INTERNATIONAL STANDARD

ISO/IEC 19770-11

First edition
2021-06

Information technology — IT asset management —

Part 11:
Requirements for bodies providing audit and certification of IT asset management systems

Technologies de l'information — Gestion de biens de logiciel —

Partie 11: Exigences pour les organismes procédant à l'audit et à la certification des systèmes de management de la gestion des actifs logiciels

Reference number
ISO/IEC 19770-11:2021(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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 or www.iec.ch/members_experts/refdocs).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see patents.iec.ch).

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. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, subcommittee SC 7, *Software and systems engineering*.

A list of all parts in the ISO/IEC 19770 series can be found on the ISO and IEC websites.

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 and www.iec.ch/national-committees.

Introduction

This document is for use by certification bodies for auditing and certifying a management system for IT asset management (ITAM), referred to as an "IT asset management system" (ITAMS) in accordance with ISO/IEC 19770-1. It can also be used by accreditation bodies when assessing certification bodies. It is intended to be used in conjunction with ISO/IEC 17021-1, which sets out criteria for certification bodies providing audit and certification of management systems. This document provides requirements additional to those in ISO/IEC 17021-1.

Correct application of this document enables certification bodies to harmonize their application of ISO/IEC 17021-1 for audits against ISO/IEC 19770-1. It will also enable accreditation bodies to harmonize their application of the standards they use to audit certification bodies.

This document follows the structure of ISO/IEC 17021-1, as far as possible. The requirements additional to those in ISO/IEC 17021-1 are identified by subclauses titles that include "SMxxx".

ISO/IEC 17021-1 and this document use the term "client" for the organization seeking certification.

Information technology — IT asset management —

Part 11: Requirements for bodies providing audit and certification of IT asset management systems

1 Scope

This document specifies requirements and provides guidance for certification bodies providing audit and certification of an ITAMS in accordance with ISO/IEC 19770-1. It does not change the requirements specified in ISO/IEC 19770-1.

This document can also be used by accreditation bodies for the accreditation of certification bodies. However, this document does not specify requirements or provides guidance for accreditation bodies to audit certification bodies.

A certification body providing ITAMS certification is expected to be able to demonstrate fulfilment of the requirements specified in this document, in addition to the requirements in ISO/IEC 17021-1.

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/IEC 17021-1:2015, *Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 1: Requirements*

ISO/IEC 19770-1, *Information technology — IT asset management — Part 1: IT asset management systems — Requirements*

ISO/IEC 19770-5, *Information technology — IT asset management — Part 5: Overview and vocabulary*

ISO/IEC 20000-1, *Information technology — Service management — Part 1: Service management system requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17021-1 and ISO/IEC 19770-5 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principles

The principles in ISO/IEC 17021-1:2015, Clause 4 apply.

5 General requirements

5.1 Legal and contractual matters

The requirements in ISO/IEC 17021-1:2015, 5.1 apply.

5.2 Management of impartiality

5.2.1 General

The requirements in ISO/IEC 17021-1:2015, 5.2 apply. In addition, the following requirements and guidance apply.

5.2.2 SM5.2.2 Conflicts of interest

Certification bodies may carry out the following duties without them being considered as consultancy or having a potential conflict of interest:

a) arranging and participating as a lecturer in training courses; where these courses relate to ITAM, related management systems or auditing, certification bodies shall confine themselves to the provision of generic information and advice which is publicly available, i.e. they shall not provide company-specific advice;

b) making available or publishing on request information describing the certification body's interpretation of the requirements of the certification audit standards;

c) activities prior to audit, solely aimed at determining readiness for certification audit; these activities shall not result in the provision of recommendations or advice that would contravene this subclause; certification bodies shall be able to confirm that such activities do not contravene these requirements and that they are not used to justify a reduction in the eventual certification audit duration;

d) performing second and third-party audits according to other standards or regulations not directly related to the ITAMS;

e) adding value during certification audits, e.g. by identifying opportunities for improvement, as they become evident during the audit, without recommending specific solutions.

Certification bodies shall not provide internal ITAM reviews of the client's ITAMS subject to certification. Certification bodies shall be independent of the body or bodies (including any individuals) which provide the internal ITAMS audit.

5.3 Liability and financing

The requirements in ISO/IEC 17021-1:2015, 5.3 apply.

6 Structural requirements

The requirements in ISO/IEC 17021-1:2015, Clause 6 apply.

