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Asset management — Guidance on the alignment of financial and non-financial functions in asset management

Gestion d'actifs — Orientation sur l'alignement des fonctions financières et non financières dans la gestion d'actifs

Управление активами — Руководство по обеспечению согласованности финансовой и нефинансовой деятельности при управлении активами

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Phone: + 41 22 749 01 11
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO documents/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).

~~Attention is drawn~~ISO draws attention to the possibility that ~~some of the elements~~implementation of this document may ~~be involve~~ the ~~subject~~use of (a) patent(s). ISO takes 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 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. ISO 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).~~

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.

This document was prepared by Technical Committee ISO/TC 251, *Asset management*.

This second edition cancels and replaces the first edition (ISO/TS 55010:2019), which has been technically revised.

The following~~main~~ changes ~~have been made~~are as follows:

- the text has been updated to be aligned ~~to~~with ISO ~~7CD-55001~~—:—¹;
- the retitling and revision of ~~Annex E~~Annex E₂;
- the addition of new ~~Annexes H, I, J and K~~Annexes H, I, J and J₂.

¹ Under preparation.

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Introduction

The ISO 55000, ISO 55001 and ISO 55002 asset management standards ~~have raised~~raise awareness of the importance of improving alignment between an organization's financial and non-financial functions, and this document provides guidance on how to achieve this. ~~ISO/CD 55001:~~Alignment of these functions enabling the realization of value derived from the implementation of asset management ~~is detailed within~~ISO 55000, ISO 55001, and ISO 55002, particularly ISO 55002:2018, Annex F.

The guidance in this document is consistent with the requirements of ISO 55001 for an asset management system but does not add new requirements to ISO 55001 or provide interpretations of the requirements of ISO 55001.

For an example of an organization aligning its asset management functions, see ~~Annex F~~Annex F.

As used in this document, financial functions refer to processes and activities such as managerial costing and accounting, budgeting, financing and valuation related to the assets. Non-financial functions are the complementary processes and activities, for providing a product or service from the assets.

The asset management function may include both financial and non-financial functions.

The definition of "asset" in ISO 55000 is broader than that of the ~~generally accepted accounting principles~~United States (US) Generally Accepted Accounting Principles (GAAP) or the International Financial Reporting Standards (IFRS). The term "asset" as primarily used in this document is defined in ISO 55000. ~~See Annex H.~~

In many organizations, the financial and non-financial functions of asset management are inadequately aligned. Often the financial accounting functions are predominantly focused on retrospective reporting of accounting/regulatory financial activities. However, there is a growing awareness in organizations of the need to focus on providing a managerial costing approach to support decision-making for the future. At the same time, the non-financial functions are recognizing the need to improve their understanding of the financial implications of their activities. These are examples of moves towards better alignment of the financial and non-financial functions with the aim of better decision-making and value realization.

Lack of alignment between financial and non-financial functions can be attributed to silos in an organization, including reporting structures, functional/operational business processes, and related technical data. ~~Reference [23The United States Government's "Government Accountability Office interviews with asset management experts" (2019)]~~ advises that "... silos [department/functional specialization] are necessary to allow for the required level of specialization, but if these silos [department/functional specialization] do not communicate, inefficiencies and errors in asset management result" and that "when asset management implementation fails, it is often because asset management staff and senior management are not in alignment".

Alignment should prudently work both "vertically" and "horizontally". Vertical alignment "~~Top~~top-down and bottom-up information flow" means that financial and non-financial asset-related directives by top management are informed by accurate upward information flows, effectively implemented within the appropriate levels of the organization. Horizontal alignment means that financial and non-financial information that flows between departments (conducting functions such as operations, engineering, plant maintenance, financial accounting, financial management and risk management) uses the same terminology and refers to the assets identified in the same way. See ~~annex H~~the asset mapping table ~~in Annex H: Aligning asset management and financial reporting approaches.~~

The aim of this document is to encourage organizations to support alignment between these asset management functions and to provide guidance on how such alignment can be achieved. It also promotes the benefits that can be achieved for an organization and its stakeholders by having alignment of these asset management functions better understood, implemented and improved. This enables an organization's functional areas to share information and collaborate to achieve the ~~organization's~~ organization's objectives.

