OECD Water Governance Indicator Framework

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About

The paper is based on the OECD report *Implementing the OECD Principles on Water Governance: Indicator Framework and Evolving Practices*. It provides a synthesised version of the OECD Water Governance Indicator Framework. It is a tool supporting the implementation of the OECD Principles on Water Governance, adopted by the OECD Regional Development Committee in 2015.

The Water Governance Indicator Framework is conceived as a voluntary self-assessment tool to assess the state of play of water governance policy frameworks (what), institutions (who) and instruments (how), and their needed improvements over time. It is intended to be applicable across governance scales (local, basin, national, etc.) and water functions (water resources management, water services provisioning and water disaster risk reduction). It is grounded on a sound bottom-up and multi-stakeholder approach rather than a reporting, monitoring or benchmarking perspective, since governance responses to common water challenges are highly contextual and place-based. Its primary objective is to stimulate a transparent, neutral, open, inclusive and forward-looking dialogue across stakeholders on what works, what does not, what should be improved and who can do what.

Governments and other stakeholders are invited to make the most of the proposed indicator framework for collectively identifying policies and strategies that can better address water challenges. Although much still remains to be done to propose a comprehensive framework for assessing water governance, the tools herein provided are a first concrete achievement that can significantly contribute to the development of better water policies for better lives.

Background information

This project was developed by the OECD Centre for Entrepreneurship, SMEs, Regions and Cities as part of the 2017-18 programme of work of the Regional Development Policy Committee. The indicator framework was produced through a bottom-up and multi stakeholder process within the OECD Water Governance Initiative over 2015-17.

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OECD WATER GOVERNANCE INDICATOR FRAMEWORK

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What is "water governance"?

The OECD defines water governance as the "range of political, institutional and administrative rules, practices and processes (formal and informal) through which decisions are taken and implemented, stakeholders can articulate their interests and have their concerns considered, and decision makers are held accountable for water management" (OECD, 2015). In other words, governance addresses the role of institutions and relationships between organisations and social groups involved in water decision making, both horizontally across sectors and between urban and rural areas, and vertically from local to international levels. Governance is a means to an end, and the type of governance should match the level of risk or the magnitude of the problem to fit policies to places. Governance needs to be adaptive, context-dependent and place-based in order to take into account historical and territorial specificities and challenges. Governance is much broader than government as it also seeks to include the private sector, civil society and a wide range of stakeholders with a stake in water use and management (OECD, 2001). Policy responses to water challenges will only be viable if they are coherent and integrated; if stakeholders are properly engaged; if well-designed regulatory frameworks are in place; if there is adequate and accessible information; and if there is sufficient capacity, integrity and transparency.

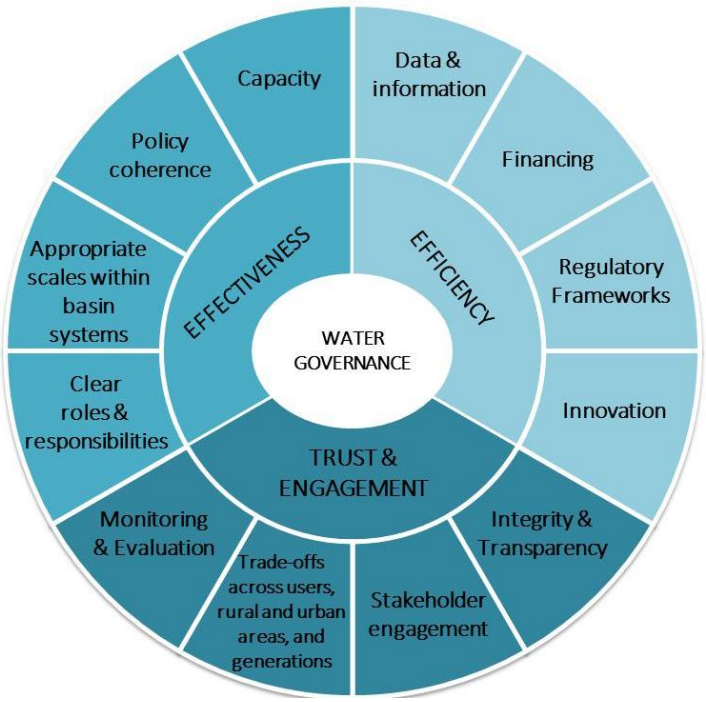
Source: OECD (2015), OECD Principles on Water Governance, www.oecd.org/governance/oecd-principles-on-water-governance.htm; OECD (2011), Water Governance in OECD Countries: A Multi-level Approach, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264119284-en.

Why an OECD Water Governance Indicator Framework?

The ***OECD Water Governance Indicator Framework*** aims to support the implementation of the ***OECD Principles on Water Governance*** (OECD, 2015). The Principles provide 12 must-haves for efficient, effective and inclusive water governance. Adopted in May 2015 by the OECD Regional Development Policy Committee and backed by ministers at the OECD Council Meeting at Ministerial Level in June 2015, as a framework to guide better water policies and reforms.

The Principles apply to the overarching water policy cycle and should be implemented in a systemic and inclusive manner. As such, they do not make distinctions across: ***water management functions*** (e.g. drinking water supply, sanitation, flood protection, water quality, water quantity, rainwater and storm-water); ***water uses*** (e.g. domestic, industry, agriculture, energy and environment); and ***ownership*** of water management, resources and assets (e.g. public, private, mixed).

OECD Principles on Water Governance



Source: OECD (2015), *OECD Principles on Water Governance*, www.oecd.org/governance/oecd-principles-on-water-governance.htm.

The Principles are clustered around three main dimensions:

1. **Effectiveness** of water governance relates to the contribution of governance to defining clear sustainable water policy goals and targets at different levels of government, to implement those policy goals, and to meet expected objectives or targets.
2. **Efficiency** of water governance relates to the contribution of governance to maximising the benefits of sustainable water management and welfare at the least cost to society.
3. **Trust and engagement** in water governance relate to the contribution of governance to building public confidence and ensuring inclusiveness of stakeholders through democratic legitimacy and fairness for society at large.

What are the objectives?

The OECD Water Governance Indicator Framework is conceived as a self-assessment tool to assess the state of play of water governance policy frameworks (what), institutions (who) and instruments (how), and their needed improvements over time. The primary objective is to stimulate a **transparent, neutral, open, inclusive and forward-looking dialogue** across stakeholders on what works, what does not, what should be improved and who can do what. **Indicators are a means to an end.** As such they can be a vehicle to:

Foster dialogue at local, basin, regional and national levels. They can promote discussion and build consensus across a range of public authorities and stakeholders on the strengths and weaknesses of water governance systems, as well as the ways forward to better manage too much, too little and too polluted water now and in the future.

Promote inclusiveness across stakeholders and identify the role that each can play to contribute to positive spill-overs on water governance. This can be achieved through in-depth consultations across public and private institutions and civil society on the who can do what to improve water governance as a shared responsibility. As such, getting the evaluation process right is key. It is important to ensure a transparent, non-discriminatory, open and forward-looking process. It is also important to make sure that stakeholders are motivated and that their inputs are taken into consideration.

Stimulate transparency in the performance of water-related institutions. Indicators can reduce information gaps and lead to greater accountability of governments and stakeholders in how they deliver intended outcomes, while shedding light on whether institutional and regulatory arrangements are fit-for-purpose and fit-for-the future.

Increase awareness on specific issues that would otherwise not receive the same attention. They can also enhance data production and collection, as well as promote technical capacity development.

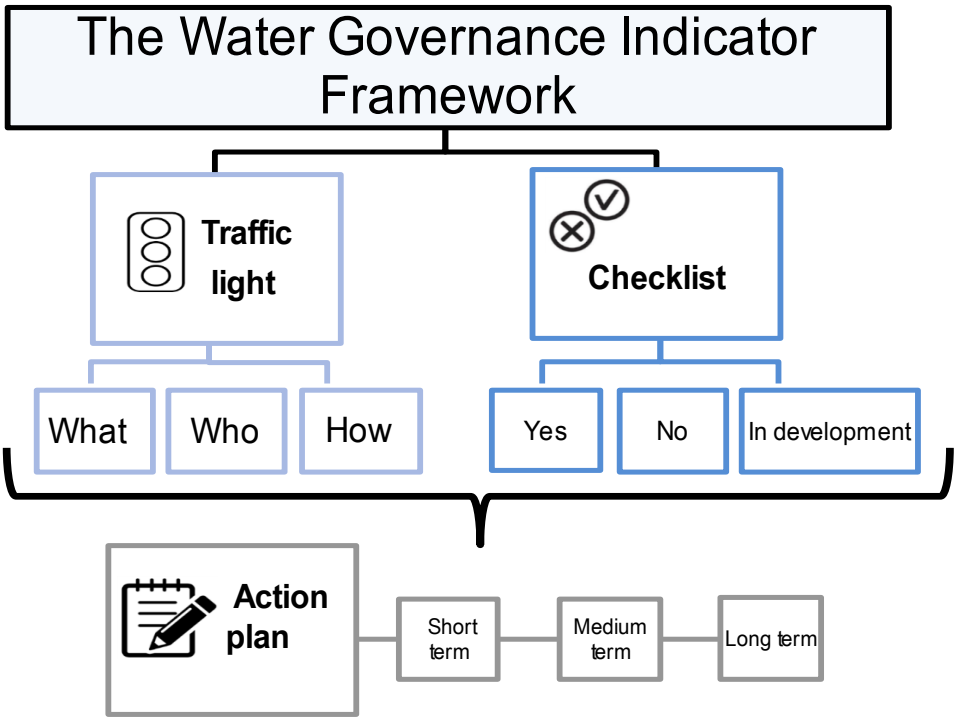
Trigger actions to bridge water governance gaps. Indicators can inform policy makers and help set policy priorities. Within the context of the global agenda, they can support countries in achieving the Sustainable Development Goal (SDG) 6 on water, as guidance for governments to strengthen institutions' implementation capacity. Implementing SDG 6 requires overcoming a number of gaps that can hinder the achievement of universal access to drinking water and sanitation, reaching a good status of water quality or reducing water stress. For instance, many countries are lagging behind in terms of data production and sharing. Appropriate technical and human capacity is an important challenge for many countries; yet, inadequate funding is a barrier to building and maintaining networks as well as replacing and modernising existing water infrastructure.

This tool is the result of an extensive bottom-up and multi-stakeholder process within the OECD Water Governance Initiative, a network of 130 members from the public and private sectors and civil society. It is conceived as voluntary methodology that can be used and contextualised by interested cities, regions, basins and countries to improve their water sector policies and strategies. It was pilot tested in Austria, Cabo Verde, Peru, United Kingdom, Netherlands, Spain, Morocco, Malaysia, Colombia and Democratic Republic of Congo at national, regional, province, basin and city level between May and November 2017.

What does the framework consist of?

