

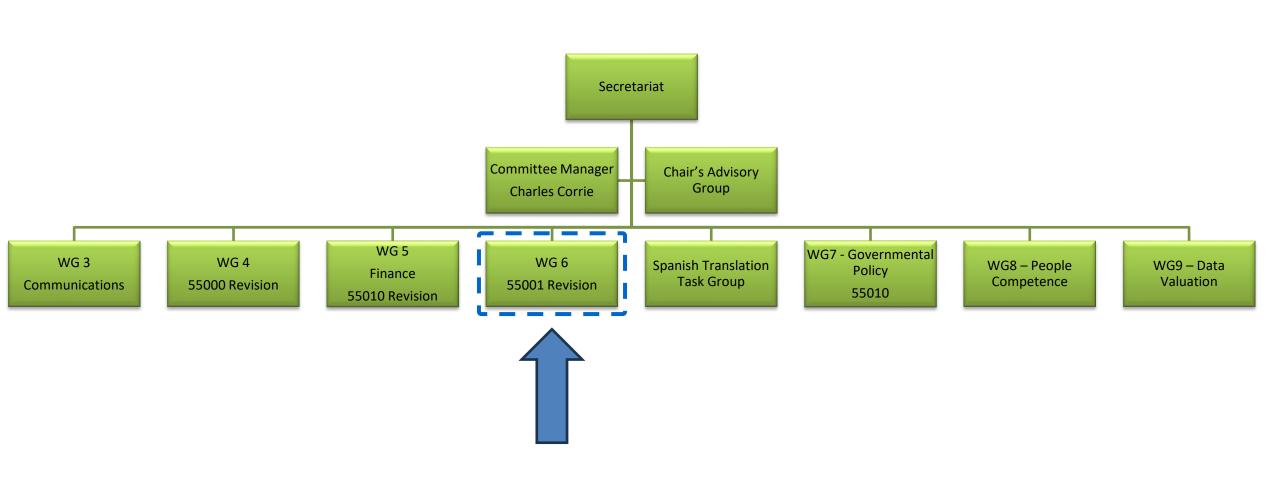
# ISO 55001:2024







#### **TC251 Structure**





### **Thank You**



#### **Dick Hortensius** Secretary/Deputy Convenor for WG6 (55001) JTCG and sounding board for all things MSS-related



Annemarie Kin Deputy Convenor for WG6 2021 through 2022 Before taking over as WG4 (55000) Convener

And to all the Theme and Sub-Team leads and everyone who participated in > 100 meetings across 3 years