7 Resource requirements

7.1 Competence of personnel

7.1.1 General considerations

7.1.1.1 General

The requirements in ISO/IEC 17021-1:2015, 7.1.1 apply. In addition, the following requirements and guidance apply.

7.1.1.2 SM7.1.1.2 Generic competence requirements

The certification body shall ensure that it has knowledge of the technological, legal and regulatory developments relevant to the ITAMS of the client which it assesses.

The certification body shall define the competence requirements for each certification function as referenced in ISO/IEC 17021-1:2015, Table A.1. The certification body shall take into account all the requirements specified in ISO/IEC 17021-1, 7.1.2 and 7.2.2 that are relevant for the ITAMS technical areas as determined by the certification body.

NOTE Annex A provides a summary of the competence requirements for personnel involved in specific certification functions.

7.1.2 Determination of competence criteria

7.1.2.1 General

The requirements in ISO/IEC 17021-1:2015, 7.1.2 apply. In addition, the following requirements and guidance apply.

7.1.2.2 SM7.1.2.2 Competence requirements for ITAMS auditing

7.1.2.2.1 The term “technical area”

ISO/IEC 19770-1 states that all requirements are generic and intended to be applicable to IT assets of organizations regardless of their types and sizes. IT assets encompass asset types such as executable software (e.g. application programs, operating systems), non-executable software (e.g. fonts, configuration information), and IT hardware (e.g. PC, server, printer). In addition, the requirements of ISO/IEC 19770-1 can be applied to all technological environments and computing platforms (e.g. virtualized software applications, cloud-based software-as-a-service). For ISO/IEC 19770-1 audits, the term “technical area” relates to the ITAMS, including all ITAM-related processes and governance within the scope of the ITAMS. “Technical area” does not relate to any underlying technology used to enable ITAM.

7.1.2.2.2 General requirements

The audit team members shall at least have knowledge of:

a) management systems in general;

b) ITAMS maturity assessments;

c) service management system (SMS) or information security management systems (ISMS) as ITAMS related management systems;

d) principles of auditing.

NOTE Further information on the principles of auditing can be found in ISO 19011.

Criteria a), b) and d) apply to all auditors being part of the audit team. Criteria c) is only relevant for audit team members involved in a combined management system audit as addressed in 9.1.6.

7.1.2.2.3 ITAMS standards and normative documents

Collectively, all members of the audit team shall have knowledge of all requirements specified in ISO/IEC 19770-1 as well as the terminology specified in ISO/IEC 19770-5.

7.1.2.2.4 ITAM principles, practices and techniques

All members of the audit team shall have knowledge of:

a) ITAM roles and responsibilities;

b) processes applicable to ITAM;

c) organizational interfaces of ITAMS;

d) ITAM related tools, methods, techniques and their application;

The audit team shall also have team members with knowledge of IT compliance and software license compliance in particular. This competency can be shared among the auditors in the audit team.

7.1.2.2.5 Business management practices

Auditors involved in ITAMS auditing shall have knowledge of:

a) business requirements for ITAM;

b) ITAM stakeholders;

c) general business management concepts, practices and the inter-relationship between ITAM policies, objectives and results;

d) management processes and related terminology.

NOTE These processes also include human resources management, internal and external communication and other relevant support processes.

7.1.2.2.6 Client business sector

Auditors involved in ITAMS auditing shall have knowledge of:

a) legal and regulatory requirements relating to ITAM, depending on geography and jurisdiction(s), e.g. country-specific laws on internal control systems for IT assets, intellectual property, copyright, data privacy and environmental regulations;

NOTE Knowledge of legal and regulatory requirements does not imply a profound legal background.

b) ITAM risks related to business sector, e.g. software license compliance as part of the overall IT compliance following regulatory requirements for financial institutions;

c) generic terminology, processes and technologies related to the client business sector;

d) relevant business sector practices.

The criteria a) and b) may be shared amongst the audit team.

7.1.2.2.7 Client products, processes and organization

Collectively, auditors involved in ITAMS auditing shall have knowledge of the impact of organization type, size, governance, structure, functions and relationships on development and implementation of the ITAMS and certification activities, including outsourcing.

7.1.2.3 SM7.1.2.3 Competence requirements for leading the ITAMS audit team

In addition to the requirements in 7.1.2.2, audit team leaders shall fulfil the following requirements, which shall be demonstrated in audits under guidance and supervision:

a) knowledge and skills to manage the certification audit process and the audit team;

b) demonstration of the capability to communicate effectively, both orally and in writing.

