

Complement ISO 42001

Integrate AI-specific considerations into other management frameworks

Vindhya Kothuri, AI Client Manager

12 February 2025



Agenda

1 Where do we start?	⁴ Key aspects of ISO/IEC 42001	7 Use case
² Objectives of integration	⁵ Integration with ISO/IEC 42001	8 Q&A
³ Relevant management standard	6 Benefits	





Where do we start?



Where do we start?

The challenge

Adopting and integrating AI while aligning with existing management frameworks can feel overwhelming.

Key considerations

- What existing frameworks (e.g., ISO 42001) can guide us?
- How do we tailor these frameworks to include AIspecific risks and opportunities?
- How do we ensure consistency across departments?





Objectives of integration



Objectives of integration

Ensuring consistency and reliability	Enhancing compliance with regulations	Promoting ethical AI usage
Streamlining operational efficiency	Facilitating risk management	Supporting scalability and interoperability
Improving stakeholder confidence	Driving continuous improvement	Supporting global recognition and competitiveness
bsi	Fostering cross-functional collaboration	© 2025 BSL All rights reserved 6





Relevant management standard

ISO/IEC 42001



ISO/IEC 42001

The AI Management System Standard.

Enables an organization to achieve their objectives by having processes in place to identify, manage, and treat AI risks.

How should AI be used, developed within the organization?

How do we identify and treat AI risks?

How do we ensure that our organization is prepared for the risk landscape of tomorrow?





Relevant management standard

Integration guidance as in ISO 42001 Annex D

- Emphasizes the applicability of the AI management system across various sectors and the necessity to integrate it with other relevant management system standards
- Provides guidance on how to integrate the AI management system with other management system standards, including considerations for privacy information management systems (PIMS) as outlined in ISO 27701

Integration with Generic Standards

- ISO 27001 (Information Security)
- ISO 27701 (Privacy Information Management)
- ISO 9001 (Quality Management)

$\mathbf{D.2}$. Integration of AI management system with other management system standards

When providing or using AI systems, the organization can have objectives or obligations related to aspects which are topics of other management system standards. These can include, for example, security, privacy, quality, respectively topics covered in ISO/IEC 27001, ISO/IEC 27701 and ISO 9001.

When providing, using or developing AI systems, potential relevant generic management system standards, but not limited to that, are:

 ISO/IEC 27001: In most contexts, security is key to achieving the objectives of the organization with the AI system. The way an organization pursues security objectives depends on its context and its own policies. If an organization identifies the need to implement an AI management system

© ISO/IEC 2023 - All rights reserved

49

BS ISO/IEC 42001:2023 ISO/IEC 42001:2023(E)

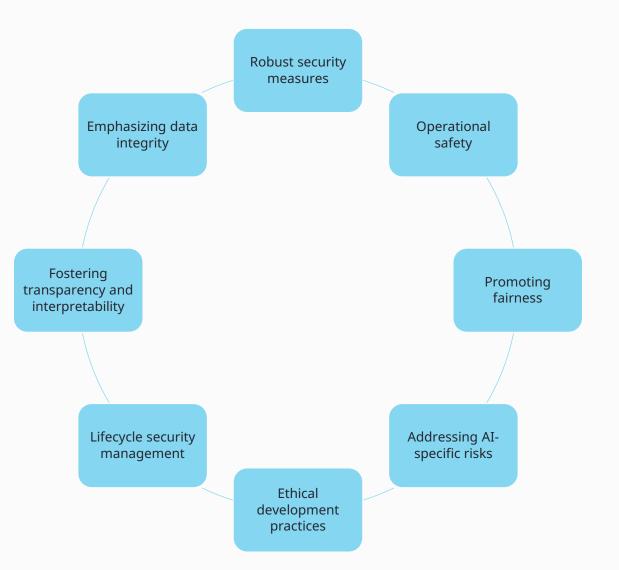
and to address security objectives in a similar thorough and systematic way, it can implement an information security management system in conformity with ISO/IEC 27001. Given that both ISO/IEC 27001 and the AI management systems use the high-level structure, their integrated use is facilitated and of great benefit for the organization. In this case, the way to implement controls which (partly) relate to information security in this document (see <u>B.6.1.2</u>) can be integrated with the organization's implementation of ISO/IEC 27001.

- ISO/IEC 27701: In many context and application domains, PIIs are processed by AI systems. The
 organization can then comply with the applicable obligations for privacy and with its own policies
 and objectives. Similarly, as for ISO/IEC 27701, the organization can benefit from the integration of
 ISO/IEC 27701 with the AI management system. Privacy-related objectives and controls of the AI
 management system (see <u>B.2.3</u> and <u>B.5.4</u>) can be integrated with the organization's implementation
 of ISO/IEC 27701.
- ISO 9001: For many organizations, conformity to ISO 9001 is a key sign that they are customeroriented and genuinely concerned about internal effectiveness. Independent conformity assessment to ISO 9001 facilitates business across organizations and inspires customer confidence in products or services. The level of customer's confidence in an organization or AI system can be highly reinforced when an AI management system is implemented jointly with ISO 9001 when AI technologies are involved. The AI management system can be complementary to the ISO 9001 requirements (risk management, software development, supply chain coherence, etc.) in helping the organization meet its objectives.

Besides the generic management system standards mentioned above, an AI management system can also be used jointly with a management system dedicated to a sector. For example, both ISO 22000 and an AI management system are relevant for an AI system that is used for food production, preparation and logistics. Another example is ISO 13405. The implementation of an AI management system can support requirements related to medical device software in ISO 13485 or requirements from other International Standards from the medical sector such as IEC 62304.

