

Outcomes Report

7th IWRF – International Water Regulators Forum

14 – 15 SEPTEMBER 2022
Copenhagen, Denmark



Forum background and structure

The International Water Regulators Forum (IWRF) is the international meeting of the global network of regulators of the International Water Association (IWA). It gathers high level representatives of regulatory authorities and officials of agencies with regulatory and supervisory functions over the provision of water, sanitation, and water management services. Discussions are structured around highly interactive sessions that combine short inspirational presentations and roundtable discussions led by the speakers. The roundtable discussions provide an opportunity for participants and speakers to analyse and debate in detail each topic, share comparative experiences, address proposed questions, and suggest recommendations for consideration in the plenary.

The 7th IWRF ran over two days on 14-15 September 2022 during the IWA World Water Congress & Exhibition (WWC&E) in Copenhagen, Denmark. Around 180 participants from different geographies graced this year's forum. The theme of this year was **"Regulating Water Services in Times of Increasing Natural, Social, and Economic Uncertainty"**. The Forum consisted of three closed sessions and two open sessions. The closed sessions were invite-only, where regulators had the opportunity to discuss the burning issues related to the forum's main topic. The closed sessions' discussions focused on how regulatory functions are being delivered in times of increasing natural, social, and economic uncertainty. Additionally, the open sessions consisted of a recap and a congress session. In the recap session, the discussions held in the closed sessions were summarised and presented to the general WWC&E audience, providing an opportunity for other relevant stakeholders to engage with regulators and explore the interlinkages between regulation, science, policy and practice. Moreover, the 7th IWRF congress session aimed to benefit from the academic richness and expertise from the general IWA 2022 WWC&E audience.



Rationale

Governments increasingly rely on regulation to deliver positive externalities to society by constantly enhancing service quality levels, safeguarding public health and preserving environmental integrity in water management. Today's water sector regulators across the globe are facing increasing levels of uncertainty stemming from natural, social, and economic dimensions, hampering their ability to support service provision and water management. This situation hinders regulators' capacities to fulfil their mandates. While the COVID-19 pandemic deeply affected societies worldwide, challenges associated with climate change may be much harder to deal with. Moreover, international conflicts and global supply chain issues affecting producers of materials and inputs intensively used in the water sector will diminish the ability of regulators to set balanced tariffs and targets. Lastly, regulators must face these severe challenges while dealing with political systems greatly weakened by polarisation and populism amidst growing social inequalities. In this challenging context, it is vital to explore not only how different regulatory authorities are coping with current volatile contexts, but also explore new tools and strategies they might use in the future. Therefore, the 7th IWRF's primary purpose was to discuss good regulatory (re) design practices in dealing with unpredictable circumstances and conditions. The forum also discussed how to increase the capacity and willingness to generate learning processes from experiences amid increasing unpredictability, to build the foundations of an effective strategy for resilient regulatory services provision.

DISCLAIMER: This report presents proceedings from the presentations and discussions from the 7th International Water Regulators Forum. The report includes paraphrased syntheses of session remarks. The information and views set out in this report do not systematically reflect the official opinion of the IWA Secretariat.

Regulating water services in times of increasing natural, social, and economic uncertainty

Opening address



Tone Madsen

Head of the Water Regulatory Authority at the Danish Competition and Consumer Authority – DCCA-KFST, 7th IWRF Programme Committee Chair (Denmark)



Tom Mollenkopf

IWA President (Australia)

Tone Madsen

Ms Tone Madsen welcomed delegates to Copenhagen and to the 7th IWRF. She expressed that even though attendees came from different parts of the world and multiple contexts with various realities, they all faced a common challenge: regulating the water sector. She pointed out that the Forum's purpose was for delegates to share knowledge and experiences with each other no matter where they came from. So, she encouraged the delegates to freely share their challenges during the 2 days of the forum, as they were not competitors, but rather allies. Every participant had something to give and to share. She concluded by requesting delegates to share freely and find help and inspiration: "Be present and give, share, and learn and be inspired."

