FINAL DRAFT International Standard

ISO/IEC FDIS 42006

Information technology — Artificial intelligence — Requirements for bodies providing audit and certification of artificial intelligence management systems

ISO/IEC JTC **1**/SC **42**

Secretariat: **ANSI**

Voting begins on:
2025-02-19

Voting terminates on:
2025-04-16

Reference number
ISO/IEC FDIS 42006:2025(en)

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).

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 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. 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 42, *Artificial Intelligence*.

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

A management system for organizations providing, developing or using artificial intelligence (AI) systems or placing them on the market as suppliers is set up according to ISO/IEC 42001. It entails, but is not limited to, various special aspects regarding the management of risks, data protection, data quality, information and cyber security, ethics as well as the validation and verification of algorithms. Also, the life cycle processes for traditional software systems need to include AI-specific life cycle characteristics defined in ISO/IEC 5338[1] which can be considered.

The object of conformity assessment in ISO/IEC 42001 and the necessary combination and complex interface functions in a management system according to ISO/IEC 42001 result in specific requirements for the certification bodies and their processes when they certify such management systems. Certification bodies can use this document to perform their roles in the auditing and certification of organizations with AI management systems (AIMS).

The certification of a management system according to ISO/IEC 42001 can be embedded in a conformity assessment scheme for products, processes and services according to ISO/IEC 17065[2] in support of ISO/IEC 17067,[3] ISO/IEC 17030[4] applies if it is intended to mark the AI product, process or service with a mark of conformity. The certification document(s) for the AI management system according to ISO/IEC 42001 can be utilised within a ISO/IEC 17065 scheme according to ISO/IEC 17065:2012, 7.4.5 to avoid double tests.

Accreditation bodies and peer assessors can use this document to assess the minimum requirements for personnel competence in certification bodies along with their certification processes.

Information technology — Artificial intelligence — Requirements for bodies providing audit and certification of artificial intelligence management systems

1 Scope

This document specifies additional requirements to ISO/IEC 17021-1. The requirements contained in this document, when implemented, support the demonstration of competence, consistency and reliability by the bodies performing auditing and certification of an artificial intelligence management system (AIMS) according to ISO/IEC 42001 for organizations that provide, develop or use AI systems.

Certification of AIMS is a third-party conformity assessment activity (as described in ISO/IEC 17000:2020, 4.5), and bodies performing this activity are third-party conformity assessment bodies.

This document also provides the necessary information and confidence to customers about the way certification has been granted.

NOTE This document can be used as a criteria document for accreditation or peer assessment.

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 17000, *Conformity assessment — Vocabulary and general principles*

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

ISO/IEC 42001, *Information technology — Artificial intelligence — Management system*

ISO/IEC 22989, *Information technology — Artificial intelligence — Artificial intelligence concepts and terminology*

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms and definitions given in ISO/IEC 17000, ISO/IEC 17021-1, ISO/IEC 42001, ISO/IEC 22989 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
artificial intelligence management system
AIMS
set of interrelated or interacting elements of an organization to establish policies and objectives, as well as processes to achieve those objectives, in the provision, development or use of an AI system

4 Principles

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

5 General requirements

5.1 Legal and contractual matters

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

5.2 Management of impartiality

5.2.1 General

The requirements of 5.2.2 and of ISO/IEC 17021-1:2015, 5.2 apply.

5.2.2 Conflicts of interest

5.2.2.1 General

In addition to the requirements of ISO/IEC 17021-1:2015, 5.2.5, certification bodies shall not provide consulting for management systems related to artificial intelligence, information security, data protection (e.g. in the form of an external data protection officer or data protection check) or risk management to their ISO/IEC 42001 certification clients.

5.2.2.2 Examples of activities without conflict of interest

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

a) when arranging and participating as a lecturer in publicly available training courses (excluding inhouse trainings for organizations or client specific trainings) related to artificial intelligence management systems, management systems, or auditing, certification bodies provide only generic and publicly available information;

b) activities preceding the audit to identify the object of certification only when the sole purpose of which is to determine the scope of the audit and the client's readiness for a certification audit at that scope.