The certification body shall ensure auditors keep knowledge and skills in ITAM and auditing up to date through continual professional development.

7.1.2.4 SM7.1.2.4 Competence requirements for reviewing audit reports and making certification decisions

7.1.2.4.1 General requirements

The personnel reviewing audit reports and making certification decisions shall have knowledge that enables them to verify the appropriateness of the scope of certification as well as changes to the scope and their impact on the effectiveness of the audit. Additionally, the personnel reviewing audit reports and making the certification decisions shall have knowledge of:

a) management systems in general;

b) audit processes and procedures;

c) audit principles, practices and techniques.

7.1.2.4.2 ITAMS standards and normative documents

The personnel reviewing audit reports and making certification decisions shall have knowledge of relevant ITAMS standards and other normative documents used in the certification process.

7.1.2.4.3 ITAM principles, practices and techniques

The personnel reviewing audit reports and making the certification decisions shall have knowledge of the items listed in 7.1.2.2.4 a), b) and c).

7.1.2.4.4 Client business sector

The personnel reviewing audit reports and making certification decisions shall have knowledge of the generic terminology and risks related to the relevant business sector practices.

7.1.3 Evaluation processes

7.1.3.1 General

The requirements in ISO/IEC 17021-1:2015, 7.1.3 apply. In addition, the following requirements and guidance apply.

7.1.3.2 SM7.1.3.2 Demonstration of knowledge and experience

Knowledge and experience of personnel involved in the management and performance of audits and other certification activities shall be evaluated, for example, by using recognized personnel qualifications. Registration records under a personnel certification scheme can also be used to evaluate the required knowledge and experience.

7.1.3.3 SM7.1.3.3 Evaluation of audit team members

The certification body shall have a process for evaluation the background experience, specific training or briefing of audit team members.

7.1.4 Other considerations

The requirements in ISO/IEC 17021-1:2015, 7.1.4 apply.

7.2 Personnel involved in certification activities

The requirements in ISO/IEC 17021-1:2015, 7.2 apply.

7.3 Use of individual external auditors and external technical experts

The requirements in ISO/IEC 17021-1:2015, 7.3 apply.

7.4 Personnel records

The requirements in ISO/IEC 17021-1:2015, 7.4 apply.

7.5 Outsourcing

The requirements in ISO/IEC 17021-1:2015, 7.5 apply.

8 Information requirements

8.1 Public information

The requirements in ISO/IEC 17021-1:2015, 8.1 apply.

8.2 Certification documents

8.2.1 General

The requirements in ISO/IEC 17021-1:2015, 8.2 apply. In addition, the following requirements and guidance apply.

8.2.2 SM8.2.2 Scope definition

The guidance in ISO/IEC 19770-1:2017, Clause 1 should be used when defining the scope.

8.3 Reference to certification and use of marks

The requirements in ISO/IEC 17021-1:2015, 8.3 apply.

8.4 Confidentiality

8.4.1 General

The requirements in ISO/IEC 17021-1:2015, 8.4 apply. In addition, the following requirements and guidance apply.

8.4.2 SM8.4.2 Access to the client's documents, including records

Before agreeing on the certification audit, the certification body shall ask the client to report if any ITAMS documents or records cannot be made available for review by the audit team because they contain confidential or sensitive information. The certification body shall determine whether the ITAMS can be adequately audited in the absence of these documents or records. If any documents or records that are essential for the audit are not available, the certification body shall advise the client that an audit cannot take place until appropriate access arrangements are granted.

8.5 Information exchange between a certification body and its clients

The requirements in ISO/IEC 17021-1:2015, 8.5 apply.

9 Process requirements

9.1 Pre-certification activities

9.1.1 Application

The requirements in ISO/IEC 17021-1:2015, 9.1.1 apply.

9.1.2 Application review

9.1.2.1 General

The requirements in ISO/IEC 17021-1:2015, 9.1.2 apply. In addition, the following requirements and guidance apply.

9.1.2.2 SM9.1.2.2 Application review

The certification body shall review the application from the client to ensure a clear understanding of the areas of activity of the client and the likely risks to the ITAMS.

9.1.3 Audit programme

The requirements in ISO/IEC 17021-1:2015, 9.1.3 apply.

9.1.4 Determining audit time

9.1.4.1 General

The requirements in ISO/IEC 17021-1:2015, 9.1.4 apply. In addition, the following requirements and guidance apply.

