

**TR ISO/IEC TS 17021-5:2017(2024)**  
**ISO/IEC TS 17021-5:2014, IDT**  
(ICS 03.120.20)

**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

Confirmed 2024

## **TR ISO/IEC TS 17021-5:2017(2024)**

ISO/IEC TS 17021-5:2014, IDT

(ICS 03.120.20)

---

### 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

---

Published by Enterprise Singapore

**Enterprise  
Singapore**



**THIS PUBLICATION IS COPYRIGHT  
PROTECTED**

**Copyright © 2017 Enterprise Singapore**

**Copyright © 2014 ISO/IEC, Geneva, Switzerland**

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Enterprise Singapore (member of ISO and representing the IEC National Committee of Singapore) or ISO/IEC. If you have any questions about the copyrights of Enterprise Singapore or ISO/IEC or have an enquiry about obtaining additional rights to this publication, please contact Enterprise Singapore at: [standards@enterprisesg.gov.sg](mailto:standards@enterprisesg.gov.sg) for further information.

ISBN 978-981-47-8423-8

## National Foreword

This Technical Reference (TR) was prepared by the Working Group on Management Systems and Others (also known as the National Mirror Working Group on ISO Committee for Conformity Assessment (CASCO)) set up by the Technical Committee on Conformity Assessment (CASCO) under the purview of the Safety and Quality Standards Committee.

This TR is an identical adoption of ISO/IEC TS 17021-5:2014, "Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part 5 : Competence requirements for auditing and certification of asset management systems", published by the International Organization for Standardization and the International Electrotechnical Commission.

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 TR 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. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review, unless there are requests to review such standards.*
- 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 and the Singapore Standards Council 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. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.*

TECHNICAL  
SPECIFICATION

ISO/IEC  
TS  
17021-5

First edition  
2014-04-01

---

---

**Conformity assessment —  
Requirements for bodies providing  
audit and certification of management  
systems —**

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

*Évaluation de la conformité — Exigences pour les organismes  
procédant à l'audit et à la certification des systèmes de  
management —*

*Partie 5: Exigences de compétence pour l'audit et la certification des  
systèmes de gestion d'actifs*

---

---

Reference number  
ISO/IEC TS 17021-5:2014(E)





**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

|  | Page      |
|--|-----------|
| <b>Foreword</b> .....  | <b>iv</b> |
| <b>Introduction</b> .....  | <b>v</b>  |
| <b>1 Scope</b> .....   | <b>1</b>  |
| <b>2 Normative references</b> .....  | <b>1</b>  |
| <b>3 Terms and definitions</b> .....   | <b>1</b>  |
| <b>4 Generic competence requirements</b> .....   | <b>1</b>  |
| <b>5 Competence requirements for the asset management system audit team and those reviewing the audit report and making the certification decision</b> ..... | <b>2</b>  |
| 5.1 Asset management terminology, definitions and principles.....  | 2         |
| 5.2 Asset management practices, activities and methodologies.....  | 2         |
| 5.3 Asset management system standards and normative documents.....   | 2         |
| 5.4 Business management practices.....   | 2         |
| 5.5 Client business sector.....  | 3         |
| 5.6 Client products and services, processes and organization.....  | 3         |
| <b>6 Competence requirements for other personnel</b> .....   | <b>3</b>  |
| <b>Bibliography</b> .....  | <b>4</b>  |

## 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/IEC 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*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 55000, ISO/IEC 17000 and ISO/IEC 17021:2011 apply.

## 4 Generic competence requirements

Personnel involved in asset management certification activities shall have the generic competencies described in ISO/IEC 17021:2011 and the asset management knowledge described in [Clauses 5](#) and [6](#).

NOTE 1 It is not necessary for each auditor in the audit team to have the same competence, however, the collective competence of the audit team needs to be sufficient to achieve the audit objectives.

NOTE 2 Knowledge concepts (i.e. concepts pertaining to the required knowledge for the principles of asset management) are given in ISO 55000. Concepts pertaining to the required knowledge for the asset management system requirements are given in ISO 55001. Concepts pertaining to the required knowledge for the application of ISO 55001 are given in ISO 55002.