This document can assist users in applying the concepts of ISO 55000 and fulfilling the requirements of ISO 55001. It provides additional advice and guidance over and above the explanations outlined in ISO 55002 on the benefits to be realized for an organization through alignment.

It is intended for use by personnel, at all levels in an organization, who are involved in asset management, including:

- top management and decision-makers, to derive the benefits that are achievable by better alignment between financial and non-financial functions;
- those in asset-related multidisciplinary functions who provide information to support decision-making or rely on the outcomes of those decisions;
- a wide range of personnel, including those who have responsibility for the technical planning, design, construction, operation, maintenance and performance of the assets, and those with financial responsibilities such as accounting, financial planning, budgeting and financial reporting.

Knowledge and understanding of terminology and common language used by financial and non-financial functions can facilitate discussion, communication and exchange of information between these functions. ~~Clauses 4~~ ~~Clauses 4~~ to ~~9~~ and ~~the~~ related annexes provide a range of information on financial and non-financial functions in asset management, including information on asset management accounting principles.

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Asset management — Guidance on the alignment of financial and non-financial functions in asset management

1 Scope

This document gives guidance ~~for on~~ the alignment between financial and non-financial asset management functions, to improve internal ~~control controls~~ as part of an organization's management system ~~and can be applied to all types of assets and by all types and sizes of organizations.~~

~~This document is applicable to all types of assets and by all types and sizes of organizations.~~

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 55000, *Asset management — Overview, principles and terminology vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 55000 and the following apply.

ISO and IEC maintain ~~terminological~~ **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 ~~http~~<https://www.electropedia.org/>

3.1 financial accounting

process of recording, summarizing, and reporting the transactions resulting from an organization's operations over a period of time

Note 1 to entry: These transactions are summarized in the preparation of financial statements (including the balance sheet, income statement and cash-flow statement) that communicate the organization's operating performance over a specified period.

3.2 management accounting

accounting to assist management in the formulation and implementation of an organization's strategy

Note 1 to entry: Management accounting usually requires partnering across different *functions* (3.20) in an organization for management decision-making, devising planning and performance management systems, and providing expertise in financial reporting and control.

3.3 managerial costing

costing used internally by an organization to ensure that information for decisions reflects the characteristics of the organization's resources and operations

Note 1 to entry: For further information on managerial costing, see ~~Reference [15] the ESC, 2018 Water Price Review, Guidance Paper, Essential Services Commission (ESC), 2016.]~~

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3.4

financial function

work, or portions of work, that pertain to financial management

~~Note 1 to entry: Examples include financial~~EXAMPLE Financial reporting, budgeting, financing, valuation (3.12), financial planning and analysis, ~~management accounting (3.2) and~~, tax accounting.

Note ~~2~~ 1 to entry: In organizations, there ~~may be~~ sometimes no separation between financial and non-financial functions (3.5); some functions ~~may~~ can be blended. Those distinctions should be addressed in internal strategic asset management plans or policy.

3.5

non-financial function

work, or portions of work, that combine with ~~the organization's~~an organization's financial functions (3.4) in delivering its services or products:

Note 1 to entry: ~~Examples include asset~~Asset planning, acquisition, marketing, operations ~~and~~, maintenance.

3.6

internal control

process(es) used by an ~~organization's~~organization's managers to help it achieve its objectives

Note 1 to entry: Internal ~~control helps~~controls help an organization to run its operations efficiently and effectively while safeguarding assets, report reliable financial and non-financial information about its operations, and comply with applicable laws, regulations, and standards.

Note 2 to entry: Internal ~~control applies~~controls apply to all activities, irrespective of whether they are financial or non-financial.

Note 3 to entry: In order to achieve a high level of assurance of the organization's internal controls, segregation of duties, is required. ~~(e.g., avoid, avoiding~~ having the same individual ~~performing responsible for~~ decision-making ~~and having responsibility for as well as~~ asset custody and record keeping, ~~and have, having~~ procedures to prevent and identify waste, fraud, abuse and mismanagement ~~(which would include, including~~ due diligence omissions, procrastination, dereliction of duty and toleration of incompetence).

Note 4 to entry: Internal ~~control supports~~controls support sound decision-making, considering risks to the achievement of objectives and reducing them to acceptable levels through cost-effective controls.