The Water Governance Indicator Framework is composed of a **Traffic light system** of 36 water governance indicators (input and process) and a **Checklist** containing 100+questions on water governance. It is complemented by an **Action Plan** for discussion on future improvements of the water governance system in the short, medium and long run.

It is intended to be applicable across governance scales (local, basin, national, etc.) and water functions (water resources management, water services provisioning, including hydropower and water disaster risk reduction). It is grounded on a sound multi-stakeholder approach rather than a reporting, monitoring or benchmarking perspective since governance responses to common water challenges are highly contextual and place-based.



1. The Traffic light

The traffic light system aims to appraise:

- ✓ The **existence and level of implementation** of the framework conditions of the water governance system in place.
- ✓ The **expected changes** over time in the water governance system.
- ✓ The level **consensus** on the assessment made amongst stakeholders.

What is the current situation of water governance performance?

Data are collected by means of a five-scale assessment (plus a "not applicable "option). Respondents are required to choose the colour corresponding to the level of implementation at the moment in which the

assessment is carried out. Results are visualised through the use of a wheel containing the colour corresponding to the evaluation.

Traffic light baseline					
In place, functioning	In place, partly implemented	In place, not implemented	Framework under development	Not in place	Not applicable

- In place, functioning: The governance dimension under investigation is complete and relevant in all aspects, no major concerns are noted.
- In place, partly implemented: The governance dimension under investigation is in place, but the level of implementation is not complete. It might be the case that parts are explicitly lacking to make the framework complete. There might be several reasons for this, including insufficient funding, regulatory burdens, bureaucratic lengthy processes, etc.
- In place, not implemented: The governance dimension under investigation is in place, but it is not implemented. For example, it can be inactive or activities are of very low relevance to play a real role in possible progress.
- Framework under development: The governance dimension under investigation does not exist yet but the framework is under development.
- Not in place: The governance dimension under investigation does not exist and there are no plans or actions taken for developing it.
- Not applicable: The governance dimension under investigation is not applicable to the context where the self-assessment takes place.

Are changes expected in three years' time on water governance performance?

Respondents are required to identify the expected trend over the coming three years in terms of improvements, decreases or stable situations, compared to the assessment related to baseline scenario.

Expected progress (three years after the baseline)		
Improvement: ↗	Stable: =	Decrease: ↘

Do all stakeholders agree on the assessment made?

Finally, in order to reflect the diversity of opinions during the discussion, respondents are requested to signal the level of consensus among stakeholders. Visually, the level of consensus is represented by an increasing number of drops, from one to three, respectively reflecting weak, acceptable and strong consensus. This aims to take into account the variety of views shared during the multi-stakeholder workshops and stimulate a discussion.

Results of stakeholder consultation		
Strong consensus:	Acceptable consensus:	Weak consensus:

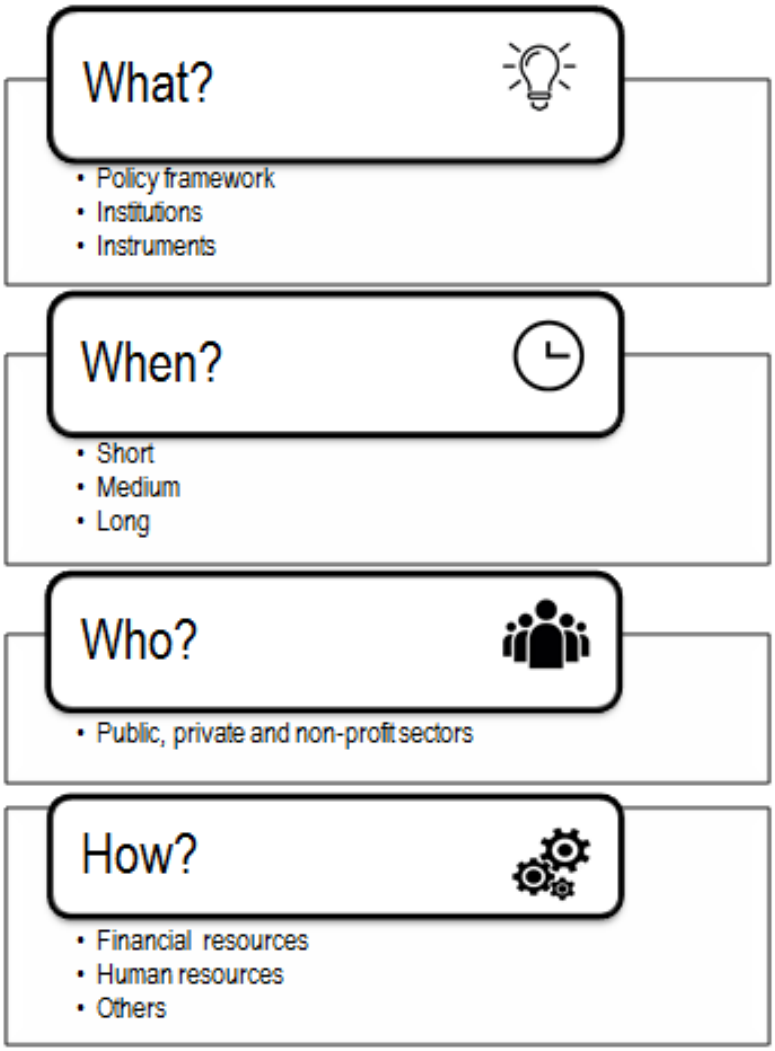
2. Accompanying checklist

In addition to the water governance indicators, the self-assessment includes a checklist of questions concerning the implementation of the 12 Principles. It was recognised that a debate on the implementation of each Principle cannot be limited to three indicators and requires a reflection on a

number of additional governance conditions, which feature in the checklist. Respondents can answer the questions through: yes, no, in development or not applicable. In addition, they should be able to provide sources/references in order to cross-check the assessment.

3. The Action Plan

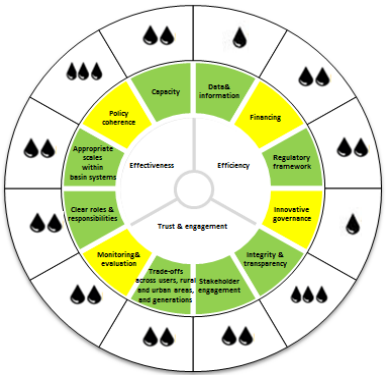
The Action Plan is the final step in the self-assessment process. It should include actions already in place or planned over the short, medium and long run for each of the Principles and corresponding indicators. The objective is for stakeholders to determine what collective actions can be taken to improve those dimensions of the water governance system that did not reach a satisfactory level of implementation.



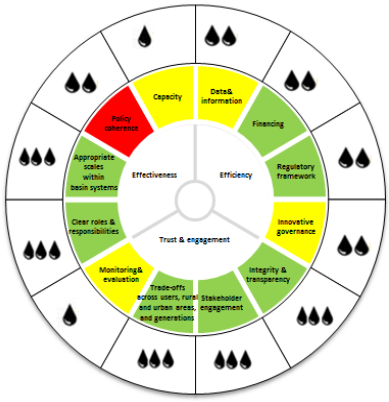
Visualisation of the traffic light system

What is the current situation?

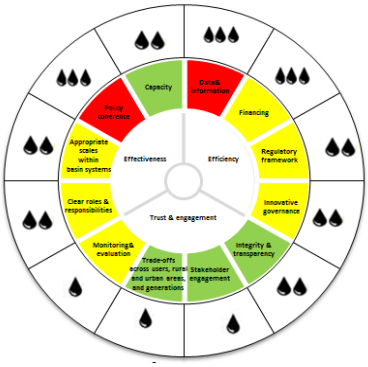
WHAT (Policy framework)



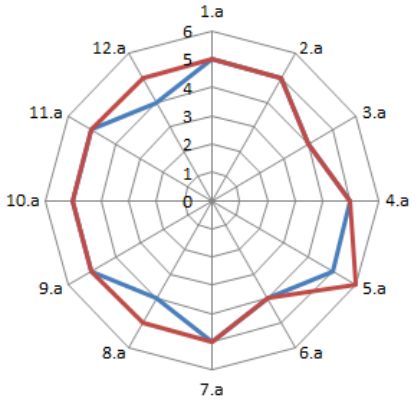
WHO (Institutions)

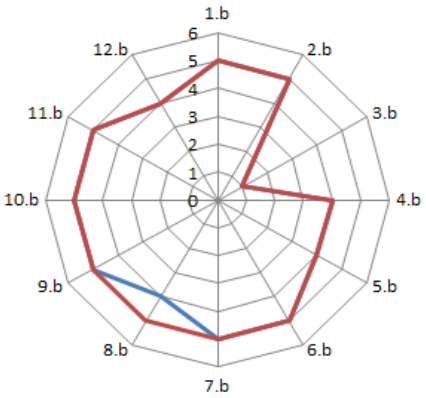


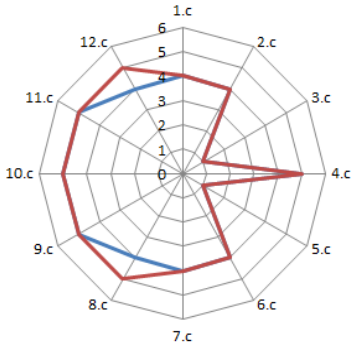
How (Instruments)



Are changes expected in 3 years' time?