Tom Mollenkopf

Mr Tom Mollenkopf began by welcoming the participants to the 7th IWRF, emphasizing how critical regulators are to IWA. He stressed that each individual brings a unique perspective, background and observations to contribute to policy and development in the water sector. Furthermore, he highlighted 5 significant points to the participants:

- 1) The Forum gives an opportunity for regulators to participate in the broader conference, increase interaction and understand the opportunities and issues in the water sector.
- 2) The Forum also allows an opportunity for a free exchange within the regulator's group to share ideas across boundaries and cross experiences. Regulators can contribute to innovation and policy development.
- 3) Regulators are invested in the outcomes and performance of the water sector. They are interested in the direction of the sector.
- 4) Complex problems require many minds and with the regulators' knowledge, diversity and experience, the outcome of the sector will be broad.
- 5) Regulators and practitioners should work together to bring a change in the attitude to have constructive development.

He concluded by stating that regulators should be enablers and not blockers and that today's session was on how we enable constructive change.

Session 1

“Except in cases of force majeure”: The impact of environmental and social disruptions on economic regulation. Who should bear the costs of incremental risk?



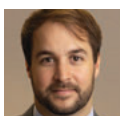
Funke Adepoju

Executive Secretary at Lagos State Water Regulatory Commission – LSWRC (Nigeria)



Vera Eiró

President of the Board at Water and Waste Services Regulation Authority – ERSAR (Portugal)



Gabor Kisvardai

Head of Secretariat at Hungarian Energy and Public Utility Regulatory Authority – MEKH (Hungary)

1.1. SETTING THE SCENE BY SESSION CHAIR

By Funke Adepoju

Ms Funke Adepoju set the scene for session 1, explaining how environmental issues have continued to impact negatively on bridging the water gaps globally, and consequently have the biggest impacts on the most vulnerable. She stressed that governments need to pragmatically address this challenge and make decisions on what constitutes environmental destruction.

1.2. DROUGHT AS A FORCE MAJEURE EVENT IN CONCESSION AGREEMENTS — THE ROLE OF THE REGULATOR

By Vera Eiró

Dr Vera Eiró's presentation focused on how the government and regulators responded to drought in Portugal. She explained the mitigation measures that are being put in place such as incentives to promote joint management of water services, strategic plans for water services and specific recovery and resilience facility investments.

She also stressed that changing circumstances mean that certain regulatory conditions no longer are appropriate. Regulators need to ensure they have the technical rigour to attend to different crises, responsibly responding to these crises on a case-by-case basis. She later urged regulators to be enablers and present solutions, which can provide certainty in uncertain times: *“Regulators should provide the solution to people's problems.”*

She concluded by stating that there was no single possible solution to the problems in Portugal and other countries. It is advisable to know how the current system is working and its characteristics, and then get the most suitable solution to implement.

1.3. HOW TO BE CERTAIN IN AN UNCERTAIN ENVIRONMENT? — THE HUNGARIAN REGULATORY EXPERIENCE

By Gabor Kisvardai

Mr Gabor Kisvardai's presentation focused on regulating in uncertain times and the regulatory experience in Hungary. He began by explaining the effect of the pandemic on the water sector, specifically the significant changes it has brought in residential water consumption, demographic effects, the revenues and how costs of service providers have been restructured and changed in different ways.

As an example, he discussed how the introduction of remote working brought about serious demographic effects where people moved out of city to the suburbs or countryside. This resulted in a huge effect on residential consumption as many industries were shut down and this had an influence on revenues. Tariffs for non-households are different, thus utilities had a change in their costs structure due of this. He also explained how the energy crisis was shifting these circumstances further.

