



# Technical Specification

**ISO/IEC TS 17012**

**Conformity assessment —  
Guidelines for the use of remote  
auditing methods in auditing  
management systems**

**First edition  
2024-07**

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[ISO/IEC TS 17012:2024](https://standards.iteh.ai/catalog/standards/iso/42e0bb09-7569-4305-b102-d7640ece3631/iso-iec-ts-17012-2024)

<https://standards.iteh.ai/catalog/standards/iso/42e0bb09-7569-4305-b102-d7640ece3631/iso-iec-ts-17012-2024>

iTeh Standards  
(<https://standards.iteh.ai>)  
Document Preview

[ISO/IEC TS 17012:2024](https://standards.iteh.ai/catalog/standards/iso/42e0bb09-7569-4305-b102-d7640ece3631/iso-iec-ts-17012-2024)

<https://standards.iteh.ai/catalog/standards/iso/42e0bb09-7569-4305-b102-d7640ece3631/iso-iec-ts-17012-2024>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO/IEC 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [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 Principles of auditing</b> .....  | <b>2</b>  |
| <b>5 Managing an audit programme</b> .....   | <b>2</b>  |
| 5.1 General.....   | 2         |
| 5.2 Establishing audit programme objectives.....                                   | 2         |
| 5.3 Determining and evaluating audit programme risks and opportunities.....        | 3         |
| 5.4 Establishing the audit programme.....  | 5         |
| 5.5 Implementation of audit programme.....   | 5         |
| 5.6 Monitoring the audit programme.....  | 6         |
| 5.7 Reviewing and improving audit programme.....                                   | 6         |
| <b>6 Conducting an audit using remote auditing methods</b> .....                   | <b>6</b>  |
| 6.1 General.....   | 6         |
| 6.2 Initiating audit.....  | 7         |
| 6.3 Preparing audit activities.....  | 7         |
| 6.3.1 Performing review of documented information.....                             | 7         |
| 6.3.2 Audit planning.....  | 7         |
| 6.4 Conducting audit activities.....   | 8         |
| 6.4.1 General.....   | 8         |
| 6.4.2 Assigning roles and responsibilities of support personnel and observers..... | 9         |
| 6.4.3 Conducting the opening meeting.....  | 9         |
| 6.4.4 Communicating during the audit.....  | 10        |
| 6.4.5 Audit information availability and access.....                               | 10        |
| 6.4.6 Reviewing documented information while conducting the audit.....             | 10        |
| 6.4.7 Collecting and verifying information.....                                    | 10        |
| 6.4.8 Generating audit findings.....   | 11        |
| 6.4.9 Determining audit conclusions.....   | 11        |
| 6.4.10 Conducting the closing meeting.....   | 11        |
| 6.5 Preparing and distributing audit report.....                                   | 11        |
| 6.6 Completing audit.....  | 11        |
| 6.7 Conducting audit follow-up.....  | 12        |
| <b>7 Competence and evaluation of auditors</b> .....                               | <b>12</b> |
| 7.1 General.....   | 12        |
| 7.2 Determining auditor competence.....  | 12        |
| 7.2.1 General.....   | 12        |
| 7.2.2 Personal behaviour.....  | 12        |
| 7.2.3 Knowledge and skills.....  | 13        |
| 7.2.4 Achieving auditor competence.....  | 14        |
| 7.2.5 Achieving audit team leader competence.....                                  | 14        |
| 7.3 Establishing auditor evaluation criteria.....                                  | 14        |
| 7.4 Selecting the appropriate auditor evaluation methods.....                      | 14        |
| 7.5 Conducting auditor evaluation.....   | 14        |
| 7.6 Maintaining and improving auditor competence.....                              | 15        |
| <b>Annex A (informative) Remote auditing methods</b> .....                         | <b>16</b> |
| <b>Annex B (informative) Useful practices</b> .....                                | <b>20</b> |
| <b>Bibliography</b> .....  | <b>24</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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives) or [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs)).

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents) and <https://patents.iec.ch>. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html). In the IEC, see [www.iec.ch/understanding-standards](http://www.iec.ch/understanding-standards).