Legend:

In place, functioning | In place, partly implemented | In place, not implemented
Framework under development | Not in place | Not applicable

Strong consensus | Medium consensus | Weak consensus

0) Not applicable; 1) Not in place; 2) Framework under development; 3) In place, not implemented; 4) In place, partly implemented; 5) In place, functioning; 6) Expected to function better compared to the baseline assessment

Current status
Expected progress (3 years)

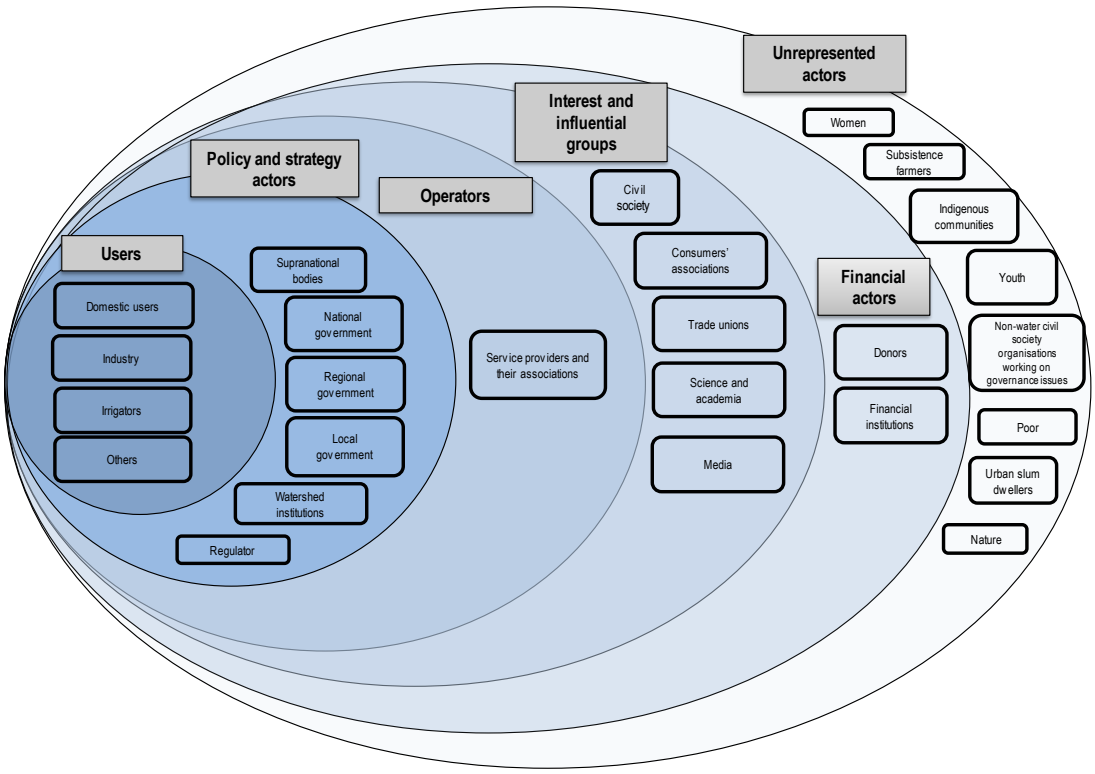
What are the key conditions to carry out the assessment?

Before starting the self-assessment, make sure that the process is:

- **Transparent**: This is needed in all the phases of the process, from the preparatory phase to the discussion of the results. Information should be shared, decisions motivated and discussed, objectives clarified from the beginning of the process. A transparent process will enhance trust and commitment for future actions.
- **Neutral and non-discriminatory**: All stakeholders should be heard without prejudice and their inputs used for the assessment and beyond without discrimination. A neutral and independent process can be guaranteed by a trusted facilitator.
- **Open**: It is important to go beyond the "usual suspects" and involve emerging actors and unheard categories, such as women, youth and civil society organisations. It is critical to include non-water sector civil society organisations that work on governance issues.
- **Forward-looking**: When carrying out the assessment, it is key to think ahead about actions for improvement: who can do what in achieving the goals, when and with what resources (human and financial).

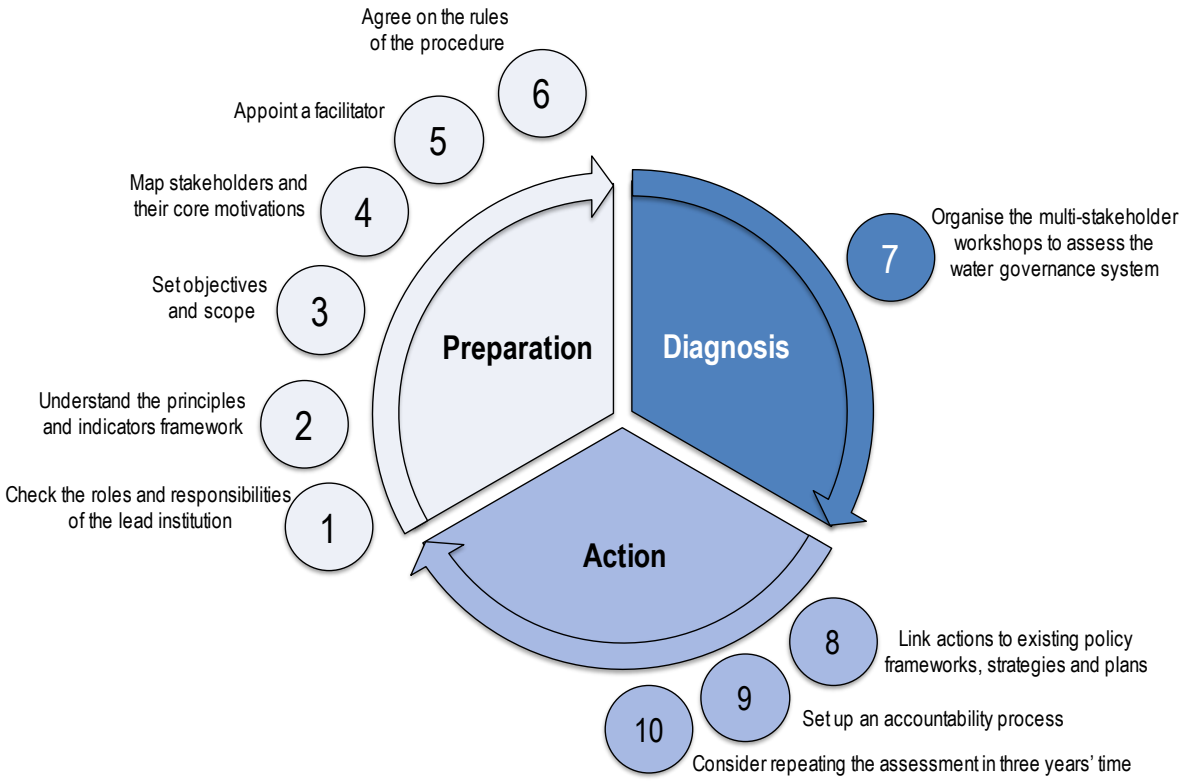
Moreover, **make sure stakeholders buy-in to the process and trust the lead institution:** The assessment should be fully owned by the leading institution in charge of it. This would help take actions based on the results. Stakeholders should be motivated to contribute to the assessment and also to play a role once actions for improvement have been identified.

Example of key stakeholders to be engaged in the self-assessment



A 10 step assessment methodology

The 10 steps to carry out the self-assessment are divided in three phases: **Preparation, Diagnosis, Action**:



Step 1: Check roles and responsibilities of the lead institution. To ensure the highest impact on policy improvement, the lead institution carrying out the assessment should ideally be a public or government authority with water resources or water services management responsibilities. Where this is not possible, the lead institution can be another public, private or non-profit organisation with no conflict of interest to facilitate an unbiased and methodologically sound assessment. In practice, the lead institution should have the convening power to gather stakeholders around the table and to thoughtfully plan and manage the entire evaluation process. In addition to ensuring knowledge and capacity to carry out the assessment, the lead institution should be motivated and able to promote the proposals for change resulting from the review. It would be desirable for the lead institution to have experience in monitoring and assessing water policies, programmes and projects, as well as in the use of methodologies to collect inputs from different stakeholders in a transparent and open way. The lead institution should also take into account the need for human and financial resources to carry out the assessment and organise multi-stakeholder workshops.

Step 2: Understand the principles and indicators framework. The *OECD Principles on Water Governance* define the key water governance conditions to design and implement effective, efficient and inclusive water policies in a shared responsibility with a broad range of stakeholders. Having a clear understanding of the

Principles is the first step for an effective evaluation process. To facilitate this process, the *OECD Principles on Water Governance* have been translated into 16 languages and are available on line. The lead institution should be familiar with the Principles and their corresponding indicators. Once stakeholders are mapped and involved in the process, they need access to available material for the assessment, e.g. principles, indicators, checklist, guidance and glossary, in order to clarify concepts and definitions, as well as address potential doubts or questions. Stakeholders should be given enough time to understand the principles and be provided with the necessary support by the lead institution and/or an external mentor.

Step 3: Set objectives and scope of the assessment. There are several objectives that can trigger the assessment of the water governance system in place at national, regional, basin or local level. Generally speaking, the self-assessment is a tool for dialogue among stakeholders on whether existing water institutions, policies and governance instruments are performing well or where adjustments are needed. More specifically, the self-assessment can be carried out in order to: promote collective thinking among stakeholders; share knowledge and address asymmetries of information across governments and stakeholders; foster learning across stakeholders involved in the water sector; raise awareness about the performance or underperformance of the system; identify deficits in existing policies, institutions and instruments; develop critical thinking on who does what and how; enhance transparency and accountability of water leaders, resulting in increased levels of trust. It is important to collectively agree on the objectives of the assessment. Hence, objectives and scope identified by the lead institution can be adjusted after the consultation with stakeholders engaged in the process.

Step 4: Map stakeholders and their core motivations. The self-assessment should be convened among a minimum level of representation of several categories of stakeholders, such as: relevant ministries and public agencies across levels of government, different current and potential future categories of water users, water and sanitation utilities, economic and environmental regulators, civil society, scientific organisations/academia, key players from the private sector, donor agencies, financial institutions, etc. (Figure 5). Since political will is key to take action after the review, decision makers should be part of the process. For an open debate, it is important to go beyond the "usual suspects" and involve other voices, such as the "under-represented or vulnerable stakeholders" that might be affected by the project/policy process and outcomes and that can influence decisions according to their needs.

Step 5: Appoint an independent and trusted facilitator to work closely with the lead institution throughout the assessment. As facilitator, he/she should guarantee the neutrality of the process and its inclusiveness, ensuring that all the stakeholders are heard, even those less empowered to express their opinions. The independent facilitator should prevent the self-assessment process from turning into a self-satisfaction exercise. The facilitator should also serve as a mentor, guiding the lead institution and stakeholders towards a clear understanding of the principles and the indicator framework before and during the assessment. The facilitator should be impartial and be recognised as legitimate and credible by all stakeholders involved in the dialogue.

Step 6: Agree on the rules of the procedure. The lead institution should organise a series of workshops lasting a half or full day to share information and opinions, gather data and identify possible ways forward for improving water governance. The workshop discussions should aim to gather views from the full range of stakeholders. Stakeholders will vary in terms of their background, experiences and interests, as well as their level of participation, i.e. some stakeholders may be more vocal than others. The moderator should ensure balanced participation, allowing the stakeholders to pass individual opinions/scores and collectively discuss and dispute the gathered opinions/scores.

Step 7: Organise the multi-stakeholder workshops to assess the water governance system against the traffic light and the checklist, and design the Action Plan. The workshops are the platform in which stakeholders can share and compare confront their opinions and achieve consensus on future activities. Three workshops are considered to be a minimum for an in-depth assessment of the water governance system in place and future changes. They can be organised according to the needs of stakeholders (e.g. by cluster of the principles, by component of the indicator framework, etc.). Further meetings may be needed depending on the opportunities for stakeholders to provide inputs in between the workshops and to build consensus on the assessment and actions needed. The workshops should consider both the traffic light and the checklist for each of the principles under assessment. The exercise can cover all of the Principles or a selection of those that have been identified as a priority, according to the stakeholders' needs. During each workshop: i) Allow time to present the Principles and the indicator framework; ii) Discuss, based on material to be shared well in advance of the workshop, the responses to the traffic light and the checklist; iii) Clarify any misinterpretations and understand the reasons of drastic diverging opinions, both on the level of implementation of certain governance dimensions and on priorities of actions for the future; and iv) Report on future intents in the Action Plan.