As a response to these issues, the government and the regulator in Hungary put in place some measures. The government's response included:

- Direct financial assistance to the sector (central budgetary funds, emergency funds, etc.)
- Mitigation of the impact of energy price increases (VAT reduction, tax exemptions, credit, and liquidity loans)
- Energy demand reduction (block tariffs, awareness raising campaigns, energy efficiency projects)

The Regulatory responses included:

- Extraordinary cost review process (does the regulator have the power? What is the rate of cost recovery?)
- Increased water tariffs (affordability issues, full cost recovery or partial?)
- Signalling and sector analysis (notifying the government to intervene the frequency of ad hoc data collection increases)

Later he highlighted on the advantages of multisector regulation in Hungary. Multi-sector regulators provide the technical and professional base to manage cross-sectoral challenges and allow the regulator to become a technical companion to governments. Regulators can also act to assist in signalling and analysis for the government, forecasting and structuring new tariff programmes to manage for changing paradigms.

1.4 . ROUNDTABLES QUESTIONS AND ANSWERS

The roundtables provided an opportunity for regulators to discuss and share experiences related to the causes, impacts and solutions concerned with economic regulation. Below are the responses to the three questions posed to the participants at the different roundtables.

1. What are the main sources of uncertainty in your country impacting economic regulation?

- During the COVID-19 pandemic, some regulators directed utilities not to disconnect but it led to customers relaxing to pay their bills and this was a burden on utility sustainability.
- Political instability.
- Economic – the rate of inflation is increasing.
- Environmental – the effects of climate change. This is a good time to be stronger as regulators because this is the time which requires our expertise as regulators.
- Droughts.
- Lack of coordination.
- Political risk – regulators are not fully independent, governments influence decisions.
- Poor water governance.
- Institutional fragmentation.
- Lack of clarity.
- A shift in consumption from industrial to domestic, during the COVID-19 pandemic.
- War.
- Lack of compliance with water policies.
- Lack of asset management.
- Lack of political commitment of many countries.
- Fluctuating costs of energy and electricity which affect water prices.
- Demographic changes – housing and economic growth.

2. How are regulators dealing with the increased uncertainty on economic regulation?

What are the tools, strategies or approaches used?

- Regulators should not only rely on data from the past but should also use current data to forecast the future and make recommendations.
- Government should be involved in discussions about regulation.
- Affordability measures should be analysed
- Investment in innovation.
- Transparency system.
- Putting up response strategies which can be monitored to see how they are managing the impact of the COVID-19 pandemic.
- Need to promote efficient water use.
- Develop climate change screening tools to mitigate its effects.
- Develop customised solutions.
- It is important to have KPIs.
- Good asset management.
- Increase the use of green energy.

- Should develop more skills, train more people.
- Digitalisation.
- Different tariffs for different customers.
- Reviewing prices yearly is more sustainable than quarterly.
- Introduce new sources of water such as wastewater reuse.
- Include stormwater as an important component of services.
- Role of information and monitoring as essential tool to deal with these challenges.
- Role of regulators to promote better management of small and medium utilities and giving them more skills and digitisation and modernisation.
- Change culture to improve new approach to asset management, regarding aging of the pipes.
- Subsidies from government in times of uncertainty.
- Benchmarking analysis.
- Response strategies.

3. Who should bear the cost of the incremental risk?

- There is the need to look at government subsidies and alternative sources of funding to make sure utilities are sustainable and customers are not overburdened.
- Government should provide grants to mitigate the impact of climate change.
- Taxpayers' money through the government.
- Regulators to customize on solutions. No single solution for all problems that we have. Different tariffs for different customers, depending on number of people in families. Low-income consumers can pay 20% of tariffs. Low-income families were paying no tariff during pandemic.
- Polluter pays or agent of change.

1.5. KEY QUESTIONS

The following are the key questions that emerged from the roundtable discussions:

1. How do we balance investments on residents? What is the right balance, cost-benefit? What is the role of regulator to invest in new infrastructure to enforce resilience?
2. When does climate change stop being force majeure?

Session 2

Demonstrating the added value of regulation in times of political instability: How can regulators defend themselves against political instability and its perverse impacts on governance and regulatory regime?



