



# RegNet

WHO International Network of Drinking-water and Sanitation Regulators (RegNet)

Strategy 2023-2030



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## Introduction

Regulation is a powerful tool that can be used to improve the safety of drinking-water and sanitation services. Absence of regulation may compromise accountability, leading to increased risks to public health. Such risks may go undetected until outbreaks of diseases related to water and sanitation occur. Even when in place, regulation is not always used to its full potential and best advantage, to maximize public health benefits and to ensure delivery of sustained, affordable services that meet agreed service levels.

The World Health Organization (WHO) International Network of Drinking-water and Sanitation Regulators (RegNet) is a global forum to share and promote best practices in regulating drinking-water and sanitation services, with the aim to protect the public's health. The network was established in 2008, in response to requests from Member States to better address regulatory issues pertaining to drinking-water. Its scope has now expanded to also include sanitation.

RegNet has achieved several notable accomplishments including: delivery of training and capacity-building workshops; facilitating discussions on politically sensitive regulatory matters; providing inputs on the use of regulatory data for global monitoring of water supply and sanitation; and forging strategic partnerships with regional regulator networks.

The WHO formal commitment to the 2023 Conference for the Midterm Comprehensive Review of Implementation of the United Nations Decade for Action on Water and Sanitation (2018–2028) (UN 2023 Water Conference) is to strengthen the capacity of water and sanitation regulators to support the delivery of safe, professionalized services¹ through RegNet. This commitment will be strongly embedded in future strategies of the WHO Water, Sanitation, Hygiene and Health Unit.

This strategic plan outlines the objectives and key activities for RegNet for the period 2023–2030.

### Goal

Strengthen the capacity of drinking-water and sanitation regulators to support delivery of safe, well-managed services and protect the public's health.

### Strategic objectives

- 1. Support the establishment and application of risk-based regulatory frameworks for drinking-water and sanitation services, to protect the public's health.
- 2. Promote oversight/regulation of small water supplies, including in rural areas.
- 3. Promote oversight/regulation of sanitation, particularly non-sewered services.
- 4. Strengthen capacities for implementing good practices and evidence-based responses to emerging regulatory challenges.

### **Expected outcome**

Drinking-water and sanitation regulators develop and continually improve their capacities to develop, implement, monitor and/or enforce regulations and fill regulatory gaps. This will help to ensure the safety of drinking-water and safe management of the sanitation service chain, to protect the public's health, as part of well-managed service delivery.

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<sup>1 &</sup>quot;Professionalized services": are operated, maintained and/or managed by well-trained and qualified individuals; are subject to clear legal and accountability frameworks; are subject to monitoring and evaluation against performance indicators; and are subject to affordable pricing structures that contribute to cost recovery.

## Context

An estimated 2 billion people worldwide lack access to safely managed drinking-water services, and an estimated 3.6 billion lack access to safely managed sanitation services. There is an urgent need to strengthen the capacity of regulators. Available data show that fewer than half of countries have regulatory authorities that fully perform key functions such as collecting data, publishing reports and taking corrective actions to improve performance and address non-compliance with national standards related to drinking-water regulation. Similarly, only a third of countries carry out key functions related to sanitation regulation. Countries that do not have regulatory authorities conducting such key functions are more likely to be off-track for achieving national targets for drinking-water and sanitation.

Many countries also lack human resources capacity to regulate drinking-water and sanitation services. Additionally, there is a critical need to strengthen surveillance functions such as independent water quality testing, auditing of risk management approaches and sanitary inspections. Fewer than half of countries perform independent surveillance of sanitation services. For drinking-water quality, end-product testing is carried out more often than auditing or sanitary inspections. The situation is more critical in rural areas, where surveillance activities are less likely to be performed.

Within this context, there is a clear role for strengthening national regulatory systems, to improve accountability for service delivery and collection and use of data for decision-making. There is growing recognition of the catalytic role that effective regulation can play in improving the provision, sustainability and safety of water and sanitation services. There is also a growing demand from countries for technical support and advice in developing and revising regulations.

WHO will continue to respond to this demand, and will support capacities for delivery of water and sanitation services that are protective of health. This will be achieved by working with utilities, municipalities and their development partners (through water and sanitation safety planning) in addition to accelerated action on regulation via RegNet, which WHO coordinates and hosts.