9.1.4.2 SM9.1.4.2 Determining audit time for initial audit

The certification body shall use the number of effective personnel supporting the ITAMS, as the basis for determining the audit time for an initial certification audit. The certification body shall use Table 1 when determining the audit time. Table 1 is based on 8-hour days. The numbers may be adjusted if the hours per day are more or less than 8.

The number of effective personnel shall be calculated as full-time equivalents (FTE). The calculation of effective personnel shall be based on those in the scope of the ITAMS, i.e. personnel with responsibilities and authorities in the ITAMS including ITAM operation processes or personnel supporting ITAM process objectives in accordance with ISO/IEC 19770-1:2017, Annex A.

The certification body shall be able to justify the rationale used for the relationship between the number of effective personnel supporting the ITAMS and the audit time.

If the number of effective personnel supporting the ITAMS exceeds 150, the certification body's procedures shall provide for the calculation of the audit time, following the progression in Table 1 in a consistent manner and define the days by extrapolation beyond the last band in Table 1.

The certification body shall base their plans for an initial audit on a minimum audit time of 2 days, after adjustments, irrespective of the number of personnel.

The audit duration shall not be less than 80 % of the audit time. If additional time is needed for planning or report writing, this shall not reduce the audit duration.

Table 1 — Relationship between effective number of personnel supporting the ITAMS and audit time before adjustments (initial audit)

Effective number of personnel supporting the ITAMS	Audit time (days)
5 to 10	2
11 to 20	4
21 to 35	6
36 to 50	8
51 to 70	10
71 to 100	12
101 to 150	14

NOTE Audit time is defined as the time needed to plan and accomplish a complete and effective audit of the client's management system. Audit time includes the total time on-site at a client's location (physical or virtual) and time spent off-site carrying out planning, document review, interacting with personnel and report writing. Duration of management system certification audits is defined as that part of the audit time spent conducting audit activities from the opening meeting to the closing meeting, inclusive.

The effective number of personnel consists of all personnel involved within the scope of certification. When included within the scope of certification, it shall also include non-permanent (e.g. contractors for ITAM managed services) and part-time personnel. Dependent upon the hours worked, the number of part-time personnel and employees partially involved in the scope may be reduced or increased and converted to an equivalent number of full-time personnel. When a high percentage of personnel perform activities or roles which are considered repetitive, a reduction to the number of personnel, which is coherent and applied consistently on a client to client basis within the scope of certification, is permitted.

9.1.4.3 SM9.1.4.3 Adjustments to audit time

All attributes of the client's ITAMS shall be considered and adjustments made to the initial audit time for those factors that could justify more or less time. Regardless of the adjustment factors, the certification body shall ensure that sufficient audit time is allocated to accomplish a complete and effective audit of the client's ITAMS. The certification body shall document and be able to justify a decrease or increase in the audit time.

Tables 2 and 3 show how relevant factors can affect the audit times in Table 1. The maximum reduction shall be 30 % of the audit time given in Table 1.

Table 2 — Factors which can decrease audit time

Potential decrease factors	
1	Single site with low number of personnel and standardized IT assets
2	Centralized and standardized contracts related to the management of IT assets.
3	A low rate of change to the ITAMS.
4	A low level of reliance on other parties, such as external service provider providing ITAM related services, e.g. collection and analysis of financial and/or technical data.
5	Prior knowledge of the organization, e.g. already certified to another standard by the same certification body.
6	Previously demonstrated effective performance of the ITAMS, e.g. previously certified with another accredited certification body.
7	Combined audit of the ITAMS with one or more other relevant management systems, e.g. service management systems (ISO/IEC 20000-1) or information security management systems (ISO/IEC 27001).

Table 3 — Factors which can increase audit time

Potential increase factors	
1	Large size or complexity of the ITAMS scope, e.g. high number of personnel or locations.
2	Complex IT landscape, e.g. decentral and heterogenous hardware and software in use.
3	Decentralized or individual contracts related to the management of IT assets.
4	Complicated logistics involving multi-site working, in the same, or across several time zone(s).
5	Complexity of language differences across different locations, e.g. personnel speaking in more than one language (requiring interpreter(s) or preventing individual auditors from working independently).
6	A high level of reliance on other parties, such as external service providers providing ITAM related services, e.g. collection and analysis of financial and/or technical data.
7	High degree of legal and/or regulatory requirements affecting the client's ITAMS, e.g. intellectual property rights, data privacy.