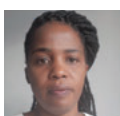
Tone Madsen

*Head of the Danish Water Regulation Authority –
DCCA-KFST (Denmark)*



Vitor Saback

*Director at the National Water Agency – ANA
(Brazil)*



Yvonne Magawa

*Executive Secretary at the Eastern and Southern Africa Water and
Sanitation Regulators Association – ESAWAS (Zambia)*



Patrick Lester N. Ty

*Chief Regulator at the Metropolitan Waterworks and Sewerage
System Regulatory Office – MWSS-RO (Philippines)*

2.1. SETTING THE SCENE BY SESSION CHAIR

By Tone Madsen

Ms Tone Madsen set the scene for session 2 and urged regulators to be concrete on how to respond to challenges being faced. She also encouraged the audience to think of what was needed and the tools that can be used to respond to the different challenges.

2.2. PROTECTING REGULATORS' POWERS AMID INCREASED POLITICAL INSTABILITY: THE ROLE OF THE REGULATOR

By Vitor Saback

Mr Vitor Saback presentation focused on the importance of regulation for Brazil, the good regulatory practices, Brazil's structural reform agenda and the challenges of water and sanitation in Brazil. He also discussed how regulators mandates can be safeguarded in times of increasing political instability.

2.3. REGULATION IN TIMES OF POLITICAL UNCERTAINTY

By Yvonne Magawa

Ms Yvonne Magawa's presentation centred around how politics affects regulation and the effects of political instability on regulation. She began by stating that the ultimate responsibility for service provision lies within the national government. She expressed that it is important to note that the responsibility and accountability of a mandated service provider (a utility, for example) is subsidiary to the higher-level responsibility and accountability of the government. She further stated that although the national government may delegate responsibility to utilities (public, quasi-public, or private) or municipalities, the ultimate responsibility for ensuring the human right to water and sanitation remains with the national government.

She emphasised that regulation plays a key role in improving service delivery in a country. A functioning regulatory system is a central feature of good sector governance. In addition, she explained that the premise of regulation is to ensure that government policy is implemented, and service providers are accountable and supported in delivering efficient, affordable, reliable, and quality services.

Later, she shifted the attention to the effects of political instability on regulation. Some of the impacts included slow sector reforms to drive change, undue political interference on the activities of the regulator, lack of political support for regulation (autonomous regulator disbanded/not operationalized), inadequate enabling environment (poor policy and legal backing), and low sector investments (slow service delivery improvements/deteriorating services).

She then presented two case studies on the effects of political instability in Burundi and Central Africa Republic and their impacts on water supply and sanitation. She concluded by demonstrating the added value of regulation.

2.4. CHANGING REGULATORY CLIMATE AMIDST POLITICAL INSTABILITY: THE CASE OF METRO MANILA

By Patrick Lester N. Ty

Mr Patrick Ty's presentation focused on the history and evolution of water regulation in Metro Manila - the Capital Region of the Philippines. He discussed the 1995 water crisis, the privatization of the publicly owned water management and supply systems, the creation of the Metropolitan Waterworks and Sewerage System (MWSS) Regulatory Office through the concession agreements, and how political influence affected the concession agreements and the regulation of water and wastewater services in the region.

Mr. Ty presented the newly signed revised concession agreements, highlighting the provisions that were advantageous to the consumers and those that were beneficial to the national government. He discussed the recent grant of legislative franchises to the concessionaires and the issuance of an Executive Order that not only strengthened the powers and independence of the Regulatory Office but further protected the interests of the consumers while ensuring water and wastewater utility sustainability. He particularly emphasized that the executive order finally empowered the MWSS RO to prescribe and impose the appropriate sanctions, disallowances, penalties, and/or fines on the concessionaires for any verified violation of their contractual obligations, or any failure to efficiently and prudently provide water, sewerage, and sanitation services to all of their customers.

Since the management and regulation of the water sector in the Philippines remain fragmented and uncoordinated, he concluded his presentation with an expression of support for the passage of legislations that will establish a national Department of Water and a Water Regulatory Commission that would ensure the availability, accessibility, and affordability of water and wastewater services throughout the country.

2.5. ROUNDTABLES QUESTIONS AND ANSWERS

Below are the responses to the question posed to the participants at the different roundtables:

What is most important in demonstrating the added value of regulation to politicians and utilities?