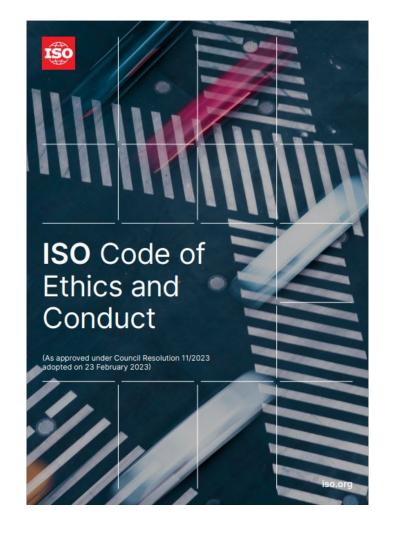
#### **Code of Conduct**

The code is applicable to all participants in ISO's activities

**General Principles:** 

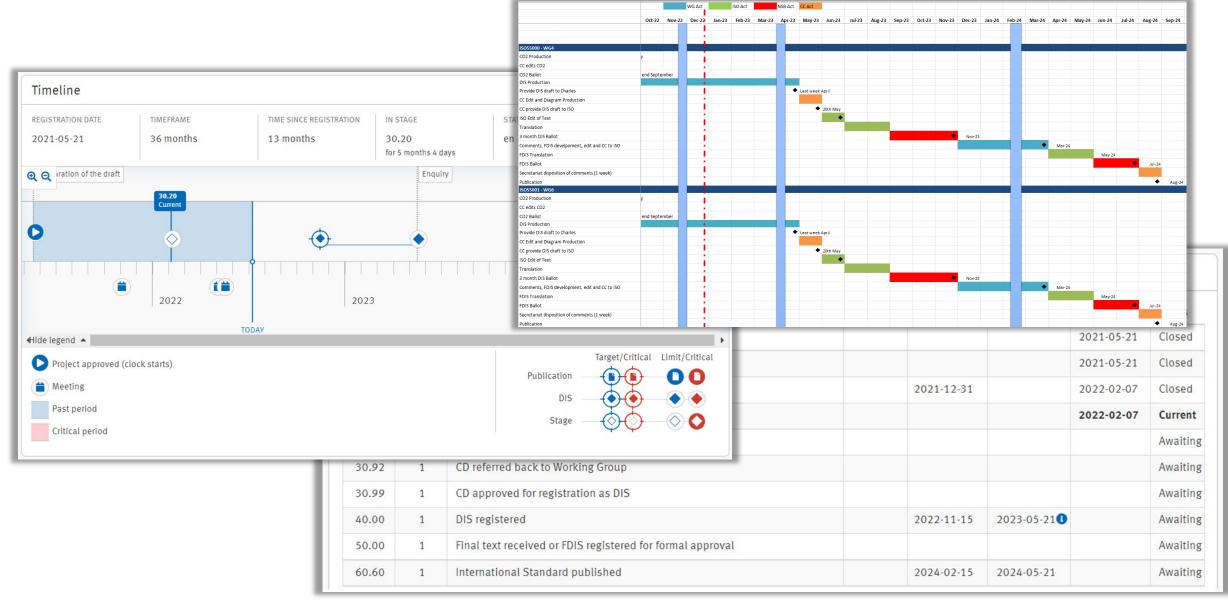
- Comply with legal and statutory obligations
- Perform and act in good faith, consistent with the purpose, policies and principles of the organization
- Behave ethically
- Promote and enable all voices to be heard
- Engage constructively in ISO activities
- Declare actual and potential conflicts of interest and manage them appropriately
- Protect confidential information
- Protect ISO assets
- Avoid and prevent any form of bribery or corruption
- Escalate and resolve disputes and uphold agreed resolution

