

Asset management — Guidance for **the** development of public policy to enable asset management

*Gestion d'actifs — Orientations pour ~~l'élaboration~~**le développement** de politiques publiques pour ~~permettre~~**favoriser** la gestion d'actifs*

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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 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).

ISO draws attention to the possibility that the implementation of this document may involve the 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.

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*.

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.

Introduction

0.1 Purpose

This document provides guidance to advance the adoption of asset management through public policy, specifically focused on the external context of all organizations that manage assets.

This guidance defines and describes an enabling environment for asset management, and outlines how it can be created, sustained, and improved through the use of public policy (see [Clause 4](#)).

It outlines how participants in that environment can act and interact with one another to influence the development and deployment of public policies to enable asset management in their countries and jurisdictions (see [Annexes A](#) and [B](#)).

This document provides a consistent approach (see [Annexes C](#) and [D](#)) to the development of public policy instruments (see [5.2.1](#)) that enable asset management and help achieve government objectives. These can include implementing a framework of recommended practices for effective public investment (see [Table 1](#)), achieving the United Nations Sustainable Development Goals ([UN SDGs](#)), and otherwise generating greater value to society.

0.2 Relationship with other standards

ISO 55000 provides context for the ~~documents produced by ISO/TC 251 concerning standards on~~ asset management ~~developed by ISO/TC 251~~ (e.g., ISO 55001, ISO 55002, ISO/TS 55010, [this document](#), ~~ISO 55011~~, ~~ISO 55012~~¹⁾ and ISO 55013²⁾).

ISO 55001 specifies requirements for an organizational “asset management system” and ISO 55002 gives guidance to an organization on the application of ISO 55001.

All concepts, terms and definitions in the above standards are written from the perspective of each individual organization. From this perspective, ~~ISO 55011~~[this document](#) relates to the external context within which an organization operates and which is created by conditions established by its external influencers. ~~fdis-55011~~

This document is written from a broader perspective and recognizes that many different individuals and organizations (“participants”) are involved in advancing the adoption of asset management in their respective countries and jurisdictions. It is intended to positively shape the external context of all organizations, rather than any single organization, through the development, or influencing the development, of supportive public policies.

0.3 Target audience

This document is intended for those individuals and organizations that want, and are able, to advance and support the adoption of asset management in their respective countries or jurisdictions through public policy. This document acknowledges government officials as the primary participants in the public policy process and recognizes other participants who can be involved in that process. Secondary users are intended to be individuals and organizations that want to advance and support the adoption of asset management and who are seeking guidance on how to do so.

NOTE 1 This guidance is relevant to all levels of government. The target audience includes government and other officials who recognize the benefits of asset management and would like, and are able, to advance asset management through their work. These individuals can include those who:

¹⁾ Under preparation. Stage at the time of publication: ISO/FDIS 55012:2024.

²⁾ Under preparation. Stage at the time of publication: ISO/FDIS 55013:2024.

- advise on public policy;
- implement public policy;
- issue implementing agency guidance;
- issue executive guidance;
- issue final regulations;
- submit proposed legislation or regulations;
- approve proposed legislation or regulations;
- pass legislation;
- are involved in the development of legislation, policy, reporting and control frameworks, including audits;
- influence policy-makers who can mandate asset management and/or support the adoption and allocation of resources;
- set strategic direction for public policy.

NOTE 2 The target audience can also include non-government individuals and organizations who recognize the benefits of asset management and would like, and are able, to influence the public policy formulation processes used by governments as well as the standards development processes used by non-government standards bodies for advancing asset management.

0.4 Document structure

The document structure is as follows:

- [Clause 4](#) describes the context in which relevant participants in the policy-making process can use public policy instruments to achieve asset management outcomes.
- [Clause 5](#) identifies the public policy instruments deployed by governments to enable asset management.
- [Clause 6](#) sets out recommended practices for effective public investment, how public policy instruments can be developed to enable asset management, and elements of good practice.
- [Annexes A](#) to [E](#) provide ~~detail~~details on government and non-government participants, potential ~~behaviors~~behaviours and actions they can take to enable asset management. They document case studies based on global best practices demonstrating the development and application of public policy instruments that enable asset management.

0.5 Benefits of this document

0.5.1 General

The benefits of asset management to individual organizations are described in ISO 55000.