Step 8: Link actions with the existing policy framework, strategies and plans. The Action Plan can be a useful starting point to identify the concrete means (human, technical and financial resources) needed to put actions into place and to establish a timeline for implementation. It is also a way to reveal the shared responsibilities across public, private and non-profit constituencies to take joint actions for improved governance. Actions should be linked to existing policy frameworks, strategies and plans, in order to complement and improve existing tools, rather than necessarily invent new ones.

Step 9: Set up an accountability process to track progress over time and keep the dialogue alive. Keeping the dialogue alive among stakeholders is critical to a strong implementation phase. When possible, the leading institution should provide future opportunities for stakeholders to continue to engage and track progress on their defined objectives. An accountability process should be set up to help facilitate this and verify whether inputs from stakeholders were considered and addressed.

Step 10: Consider repeating the self-assessment every three years. Through the traffic light and the action plan, the self-assessment aims to be forward looking and identify the expected changes. At the same time, it can serve as a baseline against which to compare a second assessment, which could occur three years later to verify if expected changes reflect the reality. Three years are intended as a minimum time lag between the baseline and the possibility that changes in the governance system have actually occurred. Being primarily a qualitative assessment view, one caveat is that stakeholders may change after three years, which could challenge the collective implementation of changes and actions identified during the baseline assessment.

The self-assessment toolkit by Principle

Principle 1: Clear roles and responsibilities

Clearly allocate and distinguish roles and responsibilities for water policy making, policy implementation, operational management and regulation, and foster co-ordination across these responsible authorities. To that effect, legal and institutional frameworks should:

- Specify the allocation of roles and responsibilities, across all levels of government and water-related institutions in regard to water:
  - policy making, especially priority setting and strategic planning
  - policy implementation, especially financing and budgeting, data and information, stakeholder engagement, capacity development and evaluation
  - operational management, especially service delivery, infrastructure operation and investment
  - regulation and enforcement, especially tariff setting, standards, licensing, monitoring and supervision, control and audit, and conflict management.
- Help identify and address gaps, overlaps and conflicts of interest through effective co-ordination at and across all levels of government.

Water governance indicators, Principle 1

Checklist, Principle 1

- Is there a dedicated water policy, indicating goals, duties, resources needed?

Such a policy can be at national or subnational level depending on the scale at which the assessment is carried out and the constitutional organisation of the country.

- Have applicable **binding and non-binding water-related international or supranational frameworks** and regulations been transposed at national (or subnational) level(s)?
- Are there **horizontal co-ordination mechanisms** across subnational authorities to manage interdependencies for water policy design and implementation?

Examples include inter-municipal or metropolitan collaboration as well as fiscal, financial or other incentives from central/regional governments, specific mechanisms for conflict resolution, joint financing, metropolitan or regional water districts, or informal co-operation around projects.

- Are there **vertical co-ordination mechanisms** or incentives that foster policy alignment, complementarities and co-operation across central and subnational governments?

Examples include contractual arrangements across levels of government; intermediate bodies or actors with core water responsibility; sectoral conferences between central and subnational water players; co-ordination agencies or commissions; shared databases and information systems; financial transfers or incentives; and organisations/tools facilitating the dialogue across levels of government.

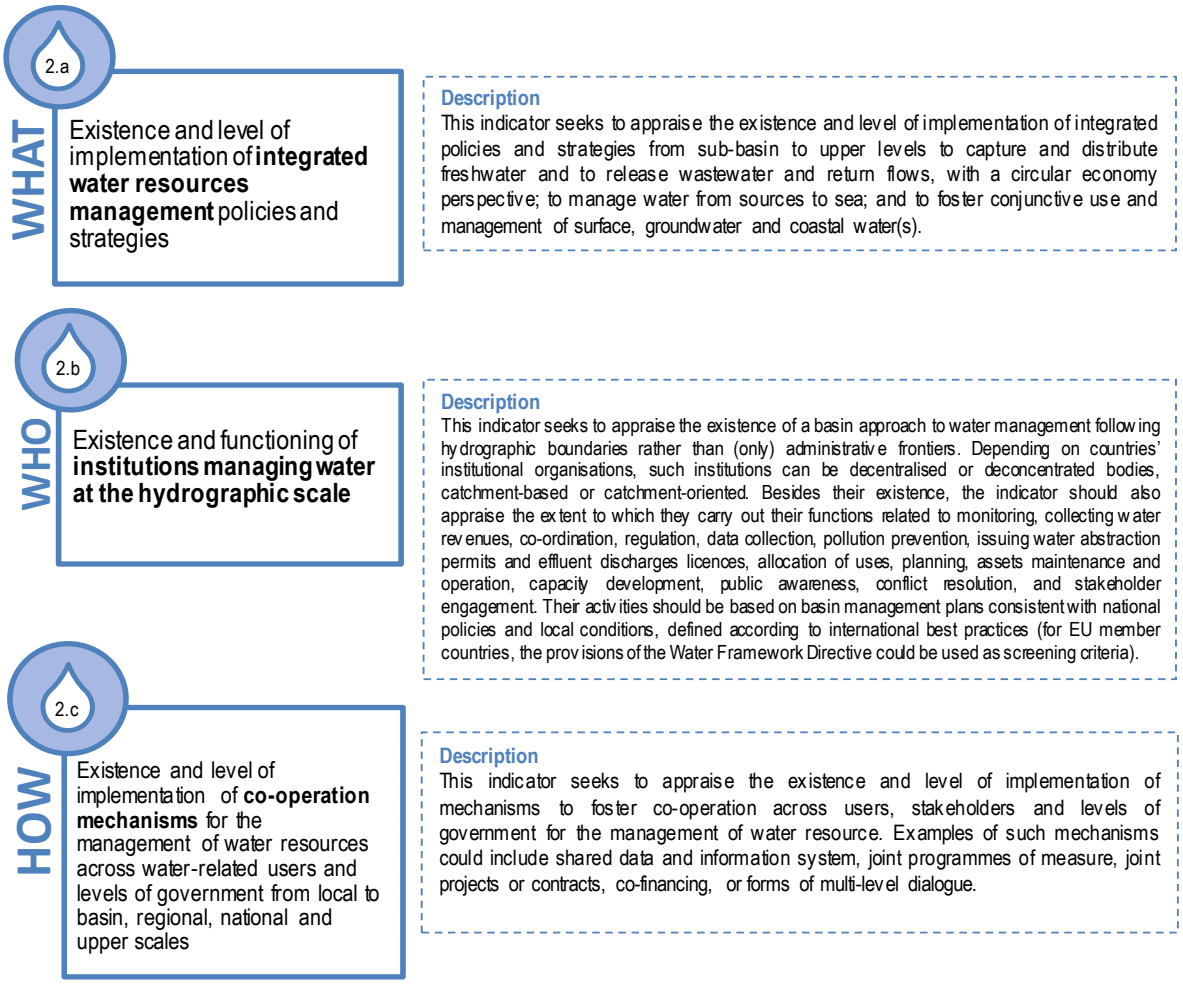
Principle 2: Appropriate scales within basin systems

Manage water at the appropriate scale(s) within integrated basin governance systems to reflect local conditions, and foster co-ordination between the different scales.

To that effect, water management practices and tools should:

- respond to long-term environmental, economic and social objectives with a view to making the best use of water resources, through risk prevention and integrated water resources management
- encourage a sound hydrological cycle management from capture and distribution of freshwater to the release of wastewater and return flows
- promote adaptive and mitigation strategies, action programmes and measures based on clear and coherent mandates, through effective basin management plans that are consistent with national policies and local conditions
- promote multi-level co-operation among users, stakeholders and levels of government for the management of water resources
- enhance riparian co-operation on the use of transboundary freshwater resources.

Water governance indicators, Principle 2



Checklist, Principle 2

- Where they exist, do catchment-based organisations have the adequate level of **autonomy, staff and budget** to carry out their functions?
- Are there policy and economic instruments in place to manage too much, too little and too polluted water at hydrographic scale?

Examples include: river basin plans, water charges, water entitlements, early warning systems for disasters, dedicated water resources funds, models and decision support system, information system, research, development and innovation, inspections, etc.

- In case of **transboundary** rivers, lakes or aquifers, are there **mechanisms or incentives** to co-ordinate among riparian states?

Examples include dedicated commissions, joint basin plans, joint information and/or monitoring systems, mutual assistance programmes, joint research and innovation, early warning and alarm procedures, public participation fora, joint financing and/or cost recovery, dispute resolution mechanisms.

- Are there **co-ordination mechanisms to combine territorial and hydrographic scales** for water resources management, for instance in metropolitan areas?

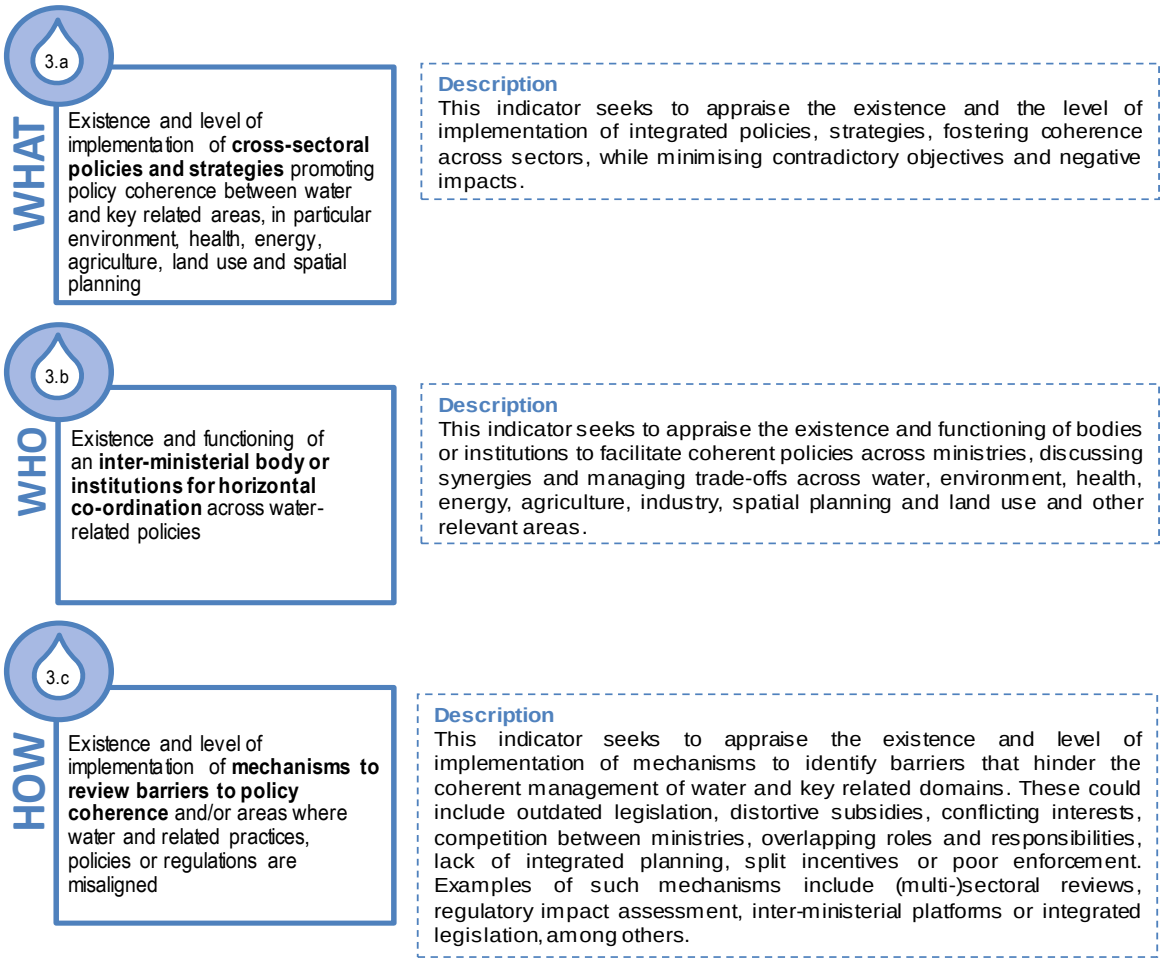
Examples include multi-sectoral metropolitan bodies, multi-sectoral or bundled utilities for water and related services, rural-urban partnerships, rivers or aquifer contracts, among others.

