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Principles for effective and efficient corporate governance of water utilities

Principes pour une gouvernance efficace et efficiente des services publics de l'eau

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 224, *Drinking water, wastewater and stormwater systems and services*.

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

Water is a global issue. Actions and subsequent decisions regarding water utilities are local issues. The United Nations has set 17 Sustainable Development Goals (SDGs), many of which are water related. Specifically, SDG 6 addresses water and sanitation and is intended to be applied at the local service level. People are aware of climate change and its impact on water availability but also the changes in weather, such as rain intensity or frequency, which can increase the risk of flooding events. The Paris Agreement takes these risks into consideration at the international level, but the question still remains on how they are considered at local level.

The water utilities sector is changing more rapidly than ever before and new solutions are being created and conceived. It is of vital importance that appropriate corporate governance systems exist and are implemented to support these changes and ensure that water services are provided which take into account user and stakeholder needs and expectations in a sustainable way.

The information provided in this document improves decision-making processes and outlines roles and responsibilities of responsible bodies and other relevant stakeholders in the governance of water utilities.

The roles of relevant authorities, responsible bodies and water utilities can differ between and within countries and result in different minimum requirements for the operations. Nevertheless, it is recommended that such organizations recognize the importance of effective and efficient corporate governance to allow for the water utility to operate properly.

The Organisation for Economic Co-operation and Development (OECD) *Principles on Water Governance*[10] are considered as a reference in this document. The OECD principles deal with overall "governance", in contrast to this document, which deals with corporate governance.

This document describes three levels of corporate governance mechanisms, as follows:

a) The first level of corporate governance relates to authorizations that are necessary for a water utility to operate. Typically, authorizations required for the water utility to be able to operate include:

   1) drinking water services, e.g. abstraction of raw water, water protection areas, building and operating facilities;

   2) wastewater services, e.g. discharge of wastewater treatment plants, discharge of non-domestic wastewater into the sewers, sludge disposal;

   3) assets, e.g. building and operating facilities;

   4) stormwater management services, i.e. collection and storage or treatment of stormwater prior to release into the environment.

   Authorizations can be taken at the national, regional or local level.

b) The second level of corporate governance considers the owner's mission, including setting the objectives of the service to be provided, the level of service, the setting or negotiation of water prices, and the investment and asset management strategies.

c) The third level of corporate governance relates to the management of the water utility and the implementation of decisions made by the owner within the relevant authorizations.

Principles for effective and efficient corporate governance of water utilities

1 Scope

This document establishes the basis for a framework for water utilities to operate efficiently and effectively considering stakeholder needs and expectations.

This document is applicable to all water utilities, regardless of ownership and management model (public or private), size, service provided or location.

This document proposes principles for effective and efficient corporate governance of water utilities with a focus on the roles and responsibilities of the responsible bodies and operators and on the decision-making process involving the relevant stakeholders. It also includes key types of decisions to be made.

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 24513, *Service activities relating to drinking water supply, wastewater and stormwater systems — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 24513 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
corporate governance
system by which utilities are directed and controlled

Note 1 to entry: Corporate governance is organizational governance applied to corporations.

Note 2 to entry: From Cadbury 1992[5] and OECD 1999[8].

[SOURCE: ISO/IEC 38500:2015, 2.4, modified — “utilities” replaced “corporations”. Note 3 to entry removed.]

3.2
governance
system of directing and controlling *water utilities* (3.3), corporate governance systems, *responsible bodies* (3.4), relevant stakeholders, relevant authorities and responsible authorities

Note 1 to entry: This includes all of the processes of governing – whether undertaken by the government of a state, by a market or by a network – over a social system (e.g. family, tribe, formal or informal organization, a territory or across territories) and whether through the laws, norms, power or language of an organized society.

