

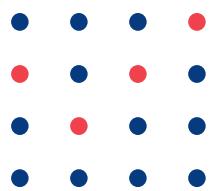


**ISO 55001:2024**

# **Asset Management**

# **System Requirements**

Transition Guideline Client version



**ISO 55001:2024 is the latest version of the international standard specifying requirements for establishing, implementing, maintaining, and improving an asset management system (AMS). It applies to all types of assets and all organizations, regardless of size, sector, or type.**

In an increasingly competitive and sustainability-oriented industrial environment, ISO 55001:2024 physical asset management has evolved towards a comprehensive approach, standardizing and aligning with the organization's strategic objectives.

The new edition of ISO 55001:2024 introduces significant adjustments that not only update the technical requirements but also align the standard with trends such as digitization, ESG criteria, and integration with corporate strategic objectives. Companies will need to prepare for change and adapt their asset management systems to comply with the new requirements and transition times if they have not yet implemented them.

This article provides a very general overview of the changes between the 2014 and 2024 versions of ISO 55001 (the asset management standard).



### Can ISO 55001:2014 certification holders transition exist, and what's the process?

- Yes. Certified organizations will need to transition to ISO 55001:2024 through a transition audit.
- All transition audits must be complete by January 2, 2027, to avoid a gap in certification.
- The transition can occur during a regular renewal or surveillance audit and requires an internal audit and management review against the new standard beforehand.
- Some certification bodies will require additional audit time to assess new requirements in your gap/transition audit.

### What documentation is required for ISO 55001:2024 certification?

- Asset management policy and objectives.
- Documented SAMP (Strategic Asset Management Plan).
- Decision-making framework and supporting records.
- Evidence of risk and opportunity identification and response actions.
- Updated monitoring, measurement, review, and improvement records aligned with the 2024 requirements.

### Who should use ISO 55001:2024?

- Any organization seeking to improve how it manages physical, financial, intellectual, or digital assets.
- Particularly suitable for infrastructure, utilities, transportation, industry, real estate, and asset-intensive service providers.

## What are the main changes in ISO 55001:2024?

- Harmonized Structure: Now closely aligned with other management systems (like ISO 9001 and ISO 14001) using the Harmonized Structure for consistency.
- Updated Terms & Definitions: Enhanced common definitions; e.g., new/revised terms for "value," "predictive action," "incident," and "data/information/knowledge".
- Decision-Making Framework: A new clause requires a formal framework for asset management decision-making aligned with organizational goals and risk management.
- Strategic Asset Management Plan (SAMP): SAMP is now a mandatory, documented requirement linked with organization-level objectives and the management of risks and opportunities.
- Focus on Life Cycle Management: The operational clauses require explicit consideration and management of all phases in an asset's life cycle, with more proactive, predictive, and sustainable approaches.
- Stronger Focus on Sustainability, Climate, and Stakeholders: Enhanced emphasis on sustainable value, climate impact, and expanded stakeholder considerations.

## What are the benefits of the updated standard?

- Improved alignment and integration with other ISO management systems.
- Strengthened asset management decision-making processes.
- Elevated focus on sustainability, adaptability, and value realization across the full asset lifecycle.
- Increased preparedness for climate change, risk, and changing stakeholder needs.



## Key changes and new sections in ISO 55001:2024:

The latest edition of ISO 55001:2024 introduces several significant updates and new requirements, including:

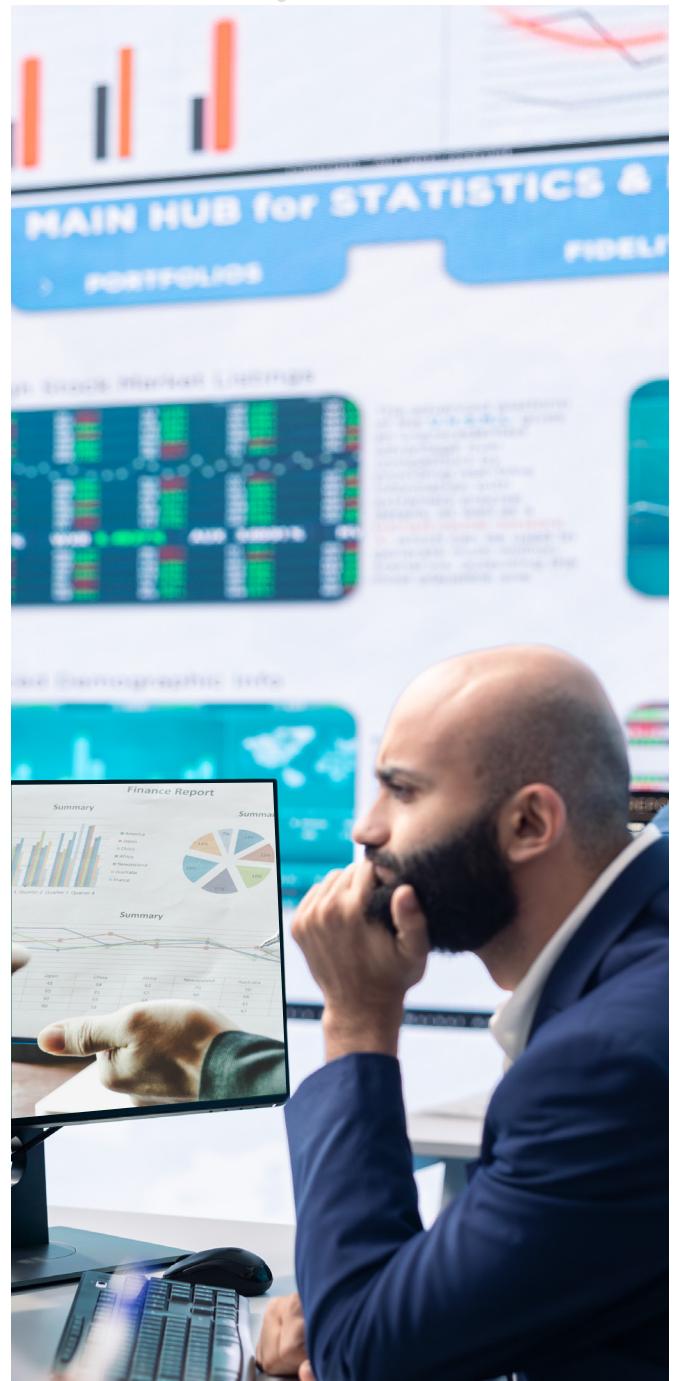
1. Asset Management Decision-Making and Value – Introduced as a new requirement, this concept is fully scalable, making it applicable to organizations of all sizes, from small businesses to large enterprises.
2. Actions to Address Risk – Revised with subtle rewording and the separation of "Opportunity," bringing enhanced clarity to risk management strategies.
3. Actions to Address Opportunities – Now a distinct requirement to emphasize that risk and opportunity management are interconnected and mutually supportive.
4. Strategic Asset Management Plan (SAMP) – Simplified and reinforced as a key artifact supporting organizational planning.
5. Asset Management Objectives – Revised for greater clarity to encourage stronger engagement and understanding from senior management.
6. Planning to Achieve Asset Management Objectives – Enhanced to better align with achieving an optimal balance between cost, risk, and performance.
7. Data and Information – Introduces a clearer distinction between data and information within the asset management context, referencing ISO 55013.
8. Knowledge Management – A newly introduced section that underpins competitive advantage and acknowledges the role of sustainability in workforce development, with reference to ISO 55012.
9. Operational Planning and Control – Expanded to place greater emphasis on life cycle management.
10. Externally Provided Processes, Products, Technologies, and Services – Significantly revised to highlight the importance of adequately resourcing asset management objectives through various means.
11. Management Review – Meaningfully updated to incorporate considerations of risk, opportunity, decision-making, and continuous improvement.
12. Predictive Action – A newly established requirement aimed at enabling organizations to proactively adapt to internal and external changes based on risk, opportunity, services, and assets.

These updates collectively enhance the framework for effective asset management, ensuring a more structured, risk-aware, and value-driven approach for organizations.

Differences between ISO 55000, 55001, and 55002

Before getting into the comparison, it is worth remembering that asset management within the ISO framework is based on three documents:

- ISO 55000: Establishes the fundamentals, definitions, and key principles of asset management.
- ISO 55001: Specifies the requirements for implementing an asset management system.
- ISO 55002: Provides practical guidelines for effectively applying ISO 55001.



## Key changes: ISO 55001:2024 and ISO 55001:2014

The release of ISO 55001:2024 marks a significant update to the standard, with several key revisions that reflect the evolving needs of organizations in managing their assets. While the core principles of ISO 55001 remain intact, the 2024 revision introduces important changes to enhance asset management practices in response to new challenges such as increased focus on sustainability, resilience, and integration with other management systems.

The primary differences between ISO 55001:2014 and ISO 55001:2024 reflect updates to terminology, structure, and the addition of new concepts to align with current best practices in asset management.

The 2024 update maintains the main structure but introduces improvements focused on strategic integration, sustainability, and intensive use of data. Among the most relevant changes are:

### Here is a brief description about the Key changes



#### 1) Structure and Alignment

ISO 55001:2024 adopts the Harmonized Structure for ISO management system standards (consistent clause numbering and core text).

- This makes it easier to integrate with other standards like ISO 9001, ISO 14001, and ISO 45001, ISO 50001.
- The 2014 version has a more traditional structure, which is less aligned with other ISO standards.

#### 2) Emphasis on Leadership

The new standard significantly enhances the role of top management in strategic decision-making and asset management planning.

##### 2024 Update:

Top management is now explicitly responsible for approving key documents, such as the Strategic Asset Management Plan (SAMP).

Greater focus on aligning asset management decision-making criteria with organizational objectives.

##### 2014 Version: Leadership

Commitment was required but lacked specific roles in strategic alignment.

#### 3) Risk Management

A clear distinction between risks and opportunities has been introduced to enhance planning and decision making.

##### 2024 Update:

Risks: Addressed through identification, analysis, and evaluation (Clause 6.1.2).