Principle 3: Policy coherence

Encourage policy coherence through effective cross-sectoral co-ordination, especially between policies for water and the environment, health, energy, agriculture, industry, spatial planning and land use through:

- encouraging co-ordination mechanisms to facilitate coherent policies across ministries, public agencies and levels of government, including cross-sectoral plans
- fostering co-ordinated management of use, protection and clean-up of water resources, taking into account policies that affect water availability, quality and demand (e.g. agriculture, forestry, mining, energy, fisheries, transportation, recreation and navigation) as well as risk prevention
- identifying, assessing and addressing the barriers to policy coherence from practices, policies and regulations within and beyond the water sector, using monitoring, reporting and reviews
- providing incentives and regulations to mitigate conflicts among sectoral strategies, bringing these strategies into line with water management needs and finding solutions that fit with local governance and norms.

Water governance indicators, Principle 3



Checklist, Principle 3

- Is there a **dedicated policy or high-level political support to water management** as a driver to economic growth as featured by the Sustainable Development Goals?
- Are **data and projections on water demanded from agriculture, industry (including energy) and households** available and guiding decisions about handling competing uses now and in the future?
- Is there an **assessment of the distributional impacts on water management** of decisions taken in other areas such as energy subsidies, spatial development, agriculture or environment?
- Are **costs** due to absent/poor water-related policy coherence evaluated and available to decision makers?

Such costs could be economic, social, environmental or financial, or relate to greater risks of human causalities, among others.

- Are **benefits** from policy coherence and policy complementarities evaluated and showcased to decision makers and key stakeholders?

Examples could include reduced information asymmetries, optimisation of financial resources use, reduction/elimination of split incentives/conflicts, equity across users, better disaster preparedness, etc.

- Are there provisions, frameworks or instruments to ensure that decisions taken in other sectors are **water-wise?**

An example would be the water tests whereby any spatial development projects need to feature water-related constraints.

- Are there **horizontal co-ordination mechanisms** at subnational and national levels?

Examples include: cross-sectoral groups/meetings, cross-sectoral policy reviews, financial incentives/conditionalities, joint actions of ministries/agencies at subnational level, cross-sectoral research programmes, etc.

- Are there **conflict mitigation and resolution mechanisms** to manage trade-offs across water-related policy areas?

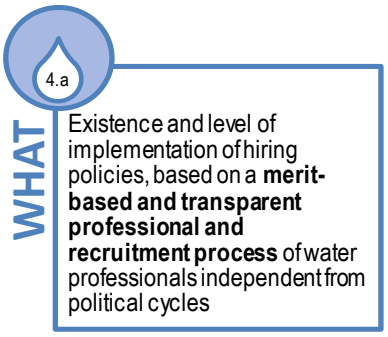
Examples include top-down or command-and-control mechanisms (water courts, laws, regulations) and bottom-up initiatives (public consultation, stakeholder groups facilitating collaborative solutions, users' associations).

Principle 4: Capacity

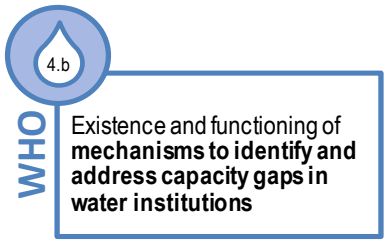
Adapt the level of capacity of responsible authorities to the complexity of the water challenges to be met, and to the set of competencies required to carry out their duties:

- identifying and addressing capacity gaps to implement integrated water resources management, notably for planning, rule-making, project management, finance, budgeting, data collection and monitoring, risk management and evaluation
- matching the level of technical, financial and institutional capacity in water governance systems to the nature of problems and needs
- encouraging adaptive and evolving assignment of competences upon demonstration of capacity, where appropriate
- promoting the hiring of public officials and water professionals that uses merit-based, transparent processes that are independent from political cycles
- promoting education and training of water professionals to strengthen the capacity of water institutions as well as stakeholders at large and to foster co-operation and knowledge-sharing.

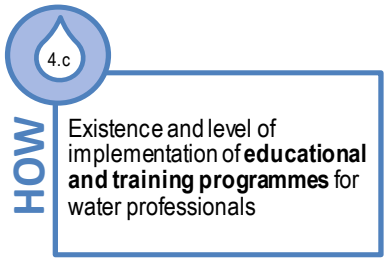
Water governance indicators, Principle 4



Description
This indicator seeks to appraise the framework conditions (not necessarily water-specific) in place and their level of implementation to assure the presence of competent staff able to deal with technical and non-technical water-related issues across agencies, responsible ministries and water management bodies.



Description
This indicator seeks to appraise the existence and functioning of mechanisms to identify the level of capacity of responsible authorities in carrying out their duties and coping with water challenges. Duties are: planning, rule-making, project management, finance, budgeting, data collection and monitoring, risk management and evaluation.



Description
This indicator seeks to appraise the existence and level of implementation of capacity-related programmes (e.g. educational curricula, executive training, technical assistance, etc.) to strengthen the capacity of water institutions as well as stakeholders at large in critical areas such as planning, financing and monitoring.

Checklist, Principle 4

- Are there **incentives** to create water careers in the public sector?
- Are there **guidelines** or standards for capacity building across authorities at all levels?
- Are there **peer-to-peer dialogue platforms** across river basin organisations?
- Are there **networks** of utilities and networks of basin organisations at national level?
- Are institutional strengthening and soft capacity included into **technical assistance programmes**?
- Are there **decentralised co-operation mechanisms** to foster north-south, south-south and north-north experience learning, capacity building and knowledge transfer?

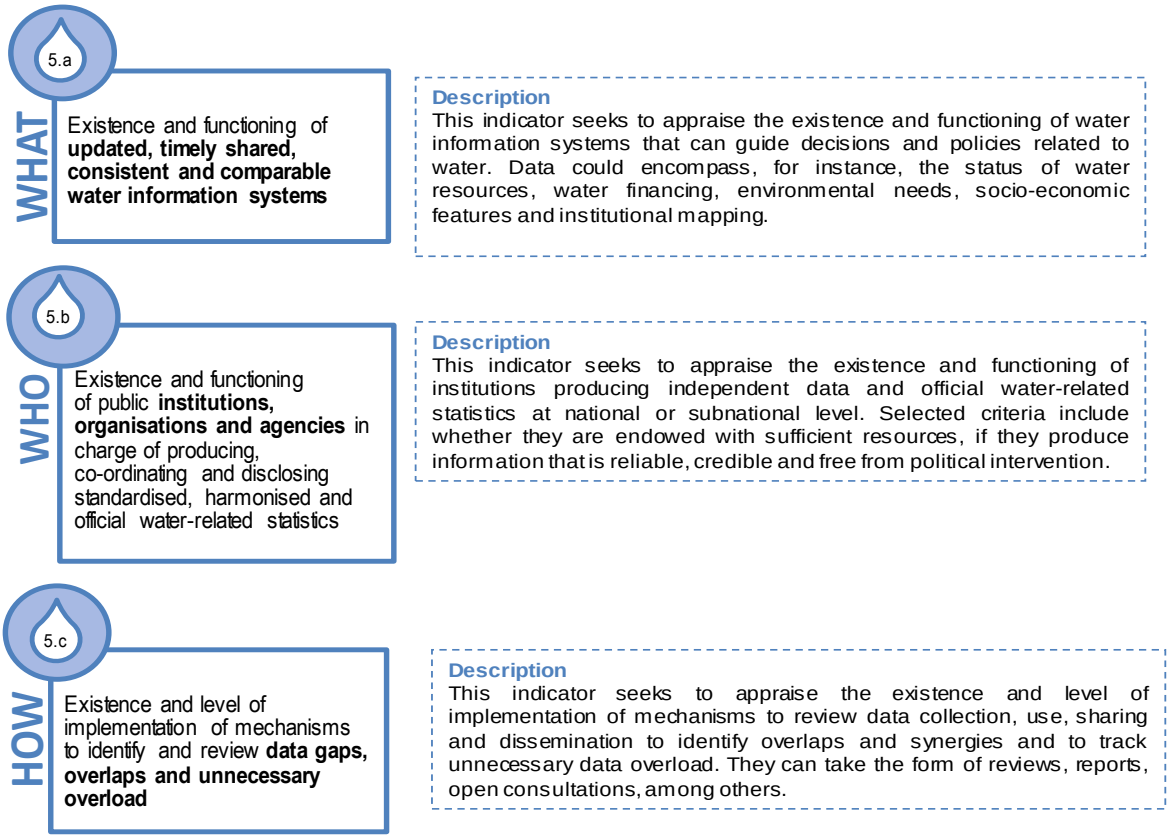
Principle 5: Data and information

Produce, update and share timely, consistent, comparable, and policy-relevant water and water-related data and information, and use it to guide, assess and improve water policy, through:

- defining requirements for cost-effective and sustainable production and methods for sharing high-quality water and water-related data and information, e.g. on the status of water resources, water financing, environmental needs, socio-economic features and institutional mapping

- fostering effective co-ordination and experience-sharing among organisations and agencies producing water-related data between data producers and users, and across levels of government
- promoting engagement with stakeholders in the design and implementation of water information systems, and providing guidance on how such information should be shared to foster transparency, trust and comparability (e.g. data banks, reports, maps, diagrams, observatories)
- encouraging the design of harmonised and consistent information systems at the basin scale, including in the case of transboundary water, to foster mutual confidence, reciprocity and comparability within the framework of agreements between riparian countries
- reviewing data collection, use, sharing and dissemination to identify overlaps and synergies and track unnecessary data overload.