3.3
water utility
whole set of organization, processes, activities, means and resources necessary for abstracting, treating, distributing or supplying drinking water, for collecting, conveying, treating, disposing of or reusing wastewater or for the control, collection, storage, transport and use or disposal of stormwater, and for providing the associated services

Note 1 to entry: Some key features for a water utility are:

— its mission, to provide drinking water services or wastewater services or the control, collection, storage, transport and use of stormwater services, or a combination thereof;

— its physical area of responsibility and the population within this area;

— its *responsible body* (3.4);

— the general organization with the function of *operator* (3.6) being carried out by the responsible body, or by legally distinct operators;

— the type of physical systems used to provide the services, with various degrees of centralization.

Note 2 to entry: Drinking water utility addresses a utility dealing only with drinking water; wastewater utility addresses a utility dealing only with wastewater; stormwater utility addresses a utility dealing only with stormwater.

Note 3 to entry: When it is not necessary or it is difficult to make a distinction between responsible body and operator, the term "water utility" covers both.

Note 4 to entry: In common English, "water service" can be used as a synonym for "water utility", but this document does not recommend using the term in this way.

[SOURCE: ISO 24513:2019, 3.3.1]

3.4
responsible body

body that has the overall legal responsibility for providing drinking water, wastewater or stormwater services for a given geographic area

EXAMPLE A local or municipal government (e.g. for a village, town or city), a regional government or a national or federal government through a specified agency, or private company.

Note 1 to entry: Responsible body is a category of stakeholder.

Note 2 to entry: The responsible body can be legally distinct, or not, from the *operator(s)* (3.6). The responsible body can be public or private.

Note 3 to entry: The responsible body acts within a framework of law and *governance* (3.2) established by the relevant authorities. It generally establishes the strategy, the specific *policies* (3.5) adapted to the characteristics of its area of responsibility and the general organization of the relevant *water utility* (3.3).

Note 4 to entry: The responsible body can operate the water utility directly with its own means through an internal operator (direct or internal management or "in house") or entrust one or several operators for the operations (outsourced or contracted management).

[SOURCE: ISO 24513:2019, 3.1.8.3]

3.5
policy
intentions and direction of an organization as formally expressed by its top management

3.6
operator
person or organization performing day-to-day processes and activities necessary for the provision of the service

EXAMPLE 1 Where *responsible body* (3.4) and operator are not legally distinct: a technical department in a municipality, a specific division of a regional authority.

EXAMPLE 2 Of legally distinct entities: a public organization, a private corporate company, a small contractor, an non-governmental organization (NGO), a cooperative.

Note 1 to entry: There can be one or several operators for a given *water utility* (3.3), for example distinct operators for installations' operation, billing and recovering service. Their missions are determined by the responsible body. An operator can subcontract some of its operations to other contractors, if allowed by the responsible body.

Note 2 to entry: The operator(s) can be legally distinct, or not, from the responsible body. They can be public or private.

Note 3 to entry: In the context of this document, an "operator" is not a person employed within an organization to operate a piece of equipment or process.

[SOURCE: ISO 24513:2019, 3.1.8.2]

3.7
owner
person, group of persons or organization that owns the infrastructure or asset

Note 1 to entry: The owner can be the *responsible body* (3.4) or other stakeholders.

4 Overview

Water is the cornerstone of sustainable development, being a driver for economic growth, social welfare and survival of the environment. However, we are currently facing a crisis of water security in many regions of the world, understanding water security as the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies.[6]

The water sector is a complex one due to its intrinsic characteristics, such as being fundamental for different sectors and development or having different stakeholders involved in its management.

Water utilities are the key actors for implementing the national water policies at the local level, thus allowing the achievement of the human right to safe and affordable water and sanitation.

Current levels of water security are jeopardized by different pressures, such as scarcity, pollution, unbalanced population growth, extreme weather events and climate change. Water utilities are facing several challenges, including:

— ageing water infrastructure and a lack of investment in water assets to allow their maintenance and renewal;

— water-related risks, such as extreme weather events (e.g. floods and droughts), water pollution and appropriate levels of treatment or scarce availability of water resources;

— institutional factors, such as legislation at different levels, territorial reforms, fragmented institutions, weak capacity at the local level, dispersion of competences, lack of policy coherence among sectors related to water, weak transparency and accountability;

— environmental and socio-economic factors;

— uncontrollable disruptions, such as terrorist activities or cyberattacks.