Opportunities: Prioritized as pathways for performance improvement (Clause 6.1.3).

##### 2014 Version:

Combined risks and opportunities into a single general clause, which lacked the clarity of the updated standard



#### 4) Predictive Action

The transition from preventive to predictive action emphasizes proactive, data-driven decision-making.

##### 2024 Update:

Predictive action (Clause 10.3) focuses on anticipating and mitigating future risks or seizing opportunities, including determining optimal intervention points for maintenance or replacement.

##### 2014 Version:

Focused on preventive action, which aimed to eliminate potential nonconformities but lacked predictive methodologies.

#### 5) Strategic Asset Management Plan (SAMP)

The importance of the SAMP as a foundational document has been clarified.

##### 2024 Update:

Introduces a dedicated clause (Clause 6.2.1), requiring the SAMP to include time frames, contingencies, and improvement strategies while aligning asset management objectives with organizational goals.

##### 2014 Version:

Referenced the SAMP indirectly as part of broader planning activities.

#### 6) Knowledge Management

A dedicated clause emphasizes the role of organizational knowledge in effective asset management.

##### 2024 Update:

Clause 7.7 requires organizations to acquire, retain, and utilize knowledge while addressing the risks associated with outdated or inaccurate information.

##### 2014 Version:

Lacked a specific focus on managing knowledge systematically.

#### 7) Life Cycle Management

ISO 55001:2024 explicitly integrates the concept of asset life cycle management into operational planning.

##### 2024 Update:

Incorporates stages such as asset acquisition, use, maintenance, renewal, and disposal (Clause 8.1).

##### 2014 Version:

Discussed operational control but did not emphasize life cycle stages.

#### 8) Climate Change and Sustainability

Sustainability and climate change considerations have become central themes in ISO 55001:2024.

##### 2024 Update:

Recognizes climate change as a critical external factor (Clause 4.1).

Encourages organizations to assess climate impacts on their assets and integrate sustainability into their asset management system.

##### 2014 Version:

Did not explicitly mention climate change or sustainability.

#### 9) Decision-Making Framework

A new clause focuses on standardizing and aligning decision-making processes.

##### 2024 Update:

Clause 4.5 introduces a framework for defining value, establishing decision-making criteria, and ensuring alignment with organizational objectives, risks, and opportunities.

##### 2014 Version:

Did not have a dedicated section on decision-making frameworks.

**10) Documentation and Information Management**

The scope of documented information has been expanded to include data management processes.

2024 Update:

Addresses data specifications, integration, quality, and sharing processes (Clause 7.6).

2014 Version:

Focused on traditional document control, without emphasizing data management integration.

**11) Stakeholder and Communication**

Engagement with stakeholders is now more explicitly defined and emphasized.

2024 Update:

Requires organizations to consider how asset management activities impact stakeholders (Clause 4.2).

Introduces consultation requirements for communication planning (Clause 7.4).

2014 Version:

Centered on identifying stakeholder needs, without emphasizing engagement or collaboration.

**12) Integration with Other Systems**

ISO 55001:2024 promotes better integration with financial, operational, and other management systems.

2024 Update:

Clause 6.2.3 emphasizes the alignment of financial and non-financial terminology, facilitating smoother integration.

2014 Version:

Lacked this strong emphasis on integration.





## Key changes: 2014 vs. 2024

The 2024 update maintains the main structure but introduces improvements focused on strategic integration, sustainability, and intensive use of data. Among the most relevant changes are:

Scope	ISO 55001:2014	ISO 55001:2024
Strategic Approach	General alignment with the organization's objectives.	Requires evidence that asset-related decisions are justified by their direct contribution to strategic goals and business outcomes.
Sustainability (ESG)	Implicit references to environmental and social aspects.	Explicit inclusion of ESG criteria in asset management, considering environmental impact, occupational safety, and transparency.
Risk Management	General framework for identifying and assessing risks.	More robust approach: prioritization based on criticality, probability, and failure cost, integrating methodologies such as RCM and RBI.
Data and Digitalization	Traditional indicators and documented records.	Intensive use of real-time data (IoT, digital twins, predictive analytics) to make condition- and performance-based decisions.
Leadership and Governance	Leadership implicitly embedded in AMS implementation.	Stricter requirements: top management must demonstrate active commitment, resource allocation, and validation of decision-making criteria.
Life Cycle	Consideration of the complete life cycle as a general principle.	Detailed planning from acquisition to disposal, with metrics to measure the value generated throughout the cycle.

## Conclusion

The integration of ISO 55001 is not a simple certification process; it is a catalyst for business strategy. Companies that adopt their risk-based and life-cycle cost approach achieve more accurate senior management, greater capital efficiency, and increased stakeholder confidence.

The process requires disciplined change management and reliable, trustworthy external verification, but the benefits, both operational and financial, accumulate year after year. Regulatory scrutiny under ISO 55001 is not just a formal requirement, but a key component of asset governance.

Its proper implementation strengthens organizational resilience, promotes technical management based on international standards, and aligns operational objectives with the current regulatory framework.