- Trust building. Trust in the regulator from politicians and stakeholders to present to them relevant data in a clear and compelling way.
- Sell the benefits of the regulation to the public. Make the public understand the advantage for the regulation and pass on to politicians.
- Credibility and technical expertise. Providing useful answers and useful data and powerful recommendations. Some sort of rating of the country, how effective is regulation in that country. Idea of supranational regulation.
- Trust. Robust legal and governance framework, buy-in from customers.
- Transparency. Need to come up with authentic documents
- Translation. Tailor-made communication. Infographics for the parliament instead of long pages. Training sessions for journalists before the crisis.
- Someone to pass the blame to.
- Trust. It has a lot to do with reliable reporting, from customers and public as well. Performance review and better services at large.
- Base condition. Make sure you have financial and administrative autonomy (or else forget about it). The tool: proactive relationship building with politicians, those in government and opposition. Consumer organization and representative groups. And with media (generic and specialized).
- Robust information system.
- Trust, regulation agenda. Respect of long-term contract must be in the agenda.
- Urgency. Conversation around regulation should be passed on to politicians and utilities. Especially in water sector where regulation is still being developed.
- Regulation for resilience. Demonstrate to citizens that you can really achieve great things through regulation.
- Valued data! Tool: robust information system.

Session 3

Coping with climate change: Climate smart regulation to boost utilities uptake of climate action and circularity



James Enright

Water Networks Manager at Commission for Regulation of Utilities – CRU (Ireland)



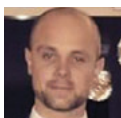
Itai Sagi

Director of Urban Water and Sewage Infrastructure Department at Governmental Authority for Water and Sewage, Israeli Water Authority – IWA (Israel)



Diego Polania

Expert Commissioner at Water Regulatory Commission – CRA (Colombia)



Jacob Victor Hansen

Special Advisor at Danish Competition and Consumer Authority – DCCA-KFST (Denmark)

3.1. SETTING THE SCENE BY SESSION CHAIR

By James Enright

Mr James Enright set the scene for the third session. He gave a short background of the speakers of the session and the importance of coping with climate change.

3.2. ISRAEL WATER SECTOR: CLIMATE SMART REGULATION

By Itai Sagi

Mr Itai Sagi's presentation focused on the Israeli water sector challenges and the climate smart regulation. He began by giving an overview of the current Israeli water situation and the challenges being faced. He then discussed the climate smart regulation which focused on how to cope with climate change and circularity. Israel has suffered drought for many years, and in response, they require a different governance structure and technical expertise to manage this. One example of this is the push to reduce the Non Revenue Water (NRW) in recent years. He also highlighted on how the increased variability in rainfall patterns is influencing the way that systems and governance are managed. A further example is of the need for all users of water to be metered and publicly managed. He concluded by stating that a closed-loop financing and management of water is central to this.

3.3. COLOMBIAN REGULATION ON ENVIRONMENTAL INVESTMENTS: INNOVATIVE APPROACHES TO INCENTIVISE WATER SOURCES PRESERVATION

By Diego Polania

Mr Diego Polania's presentation touched upon the policy and regulatory context in Colombia and the role of CRA (Colombia's regulatory commission). He explained that CRA's mandate is to improve the market conditions for the country's public services of drinking water, sanitation and solid waste management. CRA defines the tariff methodologies and sets the rules and regulations that all utilities must comply with. CRA's main functions are to:

1. Promote competition among service providers.
2. Issue tariff methodologies based on which providers establish tariffs.
3. Determine the quality standards of service provision.
4. Define efficiency criteria, indicators, and models for evaluating corporate management.

He later focused his presentation on CRA's developmental framework approach and the water scarcity and environmental investments in Colombia. CRA is currently proposing to include environmental services and costs with positive externalities into tariff methodology. However, he stressed it was the responsibility of utilities to integrate these new approaches.

