



# Regulation and Compliance

**Actors responsible for regulation and compliance ensure that the water-related and environmental policies, laws, and plans are enforced and that their objectives are achieved. The Tools in this subsection introduce the role and responsibilities of various bodies and agencies with regulatory and compliance mandates, including Regulatory Bodies and Enforcement Agencies, Local Authorities, Monitoring and Evaluation Bodies, Impact Assessment Committees, and institutional arrangements that can support Water Integrity in the water sector.**

## Regulatory Compliance in the Water Sector

Regulation could be defined as the process of interpreting and implementing laws, policies and regulations, to achieve what was intended in their formation ([Rouse, 2013](#)). Compliance can however generally be seen as conformity in fulfilling official requirements. Therefore, environmental compliance is the achievement of environmental prerequisites, as stated by the water and environmentally related legal instruments, contractual commitments, procedures, performance standards, permits, and among other specified conditions ([GoRTT| Environmental Management Act, 2000](#)). In the water sector, regulatory and compliance mechanisms are embedded into water policies ([A1 Policies](#)), laws ([A2 Legal Frameworks](#)), and ([A3 Plans](#)), which describes the actionable mechanisms for compliance and the institutions responsible for implementation. Such mechanisms ensure society as a whole and various institutions conform to regulatory standards, and any requirements specified for the water sector or sub-sectors within.

Institutions holding formal authority in defining frameworks can include government administrations and regulators at local, national, and supra-national levels, along with agencies at the catchment and river-basin levels ([Philip et al. 2008](#)). For example, at the supra-national level, the [World Health Organization's \(WHO\) Guidelines for Drinking-Water Quality \(GDWQ\)](#) have long been a leading reference point for countries in developing their local water quality standards. At the country level, regulatory and compliance are often administered by varying versions of environmental protection agencies, water resources agencies, and health departments, e.g., the [United States Environmental Protection Agency \(US EPA\)](#). Several actors are involved in the regulation and compliance of water at the local level, including municipalities, Non-governmental Organisations (NGOs), Water-user Associations and Community-based Organisations (CBOs) ([Philip et al. 2008](#)).

## Key Regulatory Compliance Challenges

The identification of factors that hinder the uptake of effective environmental regulation and compliance is critical for sustainable environmental development ([Salihu et al., 2016](#)). Elements which can affect environmental compliance can include economic, social, personal, management, and technological ([Salihu et al. 2016](#)). The following can be considered by regulatory water professionals:

- **Economic and Administrative Costs:** Rapidly changing and increasing complexities of environmental legislation can increase the costs to entities and their administrative burdens ([Kotnik, Klun, and Slabe-Erker, 2020](#)). Compliance rates can be reduced if the cost to comply with the regulator is too high ([OECD, 2004](#)).
- **Socio-political:** Lacking environmental awareness or consciousness can result in a lack of awareness of the judicial sector, the use of compliance promotion tools, and a lack of personnel with relevant skills. Internal co-ordination problems, lack of integration into other policies, lengthy parliamentary processes, and lack of communication between levels of management, and authorities all accentuate regulatory failures ([OECD, 2004](#)).
- **Organisational Culture:** Lack of reliable data, resources, and excessive reporting demands also pose challenges to regulatory compliance ([OECD, 2004](#)). Administrative cultures must also be considered, as often it can amplify the effect of regulatory failures. Every country is home to a different culture of compliance which is influenced by its own social norms. For example, non-compliance may be high in some countries which might have had historically low enforcement levels of written laws ([OECD, 2004](#)).
- **Technological Capacity:** A lack of technology can often be a considerable barrier to compliance. Some questions to consider include: is there appropriate technology? are the technologies reliable and easy to operate? is there a lack of compliance training for staff? and is there a lack of management systems for compliance? ([OECD, 2004](#)).

## **Environmental Compliance Assurance (ECA)**

ECA is a guiding framework describing various mechanisms through which authorities can promote, monitor, and enforce regulation ([EU, 2021](#)). ECA defines the application of available instruments aimed at influencing the behaviour of regulated entities to comply with regulatory requirements. It promotes the following: (i) voluntary compliance, (ii) detecting and reversing non-compliance and (iii) reprimanding the offender when deemed appropriate ([OECD, 2009](#)). In supporting the above function ECA also serves as a contributing mechanism to building good governance in the following ways: (i) reinforces creditability, fairness, and discouragement effect of environmental regulations, (ii) strengthens public confidence in the policies and institutions responsible for environmental conservation and equitable access to natural resources, and (iii) reduces administrative and compliance costs to society ([OECD, 2009](#)).

## **Building Blocks to Ensure Effectiveness in Regulatory Compliance**

Some building blocks to consider in building effective regulation and compliance can include Monitoring, Evaluation, and Data, Prevention, Education, Coercion and Compliance Assistance, Water Integrity and Anti-Corruption Practices, and the Establishment of an Independent Regulatory Body.