The code can be downloaded from: <u>PUB100011.pdf (iso.org)</u>



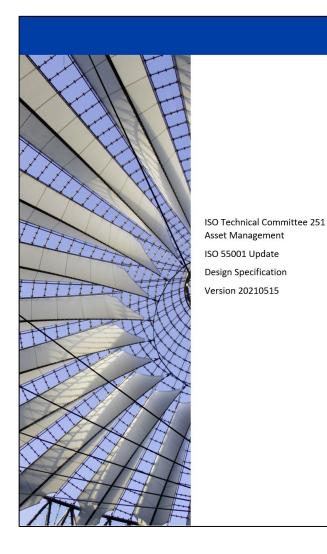


#### **Project Management – ISO Timeline**





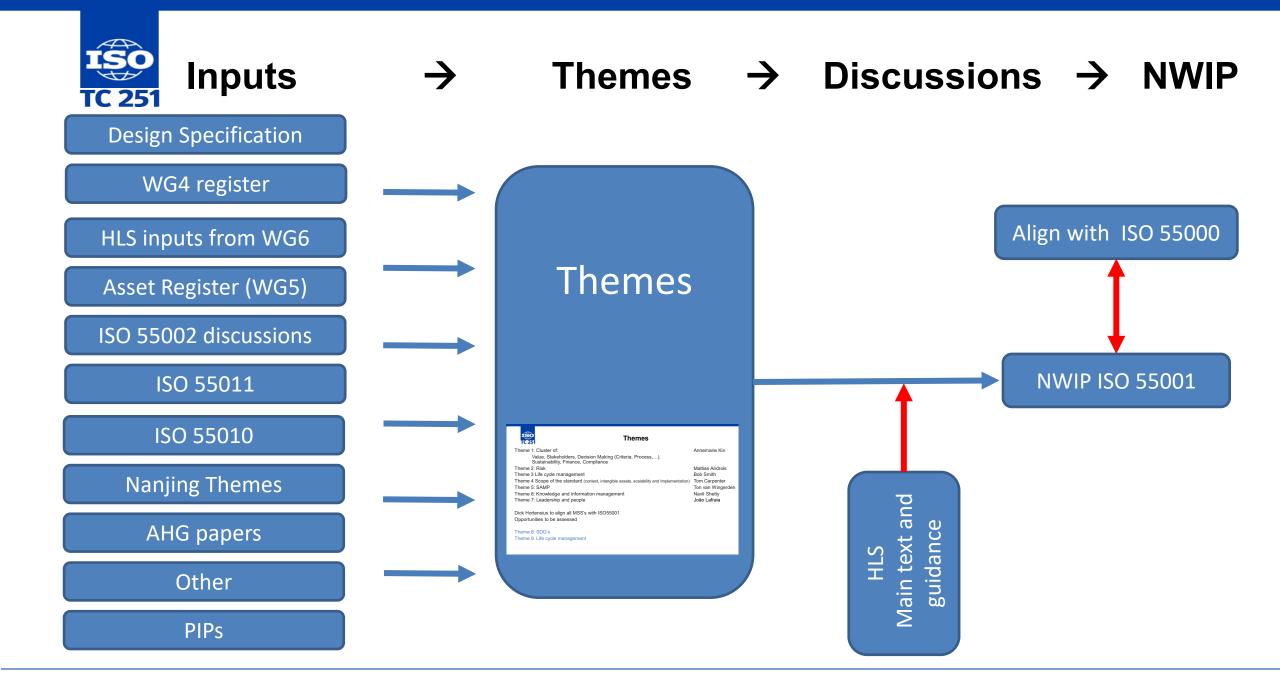
#### WG6 55001 Design Spec & Team Charter



- Purpose
- Protocols
- Why
- 🕨 What
  - How
  - Who
  - When



ISO Technical Committee 251 Asset Management Workgroup 6 (WG6) Team Charter



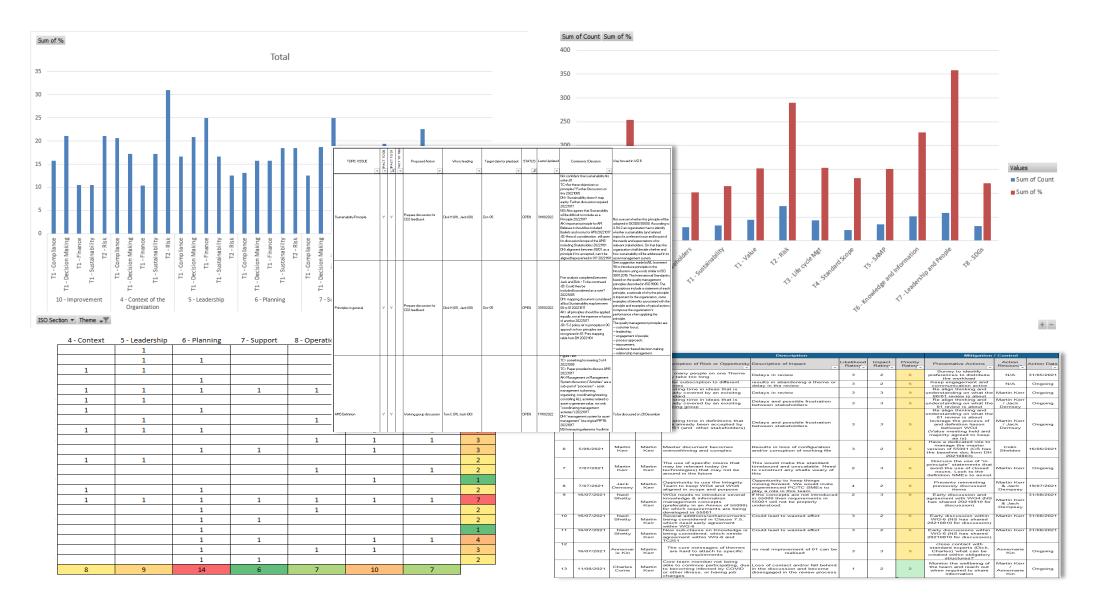


#### **Theme Leads**

Theme	Theme Lead (s)
Theme 1: Value and Decision Making	John Woodhouse (UK)
Theme 2: Risk	Mattias Androls (SE) and Tom Carpenter (AU)
Theme 3 Life cycle management	Bob Smith (US)
Theme 5: SAMP	Carrie Heishman (US)
Theme 6: Knowledge and information management	Navil Shetty (UK/IN)
Theme 7: Leadership and people	João Lafraia (BR)