5.2.2.3 Examples of activities with conflict of interest

In order to prevent potential conflict of interest when addressing the duties listed above, the certification body shall not perform at least the following:

a) provide company-specific advice as consultancy service;

b) conduct activities which themselves take the form of an audit or lead to recommendations or advice that would be contrary to 5.2.2.1, or justify a reduction of the ultimate time of the certification audit;

c) recommend specific solutions or advice regarding AIMS, AI systems or AI-specific processes, services and products.

The certification body shall not carry out any internal audits for the client to be certified. The restriction on conducting internal audits shall not be circumvented by renaming the activity as inspection, assessment or similar.

NOTE Certification bodies can add value during certification and surveillance audits (e.g. by identifying opportunities for improvement, as they become evident during the audit, without recommending specific solutions) without it being considered as consultancy or having a potential conflict of interest.

5.3 Liability and financing

5.3.1 General

The requirements of 5.3.2 and of ISO/IEC 17021-1:2015, 5.3 apply.

5.3.2 Liability

In addition to the requirements of ISO/IEC 17021-1:2015, 5.3.1, certification bodies shall be able to demonstrate a contract with an insurance policy or an alternative mechanism. Either option shall provide an appropriate amount of cover (i.e. insured amount, limitation of liability) for personal injury, property damage and financial loss in proportion to the turnover (i.e. annual gross revenue) of the clients under audit or certification.

NOTE When determining the appropriate amount of insurance, the potential for damage to the certification body is relevant. The characteristics of the certification body's customers and their AI systems, which are the subject of the AIMS to be certified, have an influence on the certification body's damage potential. This is not product liability. The liability at issue here is exclusively intended to cover damages arising from the breach of organizational obligations resulting from non-compliance with ISO/IEC 42001 during certification.

6 Structural requirements

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

7 Resource requirements

7.1 Competence of personnel

7.1.1 General

The requirements of ISO/IEC 17021-1:2015, Clause 7 apply. In addition, the technical competence requirements for the audit team and personnel involved in the AIMS certification process provided in 7.1.2 and 7.1.3 shall apply.

7.1.2 Generic technical competence requirements

The certification body shall define the competence requirements for each certification function as referenced in ISO/IEC 17021-1:2015, Table A.1. Basic knowledge of the client's business and typical business processes knowledge is defined in ISO/IEC 17021-1:2015, Table A.1.

Table 1 specifies the additional knowledge and skills that a certification body shall define for the certification functions. "X" indicates that the certification body shall define the criteria and depth of knowledge and skills. The knowledge and skill requirements specified in Table 1 are explained in more detail in 7.1.3 and are cross-referenced in parentheses in Table 1.

In addition to the technical knowledge requirements specified in Table 1, the certification body shall define criteria, including the knowledge and skills of the audit team that is necessary for the client organization and the technical area(s) regarding the scope of the client's AIMS.

Where additional specific criteria including competence requirements have been established in this document, a specific standard or certification scheme incorporating ISO/IEC 42001, these shall be applied.

NOTE 1 For an AIMS, the term "technical area" includes the products, processes and services in the scope of the AIMS certification. The technical area(s) are defined in terms of the technical fields of AI within the scope of certification (e.g. computer vision and image recognition, natural language processing (NLP), data mining etc.), the application of the AI system(s) within the scope of certification (e.g. fraud detection, automated vehicles, healthcare, retail, etc.) or a combination of the two.

NOTE 2 Certification of an AIMS is based on multiple, diverse competencies which are potentially not present in one natural person. The certification body typically appoints and deploys competent people that fulfil all the required competence criteria as a competent group, if applicable, and throughout all functions of the certification process. The certification body determines separate characteristics for knowledge and skills, whereas skills are based on knowledge.