Water governance indicators, Principle 5



Checklist, Principle 5

- Are the following data on water and sanitation services available?
  - service coverage
  - cost of water services (transporting and supplying water; collecting and treating wastewater; identification of records relating to personnel and equipment)
  - cost recovery and prices in relation to consumer income and purchasing power

– knowledge of assets, maintenance of infrastructure programmes to ensure sustainable operation, maintenance and renewal

– drinking water and wastewater quality controls against specified standards.

- Are key data on water services **publicly available and communicated** to customers?
- Is the water supply and sanitation information system **harmonised, integrated, standardised and co-ordinated** across relevant agencies and responsible authorities across relevant governance scales?
- Are the following **data on integrated water resources management** available?
  - qualitative and quantitative state of resources including hydrogeological data
  - user registry and entitlement permits for water withdrawal
  - withdrawals and consumption by sectors (domestic, energy, agriculture, industry)
  - pollution sources, registry, permits and measurement of quality parameters of pollution emission
  - hydrological connection between surface water and groundwater resources
  - water charges collected and subsidies given and their expenditure.
- Are key data on water resources management **publicly available** and communicated to users?
- Is the integrated water resources management water information system **harmonised, integrated, standardised and co-ordinated** across relevant agencies and responsible authorities across relevant governance scales?
- Are the following data on **risk management** available?
  - projections/scenarios with reference to climate change and exposed lives and goods, risks of floods, drought and accidental pollution
  - meteorological data, including data on rainfall
  - data on water flows and pressures and extension of flooded areas for known events
  - historical data on water disasters
  - data on vulnerability (human beings and properties)/ exposure to risk.
- Are key data on water risk management **publicly available** and communicated to citizens?
- Is the risk management water information system **harmonised, integrated, standardised and co-ordinated** across relevant agencies and responsible authorities across relevant governance scales?
- Are there **real-time data** and do they guide decision making?
- Are there **bottom-up mechanisms** to produce and disclose water-related data and information in a shared responsibility across levels of government, public, private and non-profit stakeholders?
- Are there **platforms for dialogue** between data producers and users?
- Are there incentives or forms of **co-operation between primary and other data producers**?
- Do **online** platforms/tools/agreements exist for experience and knowledge sharing?
- Do incentives exist to produce, disclose and use **water-related data and information**, through innovative ways?

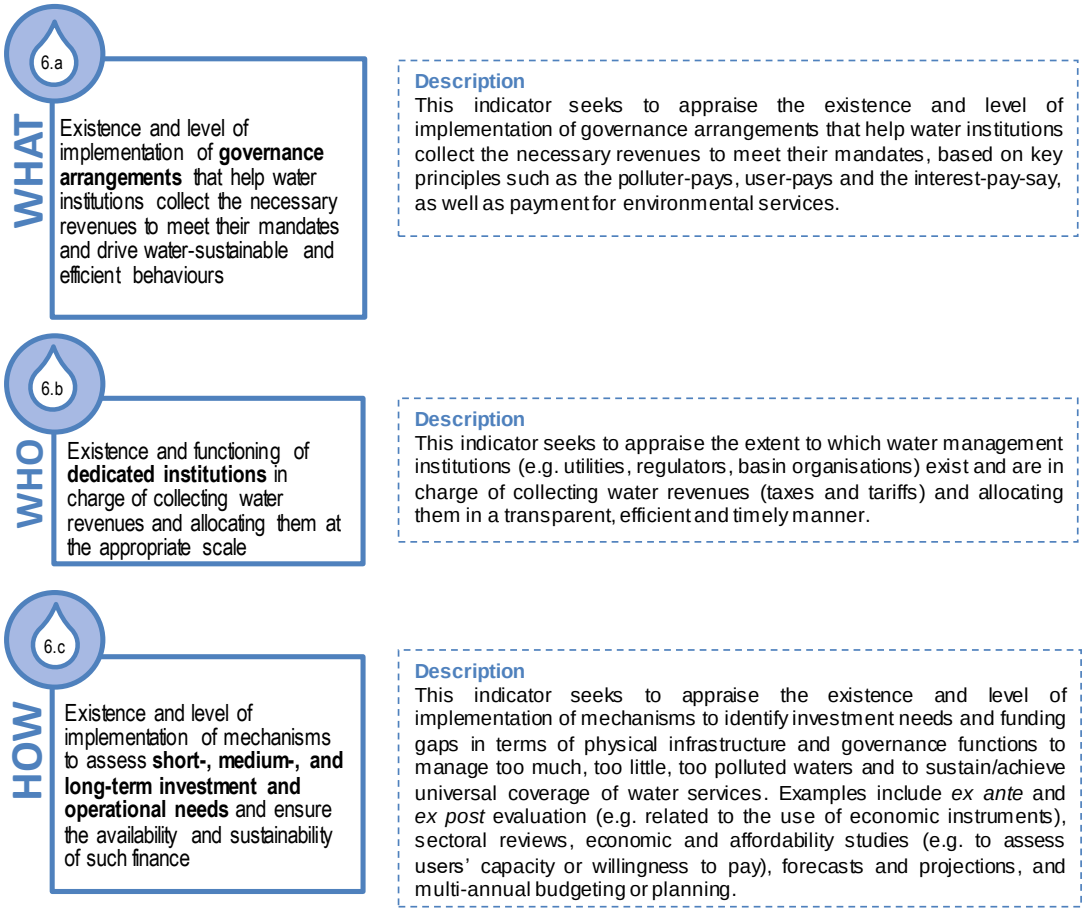
Examples are big/smart/mobile data, digital maps, real-time sensors and monitoring.

Principle 6: Financing

Ensure that governance arrangements help mobilise water finance and allocate financial resources in an efficient, transparent and timely manner through:

- promoting governance arrangements that help water institutions across levels of government raise the necessary revenues to meet their mandates, building through, for example, principles such as the polluter-pays and user-pays, as well as payment for environmental services
- carrying out sector reviews and strategic financial planning to assess short-, medium-, and long-term investment and operational needs and take measures to help ensure availability and sustainability of such finance
- adopting sound and transparent practices for budgeting and accounting that provide a clear picture of water activities and any associated contingent liabilities, including infrastructure investment, and aligning multi-annual strategic plans to annual budgets and medium-term priorities of governments
- adopting mechanisms that foster the efficient and transparent allocation of water-related public funds (e.g. through social contracts, scorecards and audits)
- minimising unnecessary administrative burdens related to public expenditure while preserving fiduciary and fiscal safeguards.

Water governance indicators, Principle 6



. Checklist, Principle 6

- Are there enough **financial revenues** (taxes, tariffs, transfers) to cover operational costs and long-term assets renewal to protect ecosystems services and to finance biodiversity programmes?

- Is there **standardised/harmonised guidance** at national or subnational level for setting and governing economic instruments such as tariffs, abstraction or pollution charges, groundwater tax?
- Are **abstraction charges** in place to foster water-use efficiency and collect revenues?
- Are **pollution charges** in place to foster water quality management and collect revenues?
- Are there schemes or incentives for **payment for environmental services**?
- Do flexible and **solidarity mechanisms** exist in case of water-related disasters?
- Are there **multi-annual strategic plans** to review short-, medium- and long-term investment needs and support policy continuity?
- Are there **investment plans and programmes** and do they guide decision making?
- Are there **clear budget transparency principles and rules** applied at all levels of government?
- Are there measures to minimise unnecessary **administrative burdens** when collecting and disbursing water-related revenues?
- Are there **reporting mechanisms** and audits of financial administration for water-related expenditure?
- Are there mechanisms or incentives to foster the efficient and transparent **allocation of water-related revenues**?

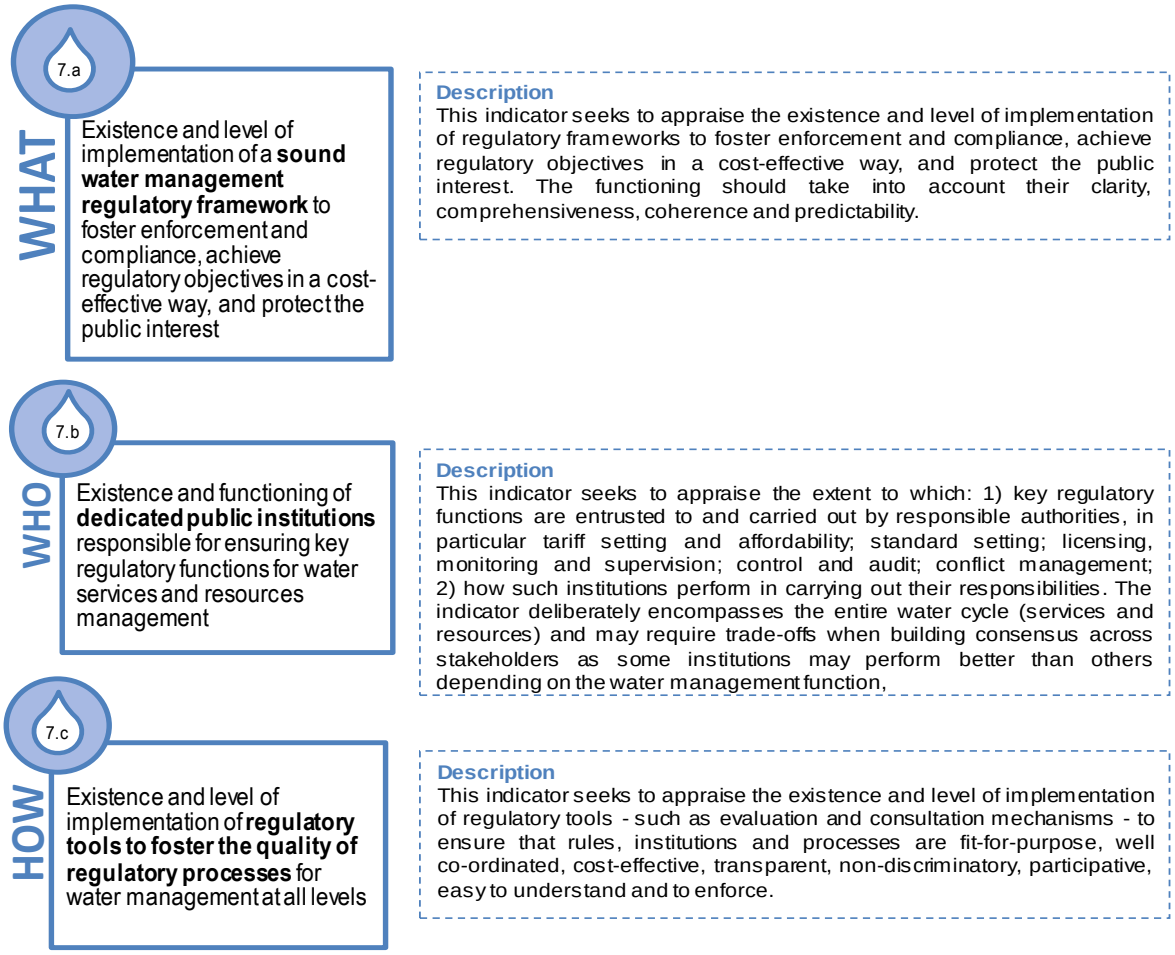
Examples include: social contracts, scorecards, cost-benefit analyses.