This document was prepared by the ISO Committee on Conformity Assessment (CASCO).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

<https://standards.iteh.ai/catalog/standards/iso/42e0bb09-7569-4305-b102-d7640ece3631/iso-iec-ts-17012-2024>

## Introduction

This document was developed in response to rapidly developing technology and changes in working practices based upon a variety of experiences, including those from the coronavirus pandemic. Applying remote auditing methods can bring a variety of benefits for all parties involved in the audit. This document provides guidance on how an audit can be effectively conducted and how audit objectives can be achieved when remote auditing methods are used.

Remote auditing methods can improve the efficiency of an audit by reducing travel-time and expense and achieving an improvement in the overall carbon footprint, as well as avoiding travel risk, enabling virtual access to more sites. A further benefit is facilitating diversity of participation in the audit and the increased involvement of technical experts within the audit. This includes cross-border activities that can improve the overall efficiency of the audit, whilst maintaining business continuity, especially in challenging situations and conditions.

The objective of this document is to provide assurance that remote auditing methods represent an additional sustainable and flexible way to conduct audits of management systems and provide confidence to customers, regulators, scheme owners and other interested parties.

This document includes guidance on a risk-based approach to be followed for planning and implementing the remote auditing methods that can apply to all types and sizes of organizations. [Table 1](#) and [Table 2](#) provide examples of risks and opportunities.

This document can be used to support an on-site, a remote or a hybrid approach to auditing management systems.

NOTE ISO 19011:2018, Table 1 gives examples of different types of audits.

This document can also be used to support other conformity assessment activities, such as accreditation assessment, product certification or peer assessment.

This document supports the continued integrity of first-party, second-party and third-party audits, including management system certification audits, to facilitate their conduct in a competent, thorough and transparent manner when remote auditing methods are used. This document can also be used to support other conformity assessment activities, such as accreditation, product certification or peer assessment. This document provides additional guidance to the implementation of ISO 19011:2018 and ISO/IEC 17021-1:2024.

This document highlights the importance of ensuring that the output of any audit process fulfils the objectives of the audit programme. This document does not take precedence over any requirements of other standards/schemes.

This document follows the same structure as ISO 19011:2018 in order to facilitate use of the two documents together.



# Conformity assessment — Guidelines for the use of remote auditing methods in auditing management systems

## 1 Scope

This document provides guidance on the use of remote auditing methods in auditing management systems. It is applicable to all organizations that plan and conduct all kinds of internal or external audits (i.e. first-party, second-party and third-party audits) of management systems.

This document supports the general principles of auditing given in ISO 19011:2018 and provides further guidance on specific conditions, possibilities and limitations for implementing remote auditing methods.

This document is intended to strengthen confidence in the use of remote auditing methods for auditing management systems among customers, regulators, accreditation bodies, certification bodies, scheme owners, industry, employees, consumers, suppliers and other interested parties.

The use of remote auditing methods for auditing management systems is not intended to replace on-site audit methods. Instead, remote auditing methods are intended to serve as a tool to effectively and efficiently conduct the audit.

NOTE This document can be used for other types of audits and assessments.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 17000, *Conformity assessment — Vocabulary and general principles*

ISO 19011:2018, *Guidelines for auditing management systems*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 19011:2018 and ISO/IEC 17000 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1

#### remote auditing method

method used for conducting audit activities from any place other than the location of the auditee

Note 1 to entry: Remote auditing methods can be used in combination with on-site methods to achieve a full and effective audit.

Note 2 to entry: Remote auditing methods can be used for virtual locations, i.e. where an organization performs work or provides a service using an online environment, enabling individuals to execute processes irrespective of physical locations.

Note 3 to entry: Remote auditing methods can be used by the auditor at one site of the auditee to audit another site.

## 4 Principles of auditing

The principles of auditing are given ISO 19011:2018, Clause 4.