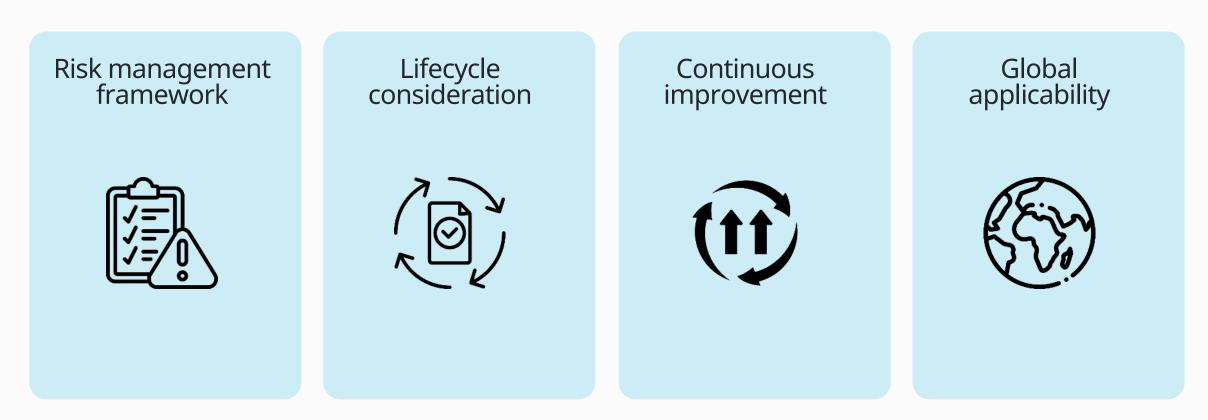


Key aspects of ISO/IEC 42001



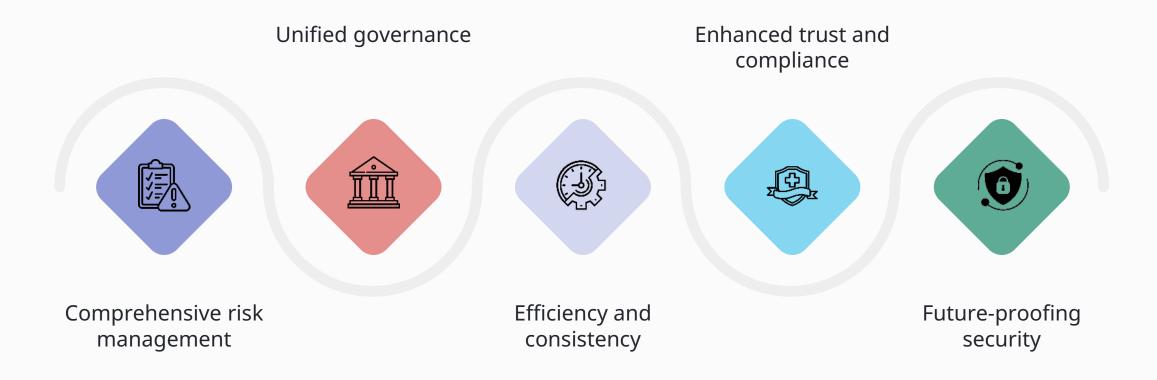


ISO/IEC 27001 and ISO/IEC 42001 integration





Benefits of integration







Example use case



Example use case: ISO 9001

A manufacturing company produces precision automotive parts. To ensure the quality of its products, the company decides to implement an AI-powered quality inspection system that uses computer vision to detect defects on production lines.

Extension with ISO 42001:

- Customer-Focused Objectives (ISO 9001)
- AI Development and Deployment (ISO 42001)
- Risk Management
- Process Integration
- Continuous Improvement (Both Standards)
- Documentation and Compliance



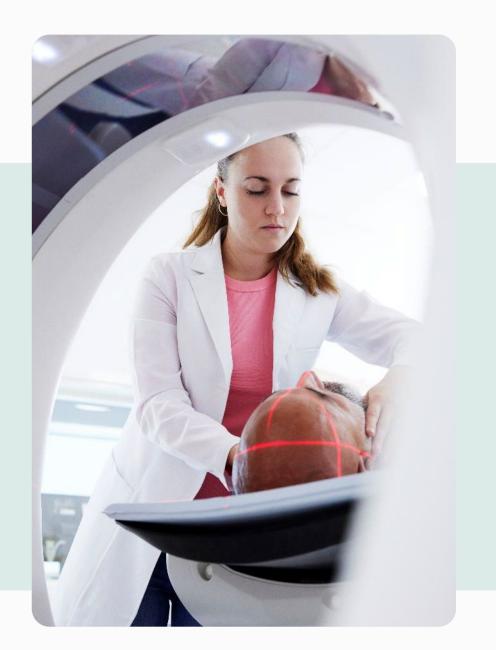


Example use case: ISO 13485

ISO 13485 compliance: a company builds a medical imaging device to detect anomalies.

Extension with ISO 42001:

- Incorporate AI models for automated image analysis
- Document the AI's training process, dataset sources, and potential biases
- Implement continuous monitoring for the AI's performance in diverse populations





ISO 42001 AI Management System Pre-Certification Assessment

ISO 42001 Pre-Certification Assessment (Optional)

The BSI AI Management System Pre-Certification Assessment service is a structured informal pre-assessment audit which assesses your AI Management System to identify areas of concern where further action would be beneficial ahead of a formal initial assessment.

The objectives of such assessments shall be limited to determine the scope, readiness, and capability for an ISO 42001 certification audit. Maximise benefits and value from a Pre-certification Assessment:

- AI-system(s) description under the draft scope of AIMS
- List of services with a description
- Statement of Applicability
- List of sites under AIMS (with addresses and description of activities)
- AI policy
- AI objectives
- AI Management System Manual (structured with relevant AIMS docs)
- Draft of relevant procedures, policies & work instructions







Q&A





Thank you

bsigroup.com