Principle 7: Regulatory frameworks

Ensure that sound water management regulatory frameworks are effectively implemented and enforced in pursuit of the public interest through:

- ensuring a comprehensive, coherent, and predictable legal and institutional framework that sets rules, standards and guidelines for achieving water policy outcomes, and encourages integrated long-term planning
- ensuring that key regulatory functions are discharged across public agencies, dedicated institutions and levels of government and that regulatory authorities are endowed with the necessary resources
- ensuring that rules, institutions and processes are well co-ordinated, transparent, non-discriminatory, participative, and easy to understand and enforce
- encouraging the use of regulatory tools (evaluation and consultation mechanisms) to foster the quality of regulatory processes and make the results accessible to the public, where appropriate
- setting clear, transparent and proportionate enforcement rules, procedures, incentives and tools (including rewards and penalties) to promote compliance and achieve regulatory objectives in a cost-effective way
- ensuring that effective remedies can be claimed through non-discriminatory access to justice, considering the range of options as appropriate.

Water governance indicators, Principle 7



Checklist, Principle 7

- Is there a systematic requirement to consider existing **international standards and norms** in the development and revision of national and/or subnational legal frameworks?
- Are there a **dedicated regulatory agency(ies)/bodies or capacities (e.g. within a ministry)** in charge of enforcement and compliance for water resources, water services and disaster risk management?
- When they exist are regulatory agencies **subject to by laws or internal regulations** that clearly state their mandate and powers?
- Are relevant regulatory and inspection authorities embedded with resources in line with their mandate? In case of dedicated regulatory agency(ies), are they **financially independent**?
- Do regulatory authorities take decisions that can also be legally binding?
- Are evaluation **mechanisms in place** to systematically and regularly performance/effectiveness, gaps and overlaps in the regulatory framework?

For instance, areas with regulatory vacuum/gaps, incoherent and/or contradictory objectives, deficient implementation and/or limited enforcement, overlaps/duplication of responsibilities, lack of consistency and continuity of regulation, etc.

- Are water-related legislations subject to **regulatory impact assessment**?
- Are there **reviews** of the governance and performance of regulatory and inspection agencies or bodies?
- Are there water-specific **inspectors** (e.g. a water "police") or other specific enforcement tools in place?
- Are there **co-ordination instruments** between water relevant ministries and bodies?
- Are there **requirements to disclose information** and inputs used for regulatory decisions?

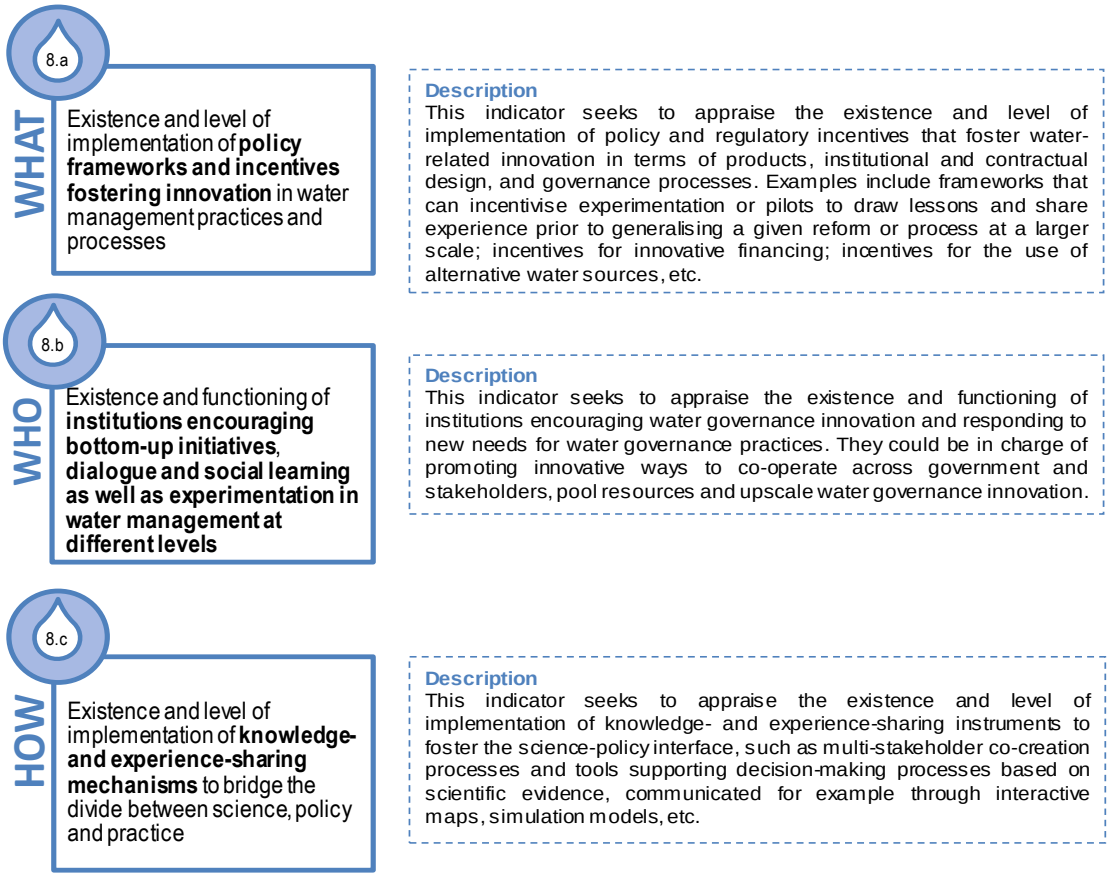
- Can regulatory decisions taken be repealed?
- Are there mechanisms to solve **water-related disputes** (be they water-specific or not)?
- Where **self-regulation** mechanisms exist, are they object of regular performance assessment?

Principle 8: Innovative governance

Promote the adoption and implementation of innovative water governance practices across responsible authorities, levels of government and relevant stakeholders:

- encouraging experimentation and pilot testing on water governance, drawing lessons from successes and failures, and scaling up replicable practices
- promoting social learning to facilitate dialogue and consensus-building, for example through networking platforms, social media, information and communication technologies and user-friendly interfaces (e.g. digital maps, big data, smart data and open data) and other means
- promoting innovative ways to co-operate, pool resources and capacity, build synergies across sectors and search for efficiency gains, notably through metropolitan governance, inter-municipal collaboration, urban-rural partnerships and performance-based contracts
- promoting a strong science-policy interface to contribute to better water governance and bridge the divide between scientific findings and water governance practices.

Water governance indicators, Principle 8



Checklist, Principle 8

- Are there any **public bodies or accredited bodies** fostering innovation (financing, sharing feedback, assessing, incentivising)?
- Do innovative **tools and processes** exist to:
  - build capacities
  - raise awareness
  - engage stakeholders
  - share information
  - engage within and across organisations?
- Are **information and communication technologies** used to guide better public action in water management and how?
- Are there **reviews** to evaluate the state of play of and potential for technical and non-technical innovation, costs/benefits of innovation, as well as regulations and standards hindering innovation?
- Do **platforms** exist to draw lessons from failures in water policy and governance, and to catalyse and scale-up best practices and success stories?
- Are there innovative **co-operation mechanisms** across territories and water users?

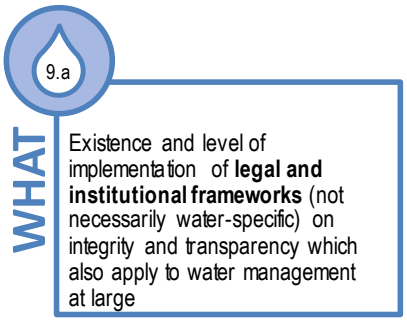
Examples include metropolitan governance, inter-municipal collaboration, urban-rural partnerships, performance-based contracts.

Principle 9: Integrity and transparency

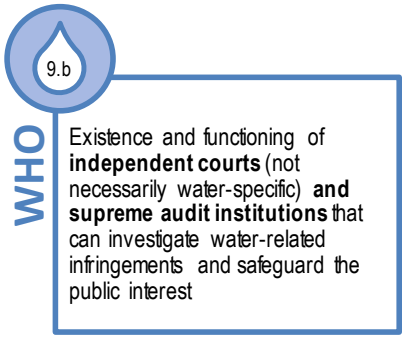
Mainstream integrity and transparency practices across water policies, water institutions and water governance frameworks for greater accountability and trust in decision making through:

- promoting legal and institutional frameworks that hold decision makers and stakeholders accountable, such as the right to information and independent authorities to investigate water-related issues and law enforcement
- encouraging norms, codes of conduct or charters on integrity and transparency in national or local contexts and monitoring their implementation
- establishing clear accountability and control mechanisms for transparent water policy making and implementation; diagnosing and mapping on a regular basis existing or potential drivers of corruption and risks in all water-related institutions at different levels, including for public procurement
- adopting multi-stakeholder approaches, dedicated tools and action plans to identify and address water integrity and transparency gaps (e.g. integrity scans/pacts, risk analysis, social witnesses).

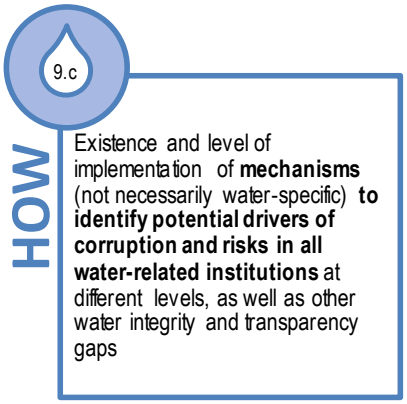
Water governance indicators, Principle 9



Description
This indicator seeks to appraise the existence and level of implementation of legal and institutional frameworks that hold decision makers and stakeholders accountable (e.g. public procurement), and whereby the public interest can be safeguarded, malpractices can be identified and sanctioned, and effective remedies can be claimed. Examples include the right to information, public procurement, in accordance with best international practice, as well as the transposition of applicable international conventions.



Description
This indicator seeks to appraise the existence and functioning of independent authorities and audit institutions (be they water-specific or not) to investigate water-related infractions through inspections and controls, enact sanctions in case of violation. Selected criteria for assessment include the effectiveness, capacity, independence and accessibility of such institutions.