## 5 Managing an audit programme

### 5.1 General

5.1.1 General guidance is given in ISO 19011:2018, 5.1.

5.1.2 When preparing the audit programme, the organization should consider the following in relation to the use of remote auditing methods:

- a) the principles mentioned in [Clause 4](#);
- b) risks related to the effectiveness of the audit programme (see [5.3](#)) and the countermeasures;
- c) opportunities related to the audit programme (see [5.3](#));
- d) information security, confidentiality and privacy issues related to remote auditing methods;
- e) the availability of information required to make judgment on their applicability;
- f) the acceptability for and limitations of scheme owners, regulators and other specifiers;
- g) the ability to use them.

### 5.2 Establishing audit programme objectives

5.2.1 General guidance is given in ISO 19011:2018, 5.2.

5.2.2 The organization carrying out the management system audit can use remote auditing methods under, but not limited to, the following conditions: [TS 17012:2024](#)

- a) the remote auditing methods do not prevent the achievement of audit programme objectives;
- b) the use of remote auditing methods is appropriate and accepted by the relevant interested parties;
- c) the technologies have been selected and their management has been defined;
- d) the information required for using remote auditing methods is sufficient;
- e) the scope of the use of remote auditing methods (audit criteria and boundary) has been determined in the audit programme;
- f) the ability of both parties (i.e. the audit team and the auditee) to use remote auditing methods has been confirmed, including personnel competence, technical abilities and physical abilities;
- g) the organization carrying out the management system audit and the auditee have resolved any differences in the understanding of remote auditing methods;
- h) there is an agreement in place to alter the remote auditing method when necessary.

NOTE Alteration of remote auditing methods can include other remote or on-site auditing methods.



**5.2.3** When appropriate, the organization carrying out the management system audit should prepare and implement a process to investigate the auditee's ability to use remote auditing methods.

The organization carrying out the management system audit should review the obtained information related to remote auditing methods and communicate with the auditee to:

- a) review whether the auditee meets the conditions for the application of remote auditing methods, as determined by the assessment of risk associated with their use (see 5.3);
- b) confirm the following:
  - 1) the feasibility of achieving the audit objectives within the defined audit scope when remote auditing methods are used;
  - 2) the support conditions for using remote auditing methods, including technological support to resolve any issue;
  - 3) any specific or additional requirements for the agreed remote auditing methods including competencies.

**5.3 Determining and evaluating audit programme risks and opportunities**

**5.3.1** General guidance is given in ISO 19011:2018, 5.3.

**5.3.2** The organization carrying out the management system audit should consider risk and opportunities on the audit programme, taking account of the knowledge of the auditee and any previous experience to determine whether remote auditing methods are feasible. Remote auditing methods should not be permitted when the assessment of risk identifies an unacceptable threat to the effectiveness of the audit process. Subsequent planning should:

- prevent or reduce risks associated with the remote auditing methods;
- leverage opportunities identified from the use of remote auditing methods;
- cover the evaluation of the effectiveness of actions taken to address the risks and opportunities;
- ensure that the expected results of the audit will be achieved.

**5.3.3** Examples of risks and opportunities related to an audit programme and their potential impacts are given in Table 1 and Table 2.

**Table 1 — Risks related to audit programmes and potential impact due to use of remote auditing methods**

| Risks  | Potential impact   |
|--|--|
| Processes requiring observation not adequately addressed in the audit programme                                | The processes would not be effectively audited.  |
| Inability to use remote auditing methods due to the nature of the process                                      | The processes would not be effectively audited.  |
| Limitations in the application of random sampling  | The processes would not be effectively audited.  |
| Unknown capability of auditee to contribute to application of remote auditing methods                          | The necessary technical equipment is not adequate and thus prevents a trouble-free audit process.                    |
| Insufficient overall competence of the audit team to conduct audits effectively, using remote auditing methods | The audit objectives would be compromised.   |
| Time loss due to insufficient digitization   | Necessary information needs first to be digitized. The loss of time can prevent all information from being reviewed. |