3.4. UTILITIES SPENDING IN NATURE AND CLIMATE: WAYS TO BALANCE PRICE AND ENVIRONMENTAL RETURN

By Jacob Victor Hansen

Mr Jacob Victor Hansen's presentation focussed on balancing price and environmental returns in Denmark. He expressed that positive environmental outcomes can be costly, and the main issue is on how to pass these on to users in a sensitive and sustainable way. To include more environmental services, the revenue cap will increase, and this will in turn mean tariff increase, and hence consumers will pay more. This is a very difficult role for the regulators. In Denmark, it is not up to the regulator whether utilities offer new services, but they do the calculations on weighting the costs and benefits. He pointed out that consumer willingness to pay and comparison with equivalent projects are key to this.

3.5. ROUNDTABLES QUESTIONS AND ANSWERS

Below are the responses to the two questions posed to the participants at the different roundtables.

1. What is the role of the regulator in dealing with climate change in your country?

- To advise the government to use multi water sources.
- Economic regulators should be concerned with resilience and sustainability.
- To drive efficiency in all forms (i.e., scale, energy, general business operation etc.), this will help improve resilience.

2. Which tools or approaches are you using to counteract increased environmental uncertainty?

- Water security plans (e.g., long term water service plans, pre-planned methods to respond to crisis).
- Guidelines – regulated entities are being moved in the right direction. Regulators should have proper baseline information to make its decisions.
- New planning methodologies, seasonal tariffs, communication during crisis.
- Water loss reduction strategies.
- Regulators should be more flexible and collaborate with other stakeholders to get more insights on uncertainties.



Session 4

Regulating water services in times of increasing natural, social & economic uncertainty: Recap and panel discussion



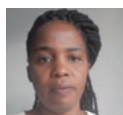
Carlos Diaz

Strategic Programmes and Engagement Manager at the International Water Association – IWA (United Kingdom)



Vera Eiró

President of the Board at Water and Waste Services Regulation Authority – ERSAR (Portugal)



Yvonne Magawa

Executive Secretary at the Eastern and Southern Africa Water and Sanitation Regulators Association – ESAWAS (Zambia)



Diego Polania

Expert Commissioner at Water Regulatory Commission – CRA (Colombia)

4.1. SETTING THE SCENE BY SESSION CHAIR

By Carlos Diaz

Mr Carlos Diaz set the scene for the recaps and panel discussion. He began by giving an overview of the International Water Regulators Forums. He talked about previous forums and how the themes and topics of this year were determined. He concluded with encouraging the participants to join the IWA Water Policy and Regulation Community of Practice.

4.2. SESSION 1,2 & 3 RECAP

A recap of sessions 1, 2 and 3 were presented by Mr Diego Polania, Ms Yvonne Magawa, and Dr Vera Eiró, respectively.

4.3. PANEL DISCUSSION



Carolina Latorre

Consultant on Water Supply and Sanitation Policy, Institutions, and Regulations – World Bank (Chile)



Sophie Tremolet

Water Security Director Europe, The Nature Conservancy – TNC (France)



Jaime Baptista

President of the Board, Lisbon International Center for Water – LIS-Water (Portugal)



Kate Medicott

Team Lead Sanitation and Wastewater at WHO Regulators Network (Switzerland)



Oscar Pintos

President of Association of Drinking Water & Sanitation Regulators of the Americas – ADERASA (Argentina)

The essence of the panel was to discuss the panellists' views of the 7th IWRF as well as future thoughts and recommendations for next editions.

PANEL DISCUSSION QUESTIONS

1. How do you find the forum of today (the topics, takeaways)?
2. How do you see this evolving and going forward? What is your recommendation?