Adoption of this document can facilitate the creation and improvement of an enabling environment, which in turn can improve the overall maturity of asset management within businesses, organizations, and nationally across countries. From a broader perspective, this can help achieve governmental objectives such as providing improved public services, infrastructure that supports the desired level for service, and safer public infrastructure at all levels of government, improving the country's competitiveness in trade with other

countries, assuring that taxpayers get a better return on their taxes, and being more responsive to societal well-being.

~~Benefits~~The benefits of adopting this document are outlined in 0.5.2 and 0.5.3.

The benefits of supporting the adoption of asset management for government and non-government participants are described in more detail in [Annexes A](#) and [B](#), respectively.

0.5.2 Benefits of a consistent approach

An effective enabling environment for asset management should result in the broad adoption of a consistent approach to asset management across the organizations that own, operate, or are otherwise responsible for assets within a country or jurisdiction. Adopting a consistent approach has its own benefits, which include:

- a) using consistent terminology to discuss asset management and common processes to create asset management systems;
- b) having agreed minimum datasets that:
 - 1) reduce duplication of effort by asset owners when providing minimum consistent elements for different jurisdictions;
 - 2) enable alignment, and closer collaboration, and ~~facilitates~~facilitate dialogue between jurisdictions, associations, and regulators;
- c) creating a community of practice with common objectives and common understandings to promote better performance outcomes both internal and external to organizations;
- d) alignment with validation and verification ~~programs~~programmes or schemes;
- e) alignment with competency improvement ~~programs~~programmes to demonstrate asset management proficiency among practitioners;
- f) providing stakeholders with an understanding of the benefits of a consistent and national approach to asset management within government and non-government organizations.

0.5.3 Beneficial outcomes of adopting this document

When an enabling environment for asset management is successfully realized, the expected outcomes or benefits include, but are not limited to, the following:

- a) better use of financial and non-financial resources, including:
 - 1) enabling greater resource efficiency (e.g. from energy, water, materials, land and labour), while reducing environmental impacts and sustaining service delivery;
 - 2) contributing to a better use of finances, ensuring quality services with an acceptable return on investment and a predictable life cycle cost;
 - 3) facilitating the identification of the human resources that will be required to operate the assets and their enablers, their competencies and the scheduling of their induction;
 - 4) providing an understanding/identification of the financial resources required to build capacity in asset management;
- b) consideration of the needs and expectations of stakeholders and citizens, by providing effective services;

- c) alignment of government objectives, at different levels of administration and in public ~~services~~service providers, contributing to the achievement of national or subnational objectives;
- d) improved decision-making over the long term, including those:
 - 1) that reduce the risks of inefficient use of funding from taxpayers and other funding providers;
 - 2) taken over the entire life cycle of the assets, allowing optimization of the total life cycle cost, through the cost-risk ~~-~~performance analysis;
 - 3) that consider the impacts of climate change and the need for climate~~-~~resilient assets;
- e) fostering research and innovation partnerships;
- f) maximization of value delivered to society by national and/or subnational assets;
- g) continued improvement of the services provided by the state or non-government service providers;
- ~~a)~~ improved transparency and accountability of government decisions and associated actions, as appropriate, which can ~~;~~
- h) build trust and credibility within communities of agencies tasked with managing critical infrastructure;
- i) ability to promote, interact with, and meet the requirements of other policy objectives, such as the ~~United Nations~~UN SDGs;
- j) effective risk management, which can lead to:
 - 1) reduced financial loss, improved safety, goodwill, and reputation, and minimizing environmental and social impacts;
 - 2) reduced liabilities for insurance premiums, fines, penalties, etc.;
 - 3) build resilience, better response and continuity of service;
- k) demonstrated social responsibility, which can:
 - 1) improve the organization's ability to reduce emissions, conserve resources and adapt to climate change;
 - 2) enable the organization to demonstrate social responsibility and ethical business practices, and where applicable, meet requirements under ~~ESG (Environmental, Social and Governance)~~environmental, social and governance (ESG) obligations;
 - 3) ~~Create~~create safer communities.

See [Annex E](#) for example case studies demonstrating how benefits can be achieved by using the approaches and practices identified in this document.

Asset management — Guidance for the development of public policy to enable asset management

1 Scope

This document ~~provides~~gives guidance ~~for~~on establishing, sustaining, and improving an enabling environment for asset management through public policy. ~~It~~

This document is applicable to all types and levels of government.