To be prepared for the future and enhance long term resilience, water utilities need to adapt to the new global challenges the water sector is facing, combining technical and non-technical secure and proven processes, methods and tools, and implementing a more inclusive and sustainable management, engaging all relevant stakeholders.

To achieve these goals, corporate governance of water utilities should assess the range of political, institutional and administrative rules, practices and processes (formal and informal) through which decisions are taken and implemented, consulting stakeholders, as well as holding decision-makers accountable for water management, in order to achieve effective, efficient and resilient water utilities (adapted from the OECD definition of water governance[10]).

In order to have effective and efficient corporate governance, water utilities should develop and implement a clear framework that covers all domains of the water utilities' responsibilities, including but not limited to:

a) level of service, which is defined according to customer expectations and is the expression of political decisions;

b) water resources management strategy, providing decisions which should be taken to:

   1) secure and conserve existing water resources identified by the relevant authority;

   2) anticipate future needs from population change;

   3) support development within the utility's service area;

   4) address the effects of climate change, anticipation, preparation and management of crises or other events (drought, flooding, population migration);

c) asset management strategy covering the entire asset life cycle, including associated requirements such as human resources and finance;

d) risk management, ensuring water-related risks are managed in a timely manner and at an acceptable cost to ensure protection of the community, public health, the environment and the financial viability of the organization, so that the next generation does not inherit liabilities and costs.

5 Corporate governance for water utilities

Water is a key factor for sustainable growth and water utilities are key players for the fulfilment of the human right to water and sanitation.[13]

Effective and efficient corporate governance of water utilities should be based on overarching governance principles which should guide the key elements of the water utility's governance framework, such as the ones included in Table 1 (based on the OECD principles on water governance[10]).

Corporate governance should help to achieve well-managed water utilities, promoting long-term objectives of environmental sustainability and enhancing social welfare. A multi-level and multi-stakeholder approach, integrating the heterogeneous concerns of stakeholders, can improve the management of water utilities.

Table 1 — Corporate governance principles for water utilities

Corporate governance principle	Explanation
Clear definition of roles and responsibilities across all levels of government and water-related institutions involved in water utilities.	Water utilities have different levels of government and water-related institutions involved, and it becomes necessary to clearly define and distinguish their roles and responsibilities regarding policymaking, policy implementation, operational management and regulation, in order to identify and address gaps, overlaps and conflicts of interest.