9.1.4.4 SM9.1.4.4 Adjustments for other management system standard certifications

If the client is certified under other relevant management system standard(s), i.e. ISO/IEC 20000-1 and/or ISO/IEC 27001, the certification body may decrease the initial audit time.

A decrease in the audit time, due to certification against the aforementioned management system standards, shall only be permitted under the following conditions:

a) any existing certificate is current and has been audited by an accredited certification body at least once in the last 12 months;

b) the scope of the other certification(s), is the same as, or greater than, that defined for the ISO/IEC 19770-1 certification.

The amount of reduction of the audit time shall be dependent on the extent to which the client's ITAMS is integrated with the other management system(s).

Regardless of other relevant management systems standards, the certification body shall ensure that sufficient time is allocated to accomplish a complete and effective audit of the client's ITAMS.

NOTE When two or more management systems of different disciplines are audited together, this is termed a "combined audit". Where these systems are integrated into a single management system, the principles and procedures for auditing are the same as for a combined audit.

9.1.4.5 SM9.1.4.5 Determining audit time for surveillance and recertification audits

The time needed to conduct surveillance and recertification audits shall be calculated using the following factors:

a) the audit duration shall not be less than 80 % of the total audit time;

b) surveillance audits shall be a minimum of one third of the audit time for the initial audit annually, whether performed in a single audit or more;

c) recertification audits shall be a minimum of two thirds of the audit time for the initial audit;

d) the minimum audit time for surveillance audits, after adjustment, shall be 1 day;

e) the minimum audit time for recertification audits, after adjustment, shall be 2 days.

9.1.4.6 SM9.1.4.6 Remote audit activities

Activities which are performed by members of the audit team at any place other than the location of the auditee, regardless of the distance are considered remote audit activities. The audit plan shall identify remote audit activities that will be performed during the audit.

Acceptable and unacceptable remote audit activities are specified in Table 4. The certification body shall not perform unacceptable remote audit activities in Table 4 and may perform the acceptable remote audit activities.

The performance of remote audit activities shall not reduce the audit time below that which is calculated from Table 1, with appropriate adjustments.

If the certification body develops an audit plan for which the remote audit activities represent more than 30 % of the planned audit time, the certification body shall document the justification.

Table 4 — Acceptable and unacceptable remote audit activities

	Acceptable
1	Teleconferencing: video and audio, web meeting, interactive web-based communications.
2	Remote access to tools used to support the ITAMS.
3	Remote access to the library of ITAMS documents and records.
	Unacceptable
4	Reliance on documentation only.
5	Assumption that all locations function identically without supporting evidence for the assumption.
6	Audits conducted without interviewing personnel.

9.1.5 Multi-site sampling

9.1.5.1 General

The requirements in ISO/IEC 17021-1:2015, 9.1.5 apply. In addition, the following requirements and guidance apply.

9.1.5.2 SM9.1.5.2 Criteria for multi-site sampling

If a client has several locations, certification bodies may use a sample-based approach to multi-site certification audits if all locations are:

a) operating under the same ITAMS, which is centrally administered;

b) included within the client's internal audit programme;

c) included within the client's management review programme.

9.1.6 Multiple management systems standards

9.1.6.1 General

The requirements in ISO/IEC 17021-1:2015, 9.1.6 apply. In addition, the following requirements and guidance apply.

9.1.6.2 SM9.1.6.2 Combining management system audits

An ITAMS audit can be combined with audits of other management systems. A combined or integrated audit shall ensure that the audit evidence fulfils the requirements specified in ISO/IEC 19770-1 within the scope of the audit. All findings relating to ISO/IEC 19770-1 shall be easily identifiable in audit reports.

The integrity of the ISO/IEC 19770-1 audit shall not be adversely affected by the combination of audits.

9.1.6.3 SM9.1.6.3 Combining management system audits for ISO/IEC 19770-1 and ISO/IEC 20000-1 or ISO/IEC 27001

Where an audit is combined for ISO/IEC 20000-1 and ISO/IEC 19770-1, the service management system (SMS) requirements in ISO/IEC 20000-1 shall be audited to ensure that the services are relevant to the ITAMS.

For a combined audit of ISO/IEC 27001 and ISO/IEC 19770-1, the requirements towards IT asset risk assessment and security management in ISO/IEC 19770-1 shall be audited to ensure that the information security policy is relevant to the ITAMS and that relevant information security risks are identified, and information security controls are implemented to support the ITAMS. The auditor may find some supporting evidence from the information security management system (ISMS).