While ISO 55000, ISO 55001 and ISO 55002 make reference to organizational policy, this document refers to public policy. The focus of this document is on influencing the choice and development of public policy instruments that promote the adoption of asset management and use of asset management systems through ISO 55001 and ISO 55002.

NOTE ~~1~~ This document is intended to provide guidance on the development and application of policy instruments based on international best practices. It is not intended to provide guidance on general public policy-making or on political issues.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content ~~supports~~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, management — Vocabulary, overview and principles and vocabulary* standards.iteh.ai/catalog/standards/iso/64e8c947-a6e4-4d2d-8a1c-e177a50d4075/iso-fdis-55011

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 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

capacity -building

provision of relevant competencies, skills, knowledge, ~~experiences~~experience, and the associated funding, technology, and other resources that enable individuals or organizations to accomplish new tasks to achieve asset management objectives

[SOURCE: Federation of Canadian Municipalities, 2019^[24], p.19, modified] — “provision” replaced “acquisition” and “and the associated funding, technology and other resources” and “to achieve asset management objectives” added.

3.2

enabling environment for asset management

set of circumstances, objects, or conditions, external to organizations managing the assets, that positively affect their adoption of asset management and the achievement of *government* (3.4) objectives

Note 1 to entry: Enabling environments for asset management are unique to different countries or regions and can be unique to different geographic areas within a country. Examples of conditions can include physical conditions (e.g. natural resources) or non-physical conditions (e.g. legal, bureaucratic, fiscal, informational, political, and cultural).

Note 2 to entry: Commonly agreed ~~on~~ upon aspects of the enabling environment for asset management typically ~~feature across~~ fit into five categories—: economic, political, administrative, socio-cultural and resources. These factors provide the context for incentives and opportunities in the achievement of government objectives (including through asset management). For example, economic factors including the funding of physical infrastructure or administrative actions can include creating incentives for performance.

Note 3 to entry: *Public policies* (3.7) are developed and issued by different levels of government, each of which can have its own enabling environment for asset management consisting of varying conditions.

Note 4 to entry: This document focuses on the conditions in the external context created by the contribution, interests and demands of non-government participants, and the strategic directions of government participants which can be modified by public policies.

[SOURCE: Amjad et al. 2015^{[12]-1}; Ojomo 2016^{[40]-1}, modified]

3.3

governance

system of directing and controlling

[SOURCE: ISO/IEC TR 29110-5-3:2018, 3.12]

3.4

government

act of, or responsibility for, managing, governing and promoting the development of a jurisdiction, including responsibilities for the definition, design, development and institutionalization of *public policies* (3.7) expressed in the provision of products and services to its stakeholders

Note 1 to entry: Government can refer to the act of governing, as well as to the institutions (e.g., agencies or organizations) responsible for governing.

Note 2 to entry: The term “~~governments~~government” refers to all levels of government.

Note 3 to entry: “The term “government” is usually used to designate the highest instance of executive administration (the power of the state that, according to the constitution of a country, has the attribution of governing the people and administering public interests, faithfully complying with legal ordinances), generally recognized as the leadership of a state (any sovereign country, with its own politically organized structure, as well as designating the set of institutions that control and administer a nation) or a nation. States may have several levels or spheres of government, depending on the political organization of that country, such as local or municipal, regional or state governments, and national or federal.

3.5

local government

organization that is responsible for the *governance* (3.3) of a local area and for providing services, etc.

Note 1 to entry: Local government may be a level of *subnational government* (3.13) in non-federal countries and a sub-regional level of *government* (3.4) in federal countries.

Note 2 to entry: The terms “regions” and “local” can also refer more generically to subnational territories with specific socio-economic or territorial characteristics that ~~may or may can, but~~ not always, correspond to administrative or political units.

3.6 public investment

investment spending by the *government* (3.4) on physical infrastructure (e.g. roads, public buildings) and intangible infrastructure (e.g. human capital development, innovation, research and development) with a long-term productive life

Note 1 to entry: Statistics generally capture direct public investment as measured by gross fixed capital formation.