#### **Themes to HS Correlation**



# Annex SL text



High level structure and identical text for MSS and common core MS terms and definitions

- 1. Scope
- 2. Normative references
- 3. Terms and definitions
- 4. Context of the organization
- 5. Leadership
- 6. Planning
- 7. Support
- 8. Operation
- 9. Performance evaluation
- 10. Improvement

- Application of HS: refer Annex SL clause 8
- Type A MSS shall apply the harmonized structure detailed in Appendix 2.
- If due to exceptional discipline specific circumstances, text from the harmonized structure cannot be applied in the management system standard, then the committee may request an amendment the text.
- Discipline-specific text shall not affect harmonization or contradict or undermine the intent of the harmonized structure.



### Example 'blue text' ISO 55001:2014

#### **Context of the organization** 4

#### 4.1 Understanding the organization and its context

The organization shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcome(s) of its asset management system.

Asset management objectives, included in the strategic asset management plan (SAMP), shall be aligned to, and consistent with, the organizational objectives. SAMPLEONIX

#### 4.2 Understanding the needs and expectations of stakeholders

The organization shall determine:

- the interested parties stakeholders that are relevant to the asset management sy \_\_\_\_
- the relevant requirements and expectations of these interested parties stakeholders with respect to asset management;
- the criteria for asset management decision making; \_\_\_\_
- the stakeholder requirements for recording financial and non-financial information relevant to \_\_\_\_ asset management, and for reporting on it both internally and externally.



## Example of impact of changes in HS on ISO 55001:2014

#### **Context of the organization**

#### 4.1 Understanding the organization and its context

The organization shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomerce result(s) of its asset management system.

Asset management objectives, included in the strategic to, and consistent with, the organizational objectives

agement plan (SAMP), shall be aligned

#### SAMPLEONIX stakeholders 4.2 Understanding the needs and expect

The organization shall determine:

the interested parties stakeholder

elevant to the asset management system;

- the relevant requirements and expect tions of these interested parties stakeholders with respect to asset management;
- which of these requirements will be addressed through the asset management system;
- the criteria for asset management decision making;
- the stakeholder requirements for recording financial and non-financial information relevant to asset management, and for reporting on it both internally and externally.



### **55001 Guiding Principles**

What does good like? (Guidelines)

- **G1** Less is more (what is the least we can add to 00/01 to get the most benefit for industry?)
- **G2** Consider organizations who are new to 550xx (changes may turn them away from ISO?)
- **G3** Consider organizations that are already certified to 550xx (will they stay with the 2014 version?)
- **G4** Consider an auditor of 55001 and how they will audit against "shalls" (i.e. remove ambiguity and provide clarity)
- **G5** Shall statements are "outcome" worded, not "detailed" worded

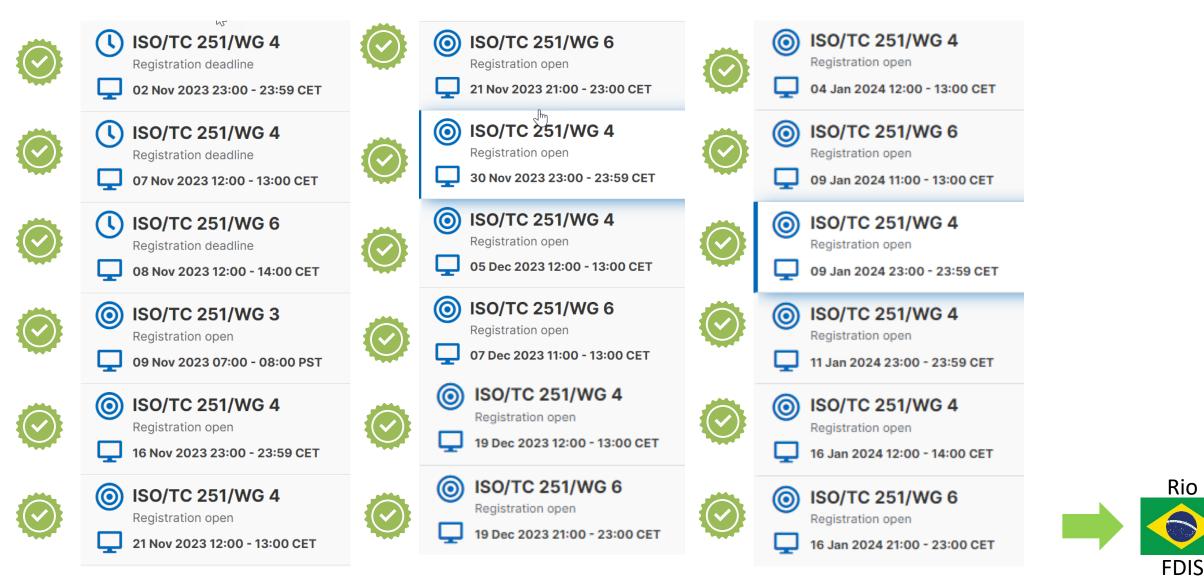
**G6** - This is a management system standard (MSS) for asset management, not the management of assets.