# Principles of RegNet

The key principles that guide how RegNet works are summarized as follows:

- Prioritize public health aspects of drinking-water and sanitation regulation, including applying risk-based approaches ensuring the well-being of communities remains at the forefront of all regulatory efforts.
- Provide a safe space for open dialogue that allows regulators to engage candidly on regulatory concerns and obtain practical advice.
- Promote incremental improvement and stepwise approaches in advancing regulatory frameworks.
- **Encourage diversity and inclusivity**, and promote prioritization and fast tracking of actions for the poorest and most marginalized people, recognizing that regulatory frameworks around the world, and the communities they serve, are at different stages of maturity and development.
- Align with the Sustainable Development Goal (SDG) 6 Global Acceleration Framework<sup>2</sup>, and promote complementarity and alignment with related networks and sector partners.

# RegNet 2023-2030 strategic approach

The RegNet Secretariat at WHO drafted this strategic plan, in consultation with RegNet members. The draft plan was circulated for peer review among key partners working to support regulation, including regional regulator networks, development banks and international non-governmental organizations.

This strategic plan complements other documents that have been published in consultation with the RegNet membership, specifically the Terms of Reference and brochure. The Terms of Reference serve as a reference guide for members, and outline practical information about the network, including membership criteria, network structure and function, and scope of activities. The brochure summarizes the objectives and practical information about RegNet.

For the period 2023–2030, the RegNet Secretariat will organize its activities around the approaches outlined in Table 1 of this strategic plan. These approaches set out the key actions that the RegNet Secretariat will undertake to achieve the network's objectives, and the expected outcomes. Where relevant, the Secretariat will draw on the expertise of WHO, and RegNet members and partners to achieve the specific objectives.

Table 1. RegNet strategic approach, key actions and expected outcomes

Strategic approach	Key actions	Expected outcomes
Facilitate sharing of experiences,	Develop a brief compendium of good practice case studies	Increased activity and improved
good practices and innovation among members	Facilitate peer-to-peer exchange and targeted technical support	information sharing and learning within RegNet
	Stimulate exchange on a communication platform on specific topics	
	Convene thematic webinars	
	Convene RegNet annual meetings	
	Develop incentives to promote continual improvement among regulators	

<sup>&</sup>lt;sup>2</sup> The "accelerator" components of the SDG 6 Global Acceleration Framework are: optimized financing, improved data and information, capacity development, innovation and governance.

### Table 1. continued

Strategic approach	Key actions	Expected outcomes	
Strengthen engagement with regional	Provide technical support on specific issues	Accelerated dissemination and uptake	
regulator networks and key partners, to positively influence regulatory	Co-convene webinars and conferences	of WHO norms on drinking-water and sanitation	
knowledge, attitudes and practices	Co-publish guidance and issue briefs		
<b>Strengthen visibility of RegNet</b> as the global network on public health	Convene events on public health regulation of water and sanitation services at key international forums	Increased awareness of RegNet, leading to growth in membership and wider	
regulation of drinking-water and sanitation services	Disseminate the RegNet brochure and strategic plan	collaboration with partners	
Facilitate regulator input to global	Share draft documents for input	Improved practicability of guidance and	
norms and global monitoring of water supply and sanitation	Facilitate participation of RegNet members in working/expert groups	monitoring processes	
Foster alignment with complementary	Raise awareness of and align with the principles of Citywide	Enhanced cooperation among partners	
initiatives and approaches in water and sanitation services delivery and	Inclusive Sanitation (CWIS) <sup>a</sup>	Coordinated approach to regulatory	
governance	Raise awareness of and work in accordance with the policies, institutions and regulations (PIR) approach <sup>b</sup>	system strengthening and maximization of efforts	
	Raise awareness of and align with the Water, Sanitation and Hygiene Regulation (WASHREG) approach <sup>c</sup>		
	Foster alignment of regulatory frameworks with the criteria of the human rights to drinking-water and sanitation		

- <sup>a</sup> CWIS is a public service approach to planning and implementing urban sanitation systems to support achievement of safe, equitable and sustainable sanitation under SDG 6, irrespective of where people live within a city or what technologies are used to serve them.
- b The World Bank promotes a holistic approach to strengthening water and sanitation sector PIR by considering the wider political economy and governance framework to incentivize sustainable actions.
- <sup>c</sup> WASHREG is a multi-stakeholder diagnostic approach used to identify national regulation gaps and challenges in the provision of water and sanitation services.



# Objectives for RegNet 2023-2030

Four objectives for 2023–2030 are listed below, and Table 2 gives their key actions, example priority activities, outputs and expected outcomes.