3.7 public policy

principled guide to a course of actions taken by the *government* (3.4) as a response to a perceived need, formulated by a specific political process, and adopted, implemented, and enforced by a specific public agency, ~~expecting that expects~~ results

Note 1 to entry: Public policy is different from the term “policy” ~~within used in ISO 55000~~. In ISO 55000, “top management” issues policies that provide intention and direction of the organization. In this document, government organizations issue public policies that typically provide a “principled guide” to be followed by various organizations within their jurisdictions. Examples of public policy in this context that enable asset management include those given in 6.2.

3.8 public policy instrument

intervention made by the *government* (3.4) which is intended to support the achievement of *public policy objectives* (3.10)

Note 1 to entry: See [Figure 1](#), [5.2.1](#) and [Annex C](#) for examples.

3.9 public policy-maker

representative of the *government* (3.4) ~~that who~~ is responsible for developing, administering, or influencing ~~the public policies (3.7 policy (3.7))~~

Note 1 to entry: A public policy-maker is not necessarily responsible for implementing ~~the public policy. — policies.~~

Note 2 to entry: Public policy-makers can include regulators, elected officials ~~{(e.g. politicians)}~~ and their delegates, and public administrators.

3.10 public policy objectives

result to be achieved by a *public policy* (3.7)

3.11 public policy process

set of interrelated or interacting activities through which a *public policy* (3.7) is formed, implemented and evaluated

3.12 service delivery

act of providing a service to customers

3.13

subnational government

level of *government* (3.4) below national (regional and local) governments

Note 1 to entry: “Regional government” or “region” refers to the level of government immediately below the national level in federal countries (i.e. federated states) or in unitary countries (with a specific regional level).

4 ~~The enabling~~**Enabling environment for asset management from a public policy perspective**

4.1 General

The successful implementation of asset management in any organization is influenced by the organization’s internal and external contexts. These contexts are described in ISO 55000, ISO 55001 and ISO 55002, and include a variety of conditions such as economic, political, administrative and socio-cultural conditions, and resources. This document focuses on organizations’ external contexts and a subset of conditions that contribute, through public policy, to the successful implementation of asset management and in turn, government objectives (e.g. UN SDGs). This relationship is illustrated in [Figure 1](#).

Success in creating and maintaining the enabling environment for asset management in political jurisdictions depends on the creation of appropriate public policies with a level of consensus that allows them to be sustained over time. This document provides guidance on the choice, development, and deployment of public policy instruments (see [Clauses 5](#) and [6](#) for details). It outlines considerations and actions that can be taken by government and non-government participants to achieve government objectives and ultimately deliver greater value to society.

The guidance in this document recognizes governments as the primary actors in the formation of public policy. However, non-government actors with an interest and expertise in asset management also have a role to play in the policy-making process. Those involved in the development, implementation, or improvement of public policy to create or improve the enabling environment for asset management are referred to as “participants” in this document.

The enabling environment for asset management is formed from the interactions of government and non-government participants, outlined conditions, and the legal, regulatory and policy frameworks (including public policy instruments). The enabling environment for asset management is dynamic and changes constantly in response to the actions of its participants.

To create an enabling environment for asset management through public policy, its participants should act and interact with one another in ways that positively support and advance the adoption of asset management within their political jurisdictions. The participants in the enabling environment for asset management are grouped by type and described in [4.2](#) according to the ways in which they can enable the adoption of asset management through public policies. [Annexes A](#) and [B](#) provide examples of participant actions and behaviours in an enabling environment for asset management.

4.2 Participants in the enabling environment for asset management

4.2.1 Government participants

Government organizations and officials, at all levels of government and regulatory agencies, are the most significant participants in developing and improving public policies. They generally have the authority to develop and improve public policy, for example, through [the](#) creation of formal rules, delegations, mandates, inducements, and capacity -building that directly affect the outcomes of the enabling environment for asset

management. These participants, however, do not necessarily have the asset management expertise that exists in asset owning or managing organizations, or in organizations that promote asset management.

[Annex A](#) describes different government participants in the enabling environment for asset management and ways they can support asset management through public policy.

4.2.2 Non-government participants

Non-government participants in the enabling environment can promote asset management through public policy by engaging with government agencies and officials in the development of their public policy instruments. Non-government participants can include asset owners, asset management advocacy groups, industry organizations and individuals that support asset owners or operators, professional associations, academia, the media, and other potential institutions and organizations (including, but not limited to, lenders, investors, and insurers).