- **G7 -** This is not how to do asset management
- **G8** It should also allow a small organization to apply the standard (maintain scalability)



# Alignment of 00 and 01 Meetings (Nov 23 – Jan 24)

Rio





# **High Level - Changes**

- 4.5 Asset management decision-making and value (new)
- 6.1.2 Actions to address risk (new)
- 6.1.3 Actions to address opportunities (new)
- 6.2.1 Strategic asset management plan (new)
- 6.2.2 Asset management objectives (revised)
- 6.2.3 Planning to achieve asset management objectives (revised)
- 7.6 Data and information (new)
- 7.7 Knowledge (new)
- 8.1 Operational planning and control including life cycle management (revised)
- 8.3 Externally provided processes, products, technologies and services (revised)
- 9.3 Management review (revised)
- 10.3 Predictive action (new)



### 1-Scope

- Added are the intended results of the application of an asset management system. This is in line with the Harmonized Structure and the intended results are an important reference for determining risks and opportunities (see 6.1.1) that need to be addressed to give assurance that the asset management system can achieve the intended results.
- The intended results include:
  - realized value from assets throughout their life for the organization and its stakeholders;
  - achievement of asset management objectives and fulfilment of applicable requirements;
  - continual improvement of asset management, the asset management system and the performance of assets.



### 2-Normative References & 3-Terms and Definitions

- 2. Normative references
- Reference is made to the revised ISO 55000:2024
- 3. Terms and definitions
- This clause is new and includes the (mandatory) common terms and definitions related to management systems from the Harmonized Structure. In addition two definitions are included (preventive action (3.18) and incident (3.19)) because these are relevant for understanding subclause 10.2. All asset management (system) specific terms and definitions are included in ISO 55000:2024. Particularly important for ISO 55001:2014 are the new/revised definitions of value and predictive action, as well as data, information and knowledge.



### **4-Context of the organization**

4.1 Understanding the organization and its context

The new requirement for the Harmonized Structure states that the organization shall determine whether climate change is a relevant issue. For more information on this topic, see the article on the JTCG website.

4.2 Understanding the needs and expectations of stakeholders Included are two new requirements:

- The organization shall determine which identified stakeholder requirements will be addressed in the asset management system:
- The organization shall determine the impacts of assets and asset management activities on stakeholders.

This clarifies that it is the responsibility of the organization to determine which needs and expectations from stakeholders will be taken into account in the AMS, and that the organization itself shall determine impacts on stakeholders that may need to be addressed in the AMS.



### 4-Context of the organization

4.3 Determining the scope of the asset management system No substantial changes

4.4 Asset management system

No substantial changes. The former requirement to develop a SAMP is now addressed in the new subclause 6.2.1.

#### 4.5 Asset management decision-making

This subclause is new and specifies the establishment and application of a framework for asset management decision-making, definition of the criteria to be used for asset management decision-making and the selection of appropriate methods, processes and tools.

This is a significant change compared to the 2014 edition and contributes to strengthening the alignment of asset management from the strategic to the operational level ('line of sight') as well as consistent decision-making aimed at realizing value from assets while taking into account the context, stakeholder requirements and risks and opportunities.