Description
This indicator seeks to appraise the existence and the level of implementation of mechanisms that can diagnose, discourage and/or prevent poor transparency and integrity practices at different levels. Examples include integrity scans, multi-stakeholder approaches, social witnesses, social monitoring (e.g. to track consumer perceptions and petty corruption in water management), auditable anti-corruption plans, risk analysis and risk maps.

Checklist, Principle 9

- When roles and responsibilities for water supply and sanitation service delivery, water resources management, or disaster risk reduction are delegated to dedicated public or private entities, are there **contractual arrangements** between organising and executive bodies?
- Are relevant **international conventions, resolutions or frameworks** related to transparency and integrity transposed into national legislation?
- Are there institutional **anti-corruption plans**, **codes of conduct** or integrity charters?
- Are executive, legislative and judiciary **powers** clearly **separated?**
- Are there provisions for **whistle-blower protection** in legal and institutional frameworks? Are **whistle-blower policies** internalised within all public water sector organisations?
- Are **corruption risks** and actual corruption in the water sector (e.g. manipulation of knowledge and information, bribery, extortion) diagnosed?
- Are there evaluation tools to track **budget transparency** in the water sector?

For instance the Open Budget Index of the International Budget Partnership

- Are water accounts separated to ensure **traceability** of the water money?
- Are there **evaluation tools** to track reporting on nepotisms and graft; evasion of rules and regulations; political capture; fraud; unethical practices, including those linked with petty corruption manipulated accounting; bad corporate management?

Examples of petty corruption are. illegal connections, fraudulent metering and billing, etc.

- Are there mechanisms/tools to track **transparency, accountability and participation** in the water sector?

Examples include. reviews of service providers' performance, water-related public expenditure reports, corporate reporting on the implementation of anti-corruption plans, etc.

- Are there mechanisms to assess the **economic, social and environmental costs of water-related corruption?**

Examples include integrity scans, integrity risk assessments, independent investigations including by the media.

- Are there **processes and/or platforms** for dialogue on the **drivers** to corruption and malpractices?
- Are there **requirements in place for regular financial disclosure** of assets, income and interests?
- Are **anti-bribery management systems** in place?

For instance the ISO 37001: 2016.

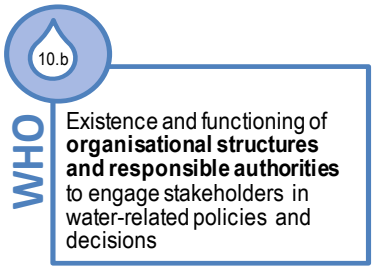
Principle 10: Stakeholder engagement

Promote stakeholder engagement for informed and outcome-oriented contributions to water policy design and implementation through:

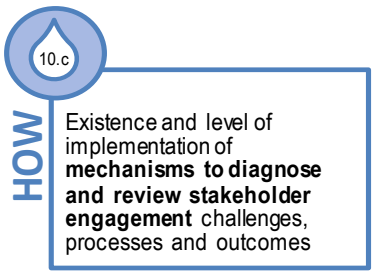
- mapping public, private and non-profit actors who have a stake in the outcome or who are likely to be affected by water-related decisions, as well as their responsibilities, core motivations and interactions
- paying special attention to under-represented categories (youth, the poor, women, indigenous people, domestic users) newcomers (property developers, institutional investors), and other water-related stakeholders and institutions
- defining the line of decision making and the expected use of stakeholders' inputs, and mitigating power imbalances and risks of consultation capture from over-represented or overly vocal categories, as well as between expert and non-expert voices
- encouraging capacity development of relevant stakeholders as well as accurate, timely and reliable information, as appropriate
- assessing the process and outcomes of stakeholder engagement to learn, adjust and improve accordingly, including the evaluation of costs and benefits of engagement processes
- promoting legal and institutional frameworks, organisational structures and responsible authorities that are conducive to stakeholder engagement, taking account of local circumstances, needs and capacities
- customising the type and level of stakeholder engagement to the needs and keeping the process flexible to adapt to changing circumstances.

Water governance indicators, Principle 10

Description
This indicator seeks to appraise the existence and level of implementation of legal frameworks to engage stakeholders in water-related decision making. In all cases, they should discourage consultation capture and consultation fatigue through balanced representativeness as well as clarity and accountability on the expected use of stakeholders' inputs.



Description
This indicator seeks to appraise the existence and functioning of dedicated stakeholder engagement institutions or platforms, such as catchment-based authorities, decentralised assemblies, governing boards, national or subnational water councils or committees, as well as more informal forms of community-based engagement. A list of such mechanisms/institutions is available in OECD (2015), *Stakeholder Engagement for Inclusive Water Governance* (Chapter 5), and could be used as a basis.



Description
This indicator seeks to appraise the existence and level of implementation of mechanisms to diagnose prominent obstacles, challenges or risks such as consultation capture, consultation fatigue or lack of resources (capacity and funding), but also processes and outcomes. This is important in order to learn, adjust and improve accordingly, including the evaluation of costs and benefits of engagement processes. Examples include satisfaction surveys, benchmarks, impact assessment, financial analysis, evaluation reports or multi-stakeholder workshops/meetings. Further details on such evaluation mechanisms can be found in Chapter 7 of OECD (2015), *Stakeholder Engagement for Inclusive Water Governance*.

Checklist, Principle 10

- Is the **Arhus Convention** and/or other legal and institutional frameworks for stakeholder engagement adopted?
- Was a stakeholder **mapping** carried out to make sure that all those who have a stake in the outcome or that are likely to be affected are clearly identified, and their responsibilities, core motivations and interactions understood?
- Are the ultimate **line of decision making**, the **objectives** of stakeholder engagement and the expected **use of inputs** clearly defined?
- Are there mechanisms or regular assessments of stakeholder engagement **costs or obstacles** at large?
- Is needed **information** for result-oriented stakeholder engagement **shared**?
- Is the type and level of engagement **customised** and the process flexible to adjust to changing circumstances?
- Is there a national **multi-stakeholder co-ordination platform** including representatives from public, private and non-profit sectors and different categories of users?
- Are there mechanisms in place to engage **science in decision making?**
- Are there **formal and informal mechanisms** to engage stakeholders?
- Do tailored **communication strategies** exist for relevant stakeholders, including the general public, regarding all aspects of water management?

Principle 11: Trade-offs across users, rural and urban areas, and generations

Encourage water governance frameworks that help manage trade-offs across water users, rural and urban areas, and generations, through:

- promoting non-discriminatory participation in decision making across people, especially vulnerable groups and people living in remote areas
- empowering local authorities and users to identify and address barriers to access quality water services and resources and promoting rural-urban co-operation, including through greater partnership between water institutions and spatial planners
- promoting public debate on the risks and costs associated with too much, too little or too polluted water to raise awareness, build consensus on who pays for what, and contribute to better affordability and sustainability now and in the future
- encouraging evidence-based assessment of the distributional consequences of water-related policies on citizens, water users and places to guide decision making.

Water governance indicators, Principle 11

Checklist, Principle 11

- Are there requirements/frameworks for **prioritisation among water uses in case of scarcity or emergency situations**?
- Are there **explicit measures** in place to identify access to water services by vulnerable groups, such as First Nation communities, refugees, economic migrants and the homeless?
- Are **rural-urban linkages** clearly identified and addressed in water management?

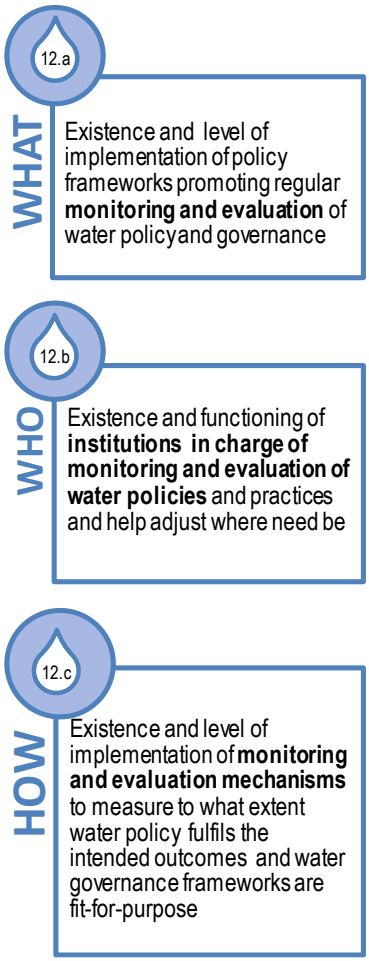
- Are there **social tariffs or other measures** for vulnerable categories of water users?
- Are the **capacity to pay** and **willingness to pay** of water users evaluated through solid economic analysis and dedicated surveys?
- Are analyses for **supporting decision making** carried out in case of conflicting objectives across users, or geographical/social disparities in accessing water resources and services? (e.g. multi-criteria decision analysis, cost-benefit analysis).

Principle 12: Monitoring and evaluation

Promote regular monitoring and evaluation of water policy and governance where appropriate, share the results with the public and make adjustments when needed:

- promoting dedicated institutions for monitoring and evaluation that are endowed with sufficient capacity, the appropriate degree of independence and resources as well as the necessary instruments
- developing reliable monitoring and reporting mechanisms to effectively guide decision making
- assessing to what extent water policy fulfils the intended outcomes and water governance frameworks are fit-for-purpose
- encouraging timely and transparent sharing of the evaluation results and adapting strategies as new information becomes available.

Water governance indicators, Principle 12



Description
This indicator seeks to appraise the existence and functioning of frameworks promoting regular monitoring and evaluation of water policy and governance, in order to effectively guide decision making.

Description
This indicator seeks to appraise the existence and functioning of monitoring institutions (not necessarily water-specific) that are endowed with sufficient capacity, resources, autonomy and legitimacy to produce evidence-based assessment on the performance of water management and governance and support decision making accordingly. Such institutions should be independent from political interference, at arm's length from water managers and accountable for the outcomes of their evaluation and monitoring.

Description
This indicator refers to mechanisms such as: *ex post* evaluations, as well as water governance reviews, national assessments, etc.

Checklist, Principle 12

- Do **formal requirements** exist for **evaluation and monitoring**?
- Are there agreed-upon **key performance indicators**?
- Do monitoring and reporting **mechanisms** exist?

Examples are joint sector reviews, surveys/polls, benchmarking, evaluation reports, ex post *financial analysis, regulatory tools, national observatories, parliamentary consultations, etc.*

- Are there **provisions or incentives** for civil society monitoring?
- Are there **financial resources** available train civil society organisations in project monitoring?
- Are the **results** of the monitoring and evaluation process shared with the wider public?
- Does a **national co-ordination** platform or alike produce evaluation and monitoring reports for parliamentarian discussion on water issues?

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