These non-governmental participants can have knowledge, experience and/or expertise in asset management, but generally do not have the authority to issue public policy instruments to create, sustain or enhance that enabling environment. For example, non-government standards bodies issue voluntary standards that can also inform the development of public policy that advances asset management. Although standards do not have the force of law, in many countries and business sectors they can positively influence behaviour. Other non-government participants can contribute to the advancement of asset management through other actions that can involve, for example, knowledge-sharing, promoting the benefits of asset management, capacity -building and professional development opportunities.

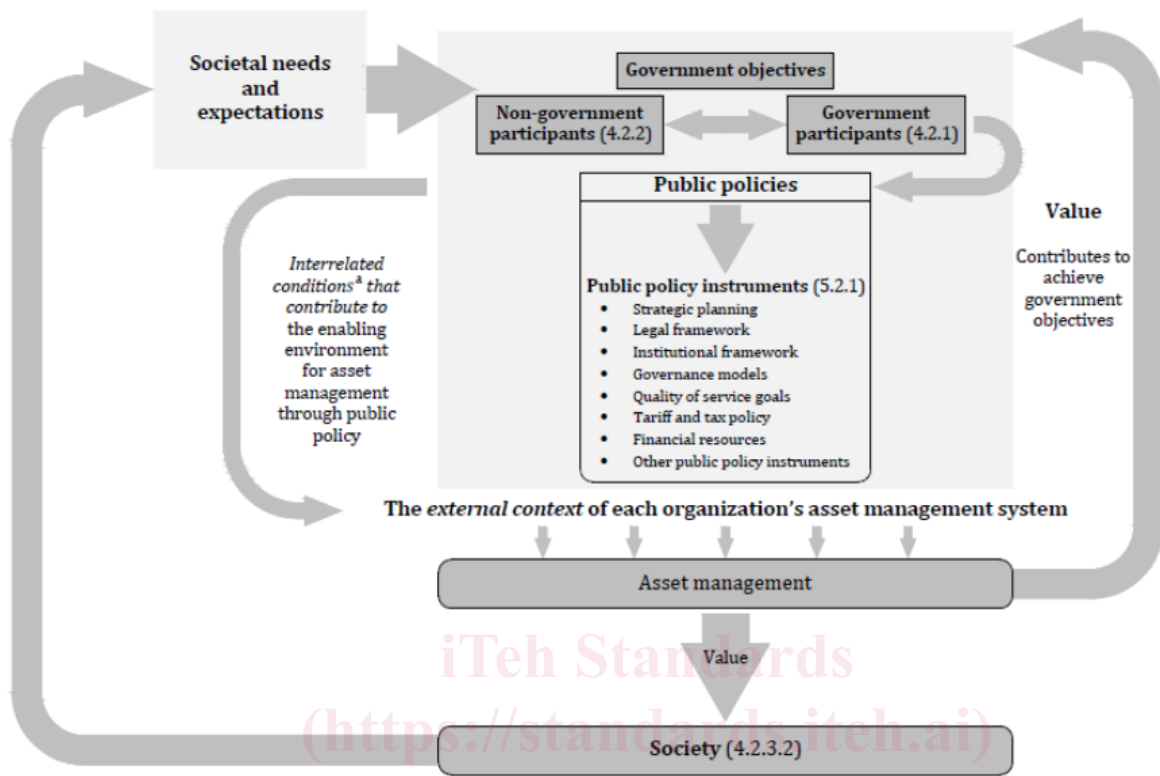
[Annex B](#) describes these non-government participants and ways they can support asset management in the enabling environment.

4.2.3 Other participants

4.2.3.1 Asset owners, operators, and custodians

Organizations that own, operate, or are otherwise responsible for assets are the target audiences of other International Standards on asset management (e.g., ISO 55001, ISO 55002, ISO/TS 55010) and the ones to which those asset management requirements are addressed. Asset owners and operators are found among both the government and non-government participants in the enabling environment for asset management. They create organizational policies and support tools that are unique to their own organizational contexts, including, but not limited to:

- organization-specific strategic plans, which include the strategic objectives of the organization;
- organization-specific asset management policies, as required by ISO 55001;
- organization-specific asset management training ~~programs~~programmes.



^aExample categories of conditions include: economic, political, administrative, socio-cultural, and resources.