PANELLISTS' VIEWS

- Mr Jamie Baptista supported the composition of the current forum. He recommended the need for more regulators and the need to inform authorities of the importance of regulators. Furthermore, he stressed the importance of an interregional approach. He concluded by expanding on the definition of a regulator as being someone who looks back, looks ahead, sends links for partnerships, and solves several problems as they would usually do in their daily work.
- Ms Sophie Tremolet recommended stretching the thinking on the role of a water regulator. She recommended a continuity between each forum that currently happen every two years. She also added that water regulators should expand their horizons.
- Ms Carolina Latorre suggested the possibility of partnerships because of common problems. She emphasized that water regulators need to understand the Policies, Institutions and Regulations (PIRs), and IWA can bring non-conventional speakers together. She also suggested that regulators need to sell the regulatory model. Many people didn't even know they were regulators even though their tasks were what a water regulator does.
- Mr Oscar Pintos began by expressing that regulators have the same problems and therefore there is a need to continue the dialogues. Additionally, he suggested that more activities should be designed in different forms for different contexts, so that equity can be addressed.
- Kate Medlicott highlighted the need to boost the enabling capability of water regulators more and more. She also added that there is the need to cancel the mindset that regulators are heavy handed or stifle the innovations but rather are enablers of innovation.

KEY QUESTIONS RAISED

1. How can regulators provide certainty in uncertain times?
2. We are evolving to a point where decentralized systems, green infrastructure, alternative water supplies are more common, making it less clear who needs to be regulated as a water services provider. How can the IWA community respond to this?
3. How do we address inequity through regulation? How helpful is it to try to address these challenges through regulation?
4. What do we need to do about regulation to expand them to address racial inequity in the globe?

KEY TAKE AWAYS

1. Regulation is becoming a key tool in ensuring successful management of water and wastewater globally. Communication between regulators internationally is important to understanding synergies in regulatory approaches. Once, the regulation community was only regulation of utilities, but it has grown today to include regulators at every part of the water cycle.
2. There is need for a regulatory regime in place to enable investments to flow. This is particularly important in relation to management of water security and environmental conservation.
3. Paradigm shifts in society and climate are requiring new approaches to development of regulation. Regulators don't need to become enablers, they already are enablers. We aren't going to solve all the problems in the water sector through regulation alone, we need the combination of PIR. Progress must start with a rigorous assessment of bottlenecks and capacity. We don't need to reinvent the wheel at every conference. Often there is another regulator on the other side of the world facing the same problem, what can we learn from each other?
4. We continue to see that regulators globally are facing the same problems; we can learn a lot about alternative and creative approaches to resolving these challenges.
5. The regulator must be the first to understand the future direction of the sector to be able to act pre-emptively, not just react.
6. Regulators must include other authorities to ensure a more collective vision in solving water challenges.
7. We need to continue to repeat the idea that regulators are creative, flexible and responsive, and not heavy handed and slow, to get partners to consider their role as an enabler, rather than a blocker of innovation.
8. We are evolving and moving to semi-decentralized systems, green solutions and alternatives which makes the borders between conventional and traditional regulations fuzzier, we need long-term enabling.
9. What drives investments? Enable investments in nature for water security. Nature-based solutions can enable us to address these problems. Cannot be tackled on full grey infrastructure.

10. Work with regulators, not in adversarial way, but in a collaborative manner.
11. Growing population is another stressor.
12. Urgency for dramatic change.
13. From contingency approach to a water secure one.
14. Green, resilient, and inclusive development.
15. Need to understand the context; be able to explain and manage those relationships.
16. Progress must start with a rigorous assessment of root causes and bottlenecks. Is it a lack of capacity? Is a new training programme needed? Or are intergovernmental relationships not working? Are the policies in place not enabling the services that are needed?
17. Private stakeholders to come in with more investments, allow innovation for new solutions.
18. Resilience within water sector and within agricultural sector.
19. A lot of countries are new to regulation. what is needed to setup a regulatory agency?
20. Evolving in a world to cope with uncertainty moving to semi-decentralized systems to have in bigger areas but local solutions that are decentralized.
21. We are moving to more green solutions, and to alternative solutions for water supply. Borders, stormwater, urban planning – boundaries get fuzzier and fuzzier
22. Responsibilities is an emerging issue. IWA should pay attention to this. The regulators should pay attention to this, the scope of regulatory, the limit of regulatory action is not so obvious.
23. Regulators needs to have a unit for thinking about the future!
24. Regulator needs to encourage water sector to think more broadly about what their role is.
25. Transparency for consistency and fairness, translation for simplification, and trust that decision by water regulators is for good.
26. Inter-regional collaborations are the way forward (Israel-Portugal drought patterns were similar), Denmark's price and returns balance may be adopted.
27. Befriending environment is a costly affair.
28. Regulators become technical hands of the government.
29. We need to explain why water regulators are important.
30. Regulatory regime is what drives the investments.
31. We need to plan uncertainty, for certain we will have uncertainty.