- **Monitoring, Evaluation, and Data:** We cannot regulate, comply, or enforce water laws/policies when we have not measured and understood the resource to its full socio-economic and physical extents. M&E systems ([Tool B1.03](#)) are vehicles towards understanding the causes of good or bad performance ([Mackay, 2007](#)). “Knowledge is a Pre-requisite to Action” and adequate knowledge and ease of access to data on the evolving status of water resources is key to winning water policies ([INBO and UNESCO, 2018](#)). Having a sturdy repository of knowledge can inform adequate regulatory and compliance mechanisms within the water sector.
- **Prevention:** Selective and targeted surveillance can be used to ensure a graduated warning approach ([WASREB, 2010](#)). The use of inspections via mobilising trained Inspectors is often a remedy to detect non-compliance before environmental damages are irreversible. Inspections form the backbone of compliance providing an official means for assessing compliance and environmental regulatory requirements ([EPA, 2021](#)). For example, the position of Inspector was created in the Water Act 2002 in Kenya, and it gives powers to order information from Water Service Boards (WSBs) and Water Service Providers (WSPs) toward entrenching compliance in areas such as infrastructure development, finance, and water quality ([WASREB, 2010](#)).  
Environmental compliance inspectors are seen as crucial elements in environmental protection agencies as they ensure compliance on a regular basis, often specialised in a specific media like water, air, and waste management ([Pautz and Schnitzer, 2008](#)).
- **Education:** Creating an environment which fosters learning, incentive, and self-regulation is important as the linkages between education and positive economic, social, and environmental outcomes are well documented ([WASREB, 2010](#) and [Wang et al. 2022](#)). An effective learning environment should encompass the following components. (i) Create awareness and sensitivity to the environmental challenges being confronted, (ii) provide knowledge and understanding of such challenges, (iii) encourage an attitude of concern for the environment and motivate water-sector individuals to improve environmental quality, (iv) equip professionals with the skills to resolve environmental problems and (v) promote participation in activities that ultimately lead to remedies for environmental challenges ([EPA, 2021](#)). Overall, environmental education can shape behaviours, increase access to other knowledge sources and skills, augmenting knowledge acquisition which aids in improving environmental responsibility ([Wang et al. 2022](#)).
- **Coercion and Compliance Assistance:** When education and prevention measures have failed and depending on the severity of non-compliance, the full force of law can be implemented. Take for example the use of the traditional ‘Coercive Approach’ which stresses the discouragement of non-compliance via imposed sanctions. It operates on the premise that increasing the certainty and harshness of penalties would deter non-compliance ([Earnhart and Glicksman, 2020](#)). In addition to the coercive approach, water-sector professionals can also consider the ‘Cooperative Approach’. This approach is more flexible and offers softer mechanisms such as encouraging compliance via compliance assistance which helps entities address noncompliance proactively. It also operates on the assumption that businesses are influenced both by civic and societal motives and they are generally inclined to comply with laws ([Earnhart and Glicksman, 2020](#)).
- **Water Integrity and Anti-Corruption Practices:** The corruption in the water and sanitation sectors can be a destabilising mechanism which threatens the entire sustainable development agenda ([Water Integrity Network - WIN](#)). Corrupted practices can lead to avoiding compliance with regulations, specifications, health, and safety rules. Therefore, building a culture that is centred on Transparency, Accountability, Participation and Anti-Corruption Measures (TAPA) ([Tool B1.05](#)) is important for

regulation and compliance.

- **Establishment of an Independent Regulatory Body:** Regulation includes setting tariffs, standards for water quality and service quality, and accountability mechanisms. Not only is regulation about issuing norms but also about being able to enforce them. To do so, regulators should be independent from governments as it provides objectivity in this regard. Some advantages of a separate regulatory agency with a licensing regime include: (i) robust independent regulator free from political influence, (ii) consistency in enforcement of obligations, (iii) functions and powers established clearly by statute, (iv) good coordination amongst the regulatory agencies and well-defined/ distinct functions ([World Bank, 2020](#)). When governing regulators, we should consider the following seven principles: (i) role clarity, (ii) preventing undue influence and maintain trust, (iii) decision making and governing body structure for independent regulators, (iv) accountability and transparency, (v) engagement, (vi) funding and (vii) performance evaluation ([OECD, 2014](#)).

## Sub-section Overview

The Tools in this subsection introduce the different agencies, authorities, bodies, and committees that serve as focal points for regulation and compliance in the water sector. The notion of regulation and compliance is also supported by the concept of water integrity and anti-corruption.

- **Regulatory Bodies and Enforcement Agencies** ([Tool B1.01](#)): Monitoring and enforcement agencies ensure proper practice and implementation by ensuring rules and regulations are enforced. Such agencies are important in water governance, and their mandate is linked to set water-related and legal instruments.
- **Local Authorities** ([Tool B1.02](#)): Local authorities function at a sub national level but work in tandem with the central government towards ensuring IWRM principles are implemented on the ground. Such authorities are important as they tend to be involved in managing water supply services and act as a primary stage for stakeholder involvement and ensure the sustainability of governmental action plans.
- **Monitoring and Evaluation Bodies** ([Tool B1.03](#)): Monitoring and Evaluation bodies provide access to reliable, up-to-date, and relevant data and information to water managers. This is important toward ensuring evidence-based decision making for IWRM implementation professionals and policymakers.
- **Impact Assessment Committees** ([Tool B1.04](#)): Impact Assessment Committees (IACs) estimate the wide range of consequences derived from proposed developmental projects on water and related environment. Such committees are important for ensuring the participation and engagement of various stakeholders in informing decision-making.
- **Water Integrity and Anti-corruption** ([Tool B1.05](#)): Water integrity speaks to the various mechanisms and institutional arrangements that are needed to support the TAP-A Integrity Wall Approach (Transparency, Accountability, Participation, and Anti-Corruption). It is critical toward ensuring the use of vested powers and resources honestly and accountably for sustainable and just water resources management.

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