Table 1 *(continued)*

Corporate governance principle	Explanation
Foster co-ordination between the different levels of government and water utilities.	In order to avoid gaps, overlaps and conflicts of interest, effective coordination at and across these actors involved in water utilities should be in place.
Encourage policy coherence across sectors	Water is impacted and has an impact on other sectors such as environment, health, energy, agriculture, industry, spatial planning and land use. Therefore, cross-sectoral coordination becomes fundamental between policies for water and these other sectors.
Enhance capability of water-related professionals and responsible authorities involved in water utilities.	In order to achieve effective and efficient water utilities, it is important to adapt the level of capacity of water-related professionals and responsible authorities to meet the water challenges and duties required. Appropriate capability reviews can also further promote motivation of water-related professionals and responsible authorities to contribute to more effective and efficient performance.
Promote information-sharing and education and awareness campaigns across all relevant stakeholders involved in water utilities.	Producing and sharing consistent water-related information can be used to guide, assess and improve water management, as sharing information is a necessary step for transparency. In addition, information, education and awareness campaigns focused on the external stakeholders of water utilities, such as users or other sectors, should be a tool to engage these actors in how to use water and contribute to the improvement of water utilities and their services.
Encourage technological and non-technological innovation in water utilities.	Technological innovation allows water utilities to be more effective and efficient; but to improve the level of service to users, water utilities should promote the adoption and implementation of innovative practices across responsible authorities, levels of government and relevant stakeholders, related, for example, to finance and economics, business models, communication strategies or stakeholder engagement.
Promote multi-level and multi-stakeholder engagement.	A multi-level and multi-stakeholder approach seeking engagement and responsiveness should facilitate managing water utilities effectively and efficiently, considering all stakeholders in the decision-making process and aiming for consensus (see Annex A).
Encourage equity and inclusiveness across water users.	Water utilities should encourage frameworks and practices that allow for managing trade-offs across different uses, users and areas, promoting equity and inclusiveness.
Foster integrity and transparency practices for greater accountability and trust in decision-making and water utilities.	Water utilities should account for their activities and tasks, accept their responsibilities regarding these activities and tasks and disclose results in a transparent way, in order to enhance trust and engagement of stakeholders in their corporate governance. In this sense, transparency, understood as an open, comprehensive and understandable presentation of information addressed to a targeted audience, and integrity, related to moral and ethical principles and values, should be mainstreamed in the water utility.
Promote regular monitoring and evaluation of the corporate governance scheme.	Continuous monitoring and evaluation should allow for identifying the need for improvement of the corporate governance scheme and adjusting it when needed. Evaluating corporate governance can strengthen the accountability of decision-makers and contribute to identifying challenges and anticipating and managing some risks, as well as helping to map the views of different stakeholders. It can contribute to overall good governance as it provides information that can improve some governance gaps.
Encourage sustainability and resilience of water utilities.	Sustainability of water utilities, in terms of operational and financial aspects, should ensure an appropriate level of services for current and future generations. In addition, water utilities should become resilient in order to deal with possible risks and challenges, such as natural disasters or terrorist attacks (see ISO 24518 and ISO/TS 24520).

6 Governance framework

6.1 General

The governance framework is directed to water utilities, including all relevant stakeholders, and should consider both "internal governance" (interrelationships) and the links with external stakeholders.

Achieving effective and efficient corporate governance for water utilities requires defining a framework that considers the following dimensions (based on Reference [9]):

a) Define the vision, mission and strategic objectives of the corporate governance of the water utility.

b) Identify corporate governance gaps.

c) Establish the decision-making process.

d) Map and define the allocation of roles and responsibilities.

e) Build a stakeholder map and promote stakeholder engagement.

f) Encourage the development of capacity building and sharing of information.

g) Adopt monitoring and evaluation.

6.2 Define the vision, mission and strategic objectives of corporate

Implementing effective and efficient corporate governance of water utilities requires governance of the water utility defining the ultimate line of decision-making, the objectives of corporate governance and the expected use of inputs, i.e. defining the strategic planning process, which should be adaptive enough to adapt to changes and new challenges.

Strategic planning should define the ultimate reasons driving the process and include an external evaluation, e.g. political, economic, social, technological, environmental and legal trends, as well as an internal one.

The mission, the values, the vision and the utility's wide strategies should be drafted, and long-term strategic objectives defined and finally translated into goals and measures. The process should be monitored and evaluated.

6.3 Identify governance gaps

In order to achieve sound water management, water utilities should identify and address several corporate governance "gaps" (based on Reference [9]):

— Policy gap: including institutional fragmentation of water policy across multiple actors, no clear allocation of roles and responsibilities, no coordination mechanisms and lack of effective policy coherence across sectors.

— Administrative gap: related to the mismatch across administrative and hydrological boundaries to manage water resources and supply water services at the relevant scale.

— Funding gap: regarding unstable or insufficient resource allocation and inconsistent financial management.

— Capacity gap: including gaps in knowledge, human capital, technology and other capabilities to design and achieve sustainable, efficient and effective water utilities.

— Information gap: regarding insufficient or incomplete water information to support decision-making.