# 1. Support the establishment and application of risk-based regulatory frameworks for drinking-water and sanitation services, to protect the public's health

Regulation should fundamentally address relevant risks and drive service improvement. Nevertheless, in some countries, regulatory models and related standards and regulations have been adopted that may not fit with the countries' contexts. In addition, regulatory requirements may be onerous, thus creating a considerable burden for service providers. This can foster an environment in which non-compliance becomes the status quo, and regulations lose their power to drive and sustain improvement.

Additionally, specific populations may be more vulnerable than others due to regulatory gaps. The Guidelines for drinking-water quality (WHO, 2022) and Guidelines on sanitation and health (WHO, 2018) emphasize the importance of risk-based approaches in ensuring regulations are contextually relevant and address public health risks.

### 2. Promote oversight/regulation of small water supplies, including in rural areas

In many countries, small water supply systems such as private wells, handpumps, rainwater harvesting systems, tankers and small water utilities3 are not always covered under national regulations, and may lack any form of regulatory oversight. However, collectively, they often serve a significant proportion of the overall population, and contribute a relatively high share of the burden of waterborne disease due to breakdowns, contamination and inadequate management.

Small water supply systems also tend to be particularly constrained with respect to financial and human resources. Efforts to strengthen the regulatory frameworks for such systems need to take these resource limitations into account. The Guidelines for drinking-water quality: small water supplies (WHO, in preparation) seek to strengthen drinking-water quality regulation of these small water supplies, and highlight prioritizing water quality parameters, risk assessment and risk management, and practical surveillance programmes.

### 3. Promote oversight/regulation of sanitation, particularly non-sewered services

Compared to water supply services, the regulatory landscape for sanitation is less mature. With rapid growth in urban populations, the use of non-sewered sanitation systems is increasing in many countries, with services delivered by a mixture of private and informal actors. However, these systems are often compromised by poor design, inadequate operation and maintenance, and lack of appropriate regulation. Where sewered systems are available, wastewater may not be managed effectively. Globally, 80% of wastewater is estimated to be discharged into the environment without adequate treatment, and few countries have standards for safe reuse of wastewater or faecal sludge.

Such a situation is ineffective in achieving a primary purpose of sanitation: protecting the public's health. The Guidelines on sanitation and health (WHO, 2018) provide a useful point of departure in addressing public health criteria in sanitation regulation. A key priority within RegNet is to promote and strengthen the public health regulation of sanitation services. This will be done by supporting regulators in ensuring public health risk assessment and risk management are embedded within and across the entire service chain.

The way small water supplies are defined differs by country. Legal, policy and/or regulatory instruments commonly refer to criteria such as population served, number of service connections, volume of water supplied, technology type, management model and/or geographical location. Refer to the Guidelines for drinking-water quality: small water supplies (WHO, 2024) for a description and scope of "small water supplies" as referred to in this context.

# 4. Strengthen capacities for implementing good practices and evidence-based responses to emerging regulatory challenges

For drinking-water and sanitation services, some public health risks are emerging that regulators need to identify and respond to. These include the impacts of climate change, antimicrobial resistance and emerging contaminants of concern such as microplastics and perfluoroalkyl and polyfluoroalkyl substances.

Facilitating rapid exchange and sharing of preventive or management measures of these emerging challenges will remain a priority for RegNet. Additionally, documenting and promoting good practices in addressing emerging regulatory challenges will be a key focus.