Table 1 — Table of knowledge and skills according to ISO/IEC 17021-1:2015, Annex A

Knowledge and skills	Certification function		
	Conducting the application review to determine audit team competence required, to select the audit team members, and to determine the audit time	Reviewing audit reports and making certification decisions	Auditing and leading the audit team
General requirements for AIMS		X (7.1.3.1.2)	X (7.1.3.1.1)
Artificial intelligence management system standards/normative documents / certification schemes	X (7.1.3.2.3)	X (7.1.3.2.2)	X (7.1.3.2.1)
AI and AIMS related legal obligations	X (7.1.3.3.3)	X (7.1.3.3.2)	X (7.1.3.3.1)
Artificial intelligence and AIMS specific terminology, principles, practices, tools, methods and techniques	X (7.1.3.4.3)	X (7.1.3.4.2)	X (7.1.3.4.1)
Client business sector	X (7.1.3.5.3)	X (7.1.3.5.2)	X (7.1.3.5.1)
Client products, processes and organization		X (7.1.3.6.2)	X (7.1.3.6.1)

7.1.3 Determination of specific technical competence requirements

7.1.3.1 General requirements for AIMS

7.1.3.1.1 Auditing

The certification body shall have criteria for verifying the competence of audit team members that ensures that at least they have the skills to apply their knowledge of:

a) artificial intelligence;

b) the technical aspects of the activity to be audited;

c) management systems and management business practices, concepts and the interrelationship between policy, objectives and results;

d) the principles of auditing;

NOTE Further information on the principles of auditing can be found in ISO 19011 [5].

e) AIMS monitoring, measurement, analysis and evaluation.

The above requirements a) to e) apply to all individual auditors in the audit team. However, b) can be shared among members in the audit team.

The audit team members shall, collectively, have skills appropriate to the requirements above, which can be demonstrated through experience of their application.

The audit team members shall, collectively, be competent in tracing and identifying indications of incidents with serious negative effects on affected persons in the client's AIMS back to the appropriate elements of the AIMS.

Individual auditors are not required to have a complete range of experience of all areas of artificial intelligence, but the audit team as a whole shall have appropriate competence to cover the AIMS scope being audited.

7.1.3.1.2 Reviewing audit reports and making certification decisions

The personnel responsible for reviewing audit reports and making certification decisions within the certification body shall have knowledge of the requirements of 7.1.3.1.1. This also applies for the team of personnel handling appeals.

7.1.3.2 Artificial intelligence management system standards/normative documents / certification schemes

7.1.3.2.1 Auditing

Each member of the audit team shall have knowledge of:

a) ISO/IEC 42001 and other normative documents used in the certification process;

b) AIMS-specific documentation structures, hierarchy and interrelationships;

c) other normative documents used in the certification process;

d) relevant certification schemes and necessary evaluation criteria for the conformity assessment.

The audit team members shall, collectively, have knowledge of all controls contained in ISO/IEC 42001:2023, Annex A and their implementation.

7.1.3.2.2 Reviewing audit reports and making certification decisions

Personnel reviewing audit reports and making certification decisions shall have knowledge of list items a) to d) in 7.1.3.2.1. This also applies for the team of personnel handling appeals.

7.1.3.2.3 Conducting the application review to determine the required audit team competence, to select the audit team members and to determine the audit time

The personnel responsible for conducting the application review, selecting the audit team, determining the needed audit competence and determining the audit time shall have knowledge of list items a) to d) in 7.1.3.2.1.

7.1.3.3 AI and AIMS related legal obligations

7.1.3.3.1 Auditing

The certification body audit team shall have knowledge of the legal obligations that apply to artificial intelligence.

7.1.3.3.2 Reviewing audit reports and making certification decisions

Personnel reviewing audit reports and making certification decisions shall have knowledge of 7.1.3.3.1. This also applies for the team of personnel handling appeals.

7.1.3.3.3 Conducting the application review to determine the required audit team competence, to select the audit team members and to determine the audit time

The personnel responsible for conducting the application review, selecting the audit team, determining the needed audit competence and determining the audit time shall have knowledge of 7.1.3.3.1.