Table 1 (continued)

| Risks  | Potential impact  |
|--|---|
| Limited competence or experience in the use of remote auditing technologies  | Ineffective or incorrect use of the technologies can limit the process and the quality of the implementation of the audit plan.   |
| No provision for an alternative plan in case remote auditing methods fail  | Audit objectives can be compromised.  |
| The specific requirements for data protection and information security when digital information is exchanged are not considered  | There is a potential breach of data protection legislation.   |
| Inadequate or unreliable technology (e.g. that related to stability and quality of internet)   | The audit cannot be performed, or it is performed in an ineffective manner.   |
| Inability to provide adequate sensory information  | Poor quality of visual and audio communications, as well as a lack of any perception of odour, vibration, temperature and relative humidity, can limit the potential to obtain reliable audit evidence. |
| Integrity of audit evidence can be compromised via the use of remote auditing methods (e.g. reduced legibility of documented information, poor video resolution, lack of visibility of parts of the process) | Possibly wrong or decreased reliability of audit conclusions.   |

Table 2 — Opportunities related to audit programmes and potential impact due to use of remote auditing methods

| Opportunities   | Potential benefit  |
|---|--|
| Travel time is reduced or eliminated  | The reduction in travel time leads to cost savings, productivity, continuity in the audit and reduction in carbon emissions from travel.   |
| Optimized audit time  | Can eliminate or reduce the time for site induction and transfer between audit locations or processes; uses technology to view wide areas.   |
| Short reaction time   | The recording of opportunities and risks takes place in a timely manner, especially for locations requiring long journeys. Consequently, the audit programme and audit plan can be adjusted quickly. |
| Easier scheduling and effective participation despite interested parties being at different locations | The scheduling of audits, especially for participants and observers at different locations where travel is difficult to schedule or organize, is simplified because the location is not a deterrent. |
| Easy involvement of external parties  | Temporary involvement of external parties (e.g. technical experts) is easy to plan and implement when necessary for only a short time.   |
| Auditability of processes across locations  | Cross-location processes and their interfaces can be easily planned and audited in unison, and do not have to be divided.  |
| Ad hoc and short notice assessments for acute topics  | In the event of sudden deviations, a defined group of participants can schedule and conduct an audit at short notice to clarify the issues.  |

Table 2 (continued)

| Opportunities                       | Potential benefit  |
|-------------------------------------|--|
| Easier documentation and reporting  | Since much evidence is available electronically, the effort for managing documentation and reporting can be reduced.   |
| Direct access to data               | The availability of audit evidence in electronic applications, so that large data files do not need to be transferred and electronic security is properly managed. |
| Health and safety of the audit team | No exposure to potentially hazardous conditions (e.g. conflict, civil unrest, health risks, radiation, transport risks).   |

## 5.4 Establishing the audit programme

5.4.1 General guidance is given in ISO 19011:2018, 5.4.

5.4.2 When preparing the audit programme, the organization carrying out the management system audit should:

- a) ensure that the use of remote auditing methods does not contradict the principles stated in [Clause 4](#);
- b) consider, but not be limited to, the relevant aspects in [5.4.3](#).

5.4.3 The organization carrying out the management system audit should communicate with the auditee on the implementation of remote auditing methods, confirm and reach an agreement with the auditee on the following relevant aspects:

- a) the competences and responsibilities of the organization carrying out the management system audit (including personnel), the auditee and external providers [e.g. suppliers of information and communication technology (ICT) services being used for remote auditing methods, such as third-party software platforms];
- b) information security risks and control measures;
- c) the scope and boundary of remote auditing methods;
- d) resources (including the remote auditing software platform), approaches and methods for using remote auditing methods;
- e) actions including, if relevant, alternative communication related to any disruption issues;
- f) the evaluation of audit results and the effectiveness of remote auditing methods in meeting the audit objectives;
- g) information security and risks related to the protection of intellectual property rights.

NOTE Legal requirements can apply.

## 5.5 Implementation of audit programme

5.5.1 General guidance is given in ISO 19011:2018, 5.5.

5.5.2 The organization carrying out the management system audit should designate an audit team with the ability to use remote auditing methods and communicate the relevant requirements from the audit programme with the audit team leader.

5.5.3 Remote access to documented information pertaining to the audit should be retained at least until the auditor presents the report.