification process set out in ISO/IEC 17021:2011, Annex A.

The guiding principles in ISO/IEC 17021:2011, Clause 4, are the basis for the requirements in this Technical Specification.

Certification bodies have a responsibility to interested parties, including their clients and the customers of the organizations whose management systems are certified, to ensure that only those auditors who demonstrate relevant competence are allowed to conduct asset management system audits.

It is intended that all asset management system auditors possess the generic competencies described in ISO/IEC 17021:2011, as well as the specific asset management system competencies described in this Technical Specification.

Certification bodies will need to identify the specific audit team competence needed for the scope of each asset management system audit. The selection of an asset management system audit team will depend upon various factors, including the client's products, services and asset types.

Complex multi-site audits or audits of larger organizations will require sufficient competent resources to ensure consistency, and enable moderation, of audit results.

The competence requirements for those reviewing the audit report and making the certification decision and other personnel involved in certification activities are also described.

In this Technical Specification, the following verbal forms are used:

- "shall" indicates a requirement;
- "should" indicates a recommendation;
- "may" indicates a permission;
- "can" indicates a possibility or a capability.

Further details can be found in the ISO/IEC Directives, Part 2.

## Conformity assessment – Requirements for bodies providing audit and certification of management systems –

### Part 5: Competence requirements for auditing and certification of asset management systems

#### 1 Scope

This Technical Specification complements the existing requirements of ISO/IEC 17021:2011. It specifies additional competence requirements for personnel involved in the certification process for asset management systems.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 17000, Conformity assessment — Vocabulary and general principles

ISO/IEC 17021:2011, Conformity assessment — Requirements for bodies providing audit and certification of management systems

ISO 55000, Asset management — Overview, principles and terminology

ISO 55001, Asset management — Management systems — Requirements

ISO 55002, Asset management — Management systems — Guidelines for the application of ISO 55001