### **5-Leadership**

5.1 Leadership and commitment No substantial changes

5.2 Asset management policy No substantial changes; shortened

5.3 Roles, responsibilities and authorities No substantial changes; shortened



## 6-Planning

6.1 Actions to address risks and opportunities

Actions to address risk and opportunities are now dealt with in two separate subclauses. This acknowledges that risks and opportunities are dealt with differently in most organizations and not always seen as antagonisms.

The risk assessment process is specified in some more detail by lifting text from 6.2.2 in ISO 55001:2014 to 6.1.2 in this new edition.



## 6-Planning

6.2 Asset management objectives and planning to achieve them

A new subclause 6.2.1 is introduced that requires the development of the Strategic Asset Management Plan (SAMP) and specifies what it should include and bring about.

This acknowledges the importance of the SAMP as element of the AMS and the key role of the SAMP in alignment of asset management with general organizational objectives and policies and the realization of value of assets for the organization and its stakeholders.

The requirements related to asset management objectives (6.2.2) and planning to achieve those objectives (6.2.3) are not substantially changed.

According the Harmonized Structure a new subclause 6.3 on planning changes is introduced addressing the determination of the need for changes, assessing associated risks and carrying out changes in a planned manner. Control of planned changes is still dealt with in subclause 8.2. This acknowledges the increasing importance of change management in organizations due to continuing developments and changes in the internal and external context of organizations that should be reflected in asset management as well as.



### 7-Support

7.1 resourcesNo substantial changes

#### 7.2 competence

An additional requirement is introduced on periodic competence assessments to validate whether required competencies are still valid.

7.3 awarenessNo substantial changes

#### 7.4 communication

New requirements are included related to stakeholder consultation on communication needs the evaluation of the effectiveness of communications, and the maintenance of appropriate documented information.



### 7-Support

7.5 documented information

No substantial changes (this subclause was numbered as 7.6 in the 2014 edition)

7.6 data and information

No substantial changes (this subclause was numbered as 7.5 in the 2014 edition)

The requirements are clearer and more concise.

#### 7.7 knowledge

This is a new subclause that is requiring that the organization determines the knowledge needed to operate the AMS, implements processes for dealing with knowledge and ensuring that knowledge remains current and reflects changing requirements and trends.

Together with 7.6 this reflects the growing importance of data, information and knowledge in asset management.



### **8-Operation**

8.1 Operational planning and control including life cycle management

This subclause now addresses explicitly life cycle processes (creation, acquisition, utilization, maintenance, improvement, renewal, and disposal of assets). Also treating risks and implementing opportunities as identified in 6.1 are integral part of operational planning and control. Finally a requirement on documented information is introduced.

#### 8.2 Control of change

No changes. Requirements related to planning changes are now moved to the new subclause 6.3

8.3 Externally provided processes, products, technologies and services

The term outsourcing has changed to externally provided processes, products, technologies and services in line with the Harmonized Structure. The requirements are not changed substantially.



### **9-Performance evaluation**

9.1 Monitoring, measurement, analysis and evaluation No substantial changes

9.2 Internal auditNo substantial changes

9.3 Management review No substantial changes



### **10-Improvement**

10.1 Continual improvement

No substantial changes (this subclause was numbered 10.3 in the 2014 edition)

10.2 Nonconformity and corrective action

No substantial changes (this subclause was numbered 10.1 in the 2014 edition)

Preventive actions are now explicitly included alongside corrective actions. Preventive actions were already implicitly present in the 2014 edition (..action and available options to eliminate the cause(s) of the nonconformity or incident, in order that it does not recur or occur elsewhere...).

#### 10.3 Predictive action

This is a new subclause replacing the subclause on preventive action (10.2 in the 2014 edition). This subclause requires the organization to establish processes for predictive actions, i.e. actions that predict future behaviour of a parameter required to support decision-making. This should enable an organization to better anticipate and act on future occurrences and impacts of non-conformities and opportunities for improvement and determine optimal intervention points.

This reflects the increasing importance to plan for future developments that affect the continued realization of value from assets for the organizations and its stakeholders.