Note 5 to entry: This definition of internal control is derived from ~~Reference [11] the definition provided by the Committee of Sponsoring Organizations of the Treadway Commission – Integrated Framework (coso.org).~~], which also provides further useful information on this topic.

3.7

asset register

record of asset data considered worthy of separate identification and accountability

Note 1 to entry: Financial, or accounting asset registers are ~~those~~ databases or systems, ~~which are~~ used to describe and manage the organization's financial accounts and ~~management accounting (3.2)~~.

Note 2 to entry: Non-financial asset registers (technical or operational) are databases or computerized systems, in which relevant technical or operational data and information of an asset are kept.

3.8

capital expenditure

CapEx

expenditure on acquisitions of, or improvements to, assets

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Note 1 to entry: Based upon accounting standards and ~~organization~~organizational policy, CapEx usually relates to relatively large (material) expenditure, which has benefits that are expected to last for more than 12 months.

3.9 operational expenditure

OpEx
recurrent or specific non-capital expenditures required to provide a service or product

3.10 total expenditure

TotEx
sum of *capital expenditure* (3.8) and *operational expenditure* (3.9) over a period of time

3.11 alignment

deliberate arrangement, relationship, and mutual understanding of common concerns within a particular activity or among activities

3.12 valuation

process of determining the current value of an asset

Note 1 to entry: Valuation methods are numerous. Values are expressed in monetary terms.

Note 2 to entry: Valuations may be made to a single asset, a group of assets, or an entire enterprise.

3.13 book value

monetary expression at which an asset or group of assets are carried on a balance sheet

Note 1 to entry: Book value is also known as “carrying amount” or “carrying value”.

3.14

~~Carrying Value~~

~~Cost of an asset less accumulated depreciation~~

3.15

residual value

estimated financial amount that an organization would expect to obtain from disposal of an asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its *useful life* (3.15)

3.16

useful life

period over which an asset or class of assets are expected to be available for use by an organization

Note 1 to entry: Useful life is determined by factors such as the economic, technological, physical and functional performance of the assets or asset system, which demands an understanding between *financial functions* (3.4) and *non-financial functions* (3.5) depending on the context (e.g. market, cost recovery, maintenance planning, long-term planning).

Note 2 to entry: The applicable period is dependent on the nature of the asset or asset system and can be elapsed time, operating hours, number of cycles, number of units of production, etc.

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~~3.17~~16

depreciation

systematic allocation of the depreciable amount of an asset over its *useful life* (3.15)

Note 1 to entry: While "depreciation" can be used for both tangible and intangible assets, "amortization" is normally used for intangible assets only.

~~3.18~~17

fair value

price that would be received to sell an asset, or paid to transfer a *liability* (3.18), in an orderly transaction between market participants at the measurement date

~~3.19~~18

liability

present obligation of the organization arising from past events, the settlement of which is expected to result in an ~~out-flow~~outflow of resources from the organization

~~3.20~~19

six capitals

classification of the different kinds of value in an organization that can be transformed in its operations, namely financial, manufactured, intellectual, human, social and relationship, and natural

Note 1 to entry: ~~The SDGs were formulated in 2015 by the (UNGA).~~

~~Note 2 to entry:~~ Within the framework of "integrated reporting", ~~organizations are,~~ an organization is encouraged to provide a fuller picture ~~on~~of how it creates value through a combination of related quantitative and qualitative information.

~~Note 2 to entry: environmental, social, and corporate governance (ESG), also known as environmental, social, governance, is a framework designed to be embedded into an organization's strategy that considers the needs and ways in which to generate value for all organizational stakeholders (such as employees, customers, suppliers, and financiers). The Sustainable Development Goals (SDGs) are a set of seventeen interconnected objectives aimed at promoting sustainable development across economic, social, and environmental dimensions.~~

~~3.21~~20

function

purpose of each area or division of an organization that performs a specific activity, provides specialized information, or implements procedures

~~3.22~~21

domain

broad area of management responsibility in an organization, ~~e.g., assets~~

EXAMPLE Assets, human resources, customers, procurement, regulators.

Note 1 to entry: A domain can include one or more *functions* (3.20).

3.22

~~3.22~~

life cycle cost

LCC

~~Total~~total cost incurred during the life cycle

Note 1 to entry: See also *life cycle costing* (3.25-).