9.2 Planning audits

9.2.1 Determining audit objectives, scope and criteria

9.2.1.1 General

The requirements in ISO/IEC 17021-1:2015, 9.2.1 apply. In addition, the following requirements and guidance apply.

9.2.1.2 SM9.2.1.2 Determining audit objectives

The audit objectives shall include checking that interfaces at the boundaries of the ITAMS with other parties participating in the activities of the ITAMS, are identified and controlled. The certification body shall also ensure that the client is aware of and managing any risks to the ITAMS and the services arising from the interfaces.

9.2.2 Audit team selection and assignments

The requirements in ISO/IEC 17021-1:2015, 9.2.2 apply.

9.2.3 Audit plan

9.2.3.1 General

The requirements in ISO/IEC 17021-1:2015, 9.2.3 apply. In addition, the following requirements and guidance apply.

9.2.3.2 SM9.2.3.2 Sampling accuracy

The certification body shall have procedures in place to ensure the following:

a) an adequate level of sampling shall be determined at the initial meeting, and subsequent audit activities, identifying differences between the following:

   1) locations, e.g. number of managed IT assets per site;

   2) country specific variations of the ITAMS, e.g. following legal and regulatory requirements;

   3) asset related variations of the ITAMS, e.g. individual data management processes for different software publishers or specialized tools for recording data about IT assets in scope;

   4) external service provider involved in the ITAMS;

b) a representative sample shall be selected from the scope of the client's ITAMS; the selection shall be based upon the judgement of the certification body, reflecting the factors presented in a), as well as a random element;

c) the design of the audit plan shall take into consideration the requirements in a) and b); the plan shall cover representative samples of the full scope of the ITAMS within the three-year period between certification audits.

9.3 Initial certification

9.3.1 General

The requirements in ISO/IEC 17021-1:2015, 9.3 apply. In addition, the following requirements and guidance apply.

9.3.2 SM9.3.2 Identification of other parties

The certification body shall have access to the evidence of the identification of other parties involved in the provision of services for the client and how they are controlled as specified in ISO/IEC 19770-1.

9.3.3 SM9.3.3 Integration of ITAMS documentation with that for other management systems

The certification body shall take into account that the client can integrate the documentation for the ITAMS with that for other management systems, e.g. a quality management system or information security management system.

If the documentation for multiple management systems is combined, the client's ITAMS shall be clearly identified.

9.4 Conducting audits

9.4.1 General

The requirements in ISO/IEC 17021-1:2015, 9.4.1 apply.

9.4.2 Conducting the opening meeting

The requirements in ISO/IEC 17021-1:2015, 9.4.2 apply.

9.4.3 Communication during the audit

The requirements in ISO/IEC 17021-1:2015, 9.4.3 apply.

9.4.4 Obtaining and verifying information

The requirements in ISO/IEC 17021-1:2015, 9.4.4 apply.

9.4.5 Identifying and recording audit findings

The requirements in ISO/IEC 17021-1:2015, 9.4.5 apply.

9.4.6 Preparing audit conclusions

The requirements in ISO/IEC 17021-1:2015, 9.4.6 apply.

9.4.7 Conducting the closing meeting

The requirements in ISO/IEC 17021-1:2015, 9.4.7 apply.

9.4.8 Audit report

9.4.8.1 General

The requirements in ISO/IEC 17021-1:2015, 9.4.8 apply. In addition, the following requirements and guidance apply.

9.4.8.2 SM9.4.8.2 Audit report

The audit report shall be of sufficient detail to support the certification decision. It shall contain the certification scope definition with a reference to any changes in the scope and descriptions of significant audit trails followed and audit methodologies used.

The report shall include the audit team's recommendation on certification of the client's ITAMS, with information to substantiate this recommendation. The substantiation shall include a summary of nonconformities and opportunities for improvement regarding the implementation and effectiveness of the ITAMS.

9.4.9 Cause analysis of nonconformities

The requirements in ISO/IEC 17021-1:2015, 9.4.9 apply.

9.4.10 Effectiveness of corrections and corrective actions

The requirements in ISO/IEC 17021-1:2015, 9.4.10 apply.

9.5 Certification decision

The requirements in ISO/IEC 17021-1:2015, 9.5 apply.

9.6 Maintaining certification

The requirements in ISO/IEC 17021-1:2015, 9.6 apply.

9.7 Appeals

The requirements in ISO/IEC 17021-1:2015, 9.7 apply.

9.8 Complaints

The requirements in ISO/IEC 17021-1:2015, 9.8 apply.