Table 2. RegNet 2023–2030 objectives

Key actions	Example priority activities	Outputs	Expected outcomes
Convene/participate in periodic meetings with key partners to advocate for including public health criteria in drinking-water and sanitation regulations  Develop guidance and tools to support integrating public health criteria in regulations  Advocate for applying risk-based approaches in drinking-water and sanitation management at key forums  Provide targeted support to countries	Develop/provide input and feedback on draft guidance on developing standards and regulations for wastewater and faecal sludge  Develop/contribute to development of training modules on regulatory aspects of drinking-water guidelines  Document case studies of good practices and successes in applying risk-based regulatory frameworks for drinking-water and sanitation services	Technical advice, guidance and advocacy to support including public health criteria in drinking-water and sanitation regulations  Technical advice and guidance to support collecting and analysing risk management data and their application in regulatory decision-making  Accelerated uptake of public health criteria in regulations, resulting in more comprehensive regulations that adequately address public health criteria  Regulatory frameworks are strengthened to reflect risk management approaches and to foster progressive improvement and greater compliance with regulations, leading to improved service delivery and public health outcomes	Accelerated uptake of public health criteria in regulations, resulting in more comprehensive regulations that adequately address public health criteria  Regulatory frameworks are strengthened to reflect risk management approaches and to foster progressive improvement and greater compliance with regulation leading to improved service deliver and public health outcomes
Objective 2: Promote oversight/reg	ulation of small water supplies, inclu	ding in rural areas	
Key actions	Example priority activities	Outputs	Expected outcomes
Expand membership of RegNet to ncrease representation of members tasked with oversight/regulation of small water supplies  Collaborate with regional regulator networks, sector partners and other key partners to document case studies on regulating small water supplies	Engage with WHO regional/country offices, and at key forums to identify new members  Provide feedback to support finalizing guidance on selecting water quality field test kits  Convene conference events on regulating small water supplies	Technical advice, guidance and tools to support progressive strengthening and oversight of small water supplies  Documentation and dissemination of experiences and good practices in regulating small water supplies	Expanded membership base, with balanced geographical and service type representation Increased capacity for regulating small water supplies Increased and improved management of small water supply systems

Table 2. continued

Objective 3: Promote oversight/reg	ulation of sanitation, particularly no	n-sewered systems		
Key actions	Example priority activities	Outputs	Expected outcomes	
Expand membership of RegNet to include more regulators mandated to regulate sanitation	Engage with WHO regional/country offices, and at key forums to identify new members  Contribute to the development of a roadmap on regulating sanitation  Collaborate with regional regulator	Technical advice, guidance and tools to support progressive improvement in oversight of sanitation, including non-sewered systems  Documentation and dissemination of experiences and good practices in regulating sanitation, through blogs, conferences and the RegNet communication platform	Expanded membership base, with balanced geographical and service type representation	
Increase sanitation-related content within RegNet meetings and workplans, including development			Increased capacity for regulating sanitation services Increased and improved management of sanitation services, including non-sewered systems	
of tools/resources to support sanitation regulation	networks to develop data collection systems to support regulating non-			
Collaborate with regional regulator networks and sector partners to document case studies and good practices on sanitation regulation	sewered sanitation Convene conference events on regulating sanitation	·		
Provide targeted support to countries				
Objective 4: Strengthen capacities	for implementing good practices and	evidence-based responses to emergi	ing regulatory challenges	
Key actions	Example priority activities	Outputs	Expected outcomes	
Facilitate early communication on causes of and responses to outbreaks of waterborne diseases	Develop an emerging challenge system on the RegNet communication platform	Technical advice, briefs and tools on specific emerging regulatory challenges developed	Improved capacity to address and respond to emerging regulatory challenges, including early	
Support learning and awareness on emerging regulatory contaminants/issues	Develop a brief on specific emerging contaminants and/or regulatory issues	Partnership and collaboration with relevant partners and stakeholders to demonstrate / document good	identification of potential risks and issues, enabling timely preventive and corrective actions	
Facilitate development of appropriate regulatory tools and related capacity-building		practice in addressing specific emerging regulatory challenges		
Provide targeted support to countries				

The objectives outlined in this strategic plan reflect a focus on tackling some of the key challenges in regulating drinking-water and sanitation services. These challenges include: maximizing limited resources by applying a risk-based approach to drinking-water and sanitation regulation; addressing regulatory gaps, particularly in the context of small water supplies and non-sewered sanitation; and strengthening capacities in identifying and responding to emerging regulatory challenges.

The next 7 years offer significant opportunities to shape more effective action in addressing these challenges, ultimately contributing to achieving universal access to safely managed drinking-water and sanitation services.

Aligning with key stakeholders including regional regulator networks, governments and partners to strengthen regulation is essential to achieving the objectives in this strategic plan.

# References

WHO (2018). Guidelines on sanitation and health. Geneva: World Health Organization (https://iris.who.int/bitstream/handle/10665/274939/9789241514705-eng.pdf?sequence=25, accessed 28 September 2023).

WHO (2022). Guidelines for drinking-water quality: fourth edition incorporating the first and second addenda. Geneva: World Health Organization (https://iris.who.int/bitstream/handle/10665/352532/9789240045064-eng. pdf?sequence=1, accessed 28 September 2023).

WHO (2024). Guidelines for drinking-water quality: small water supplies. Geneva: World Health Organization (https://iris.who.int/handle/10665/375822?search-result=true&query=small+water+supplies&scope=&rpp=10&s ort\_by=score&order=desc, accessed 14 April 2024).