Session 5

Coping with uncertainty: Forward-looking approaches to cope with uncertainty and help deliver regulatory mandates



Jaime Baptista

President of the Board, Lisbon International Center for Water – LIS-Water (Portugal)



Kevin Parks

Expert Group on Resource Management at UNECE (Canada)



Julián D. López-Murcia

Author and Founding Partner of Nalanda Analytica (Colombia)



Maria Salvetti

Head of Water and Waste Area at Florence School of Regulation – FSR (France)



Yvonne Magawa

Executive Secretary at the Eastern and Southern Africa Water and Sanitation Regulators Association – ESAWAS (Zambia)



Daniela Patiño

Programme Coordinator Latin America and Strategic Partners at the Water Integrity Network – WIN (Germany)

5.1. SETTING THE SCENE BY SESSION CHAIR

By Jaime Batista

Mr Jaime Batista set the scene for the fifth and last session of the forum. He explained how regulators should cope with uncertainty and the forward-looking approaches.

5.2. GROUNDWATER REGULATION UNDER DEEP UNCERTAINTY

By Kevin Parks

Dr Kevin Parks' presentation focused on regulation of groundwater. He began by expressing that groundwater is more challenging to regulate than surface water as it is considered a "common pool resource". He explained that groundwater systems are types of complex adaptive systems, governed by deep uncertainty which requires more sophisticated approaches to manage. It's necessary to be more principle-based than prescriptive when regulating such systems – this is the only way to manage for deep uncertainty. He concluded by stating that predictive modelling and monitoring remain important to support decision-making under such circumstances.

5.3. DESIGN THINKING METHODOLOGIES IN WATER REGULATION

By Julian Lopez-Murcia

Dr Julian Lopez-Murcia's presentation focused on the tools and strategies for uncertainty. He advised that design thinking methodologies can improve participation and anticipation of uncertain events and outcomes. Such a process allows to move from regulating for stakeholders, to regulating with stakeholders. He later discussed the 5 steps for legal design: identification; characterization; ideation; prototyping; and implementation.

He advocated that legal design could be tremendously useful in making the policy design process much more participatory, from problem identification and solution generation to the evaluation of prototypes before they become mandatory, as well as during the evaluation process at the implementation stage.

He also suggested that applying design thinking in the process of preparing water regulation could substantially improve the ability of regulators to respond more quickly and effectively to the needs and concerns of different actors, in addition to the increasing pressures on the use of natural resources. This could improve the quality of regulation, for instance, by allowing more feedback. Better feedback, in turn, could improve the ability of regulators to anticipate problems that normally only arise during the implementation of regulation.

He concluded with stating that design tools could also be used to communicate regulation more effectively.

5.4. ECONOMIC REGULATORS' ROLE IN SUPPORTING THE ECOLOGICAL TRANSITION OF WATER AND SANITATION SERVICE OPERATORS

By Maria Salvetti

Ms Maria Salvetti discussed how economic regulators should promote and incentivize the ecological transition of water service operators by: 1) Reflecting environmental and resource costs; 2) Supporting the transition to the circular economy; and 3) Addressing emerging pollutants.

She stated that regulators are trying to integrate environmental and resource costs. Nevertheless, regulator's mandates, practices and outlooks are still centred around regulating a natural monopoly, not regulating externalities. There is a mandate gap and a lack of coordination, tariff charges are too low to address water scarcity.

She later expressed that regulators are more likely to support circular economy practices incidentally rather than intentionally. Coordination between water-related and non-water-related governmental agencies is essential to managing for externalities. She acknowledged that innovation funds and regulatory sandboxes are useful in supporting a transition to more support of circular economy outcomes.

In her findings relating to emerging pollutants, she learned that economic regulators of water supply and sanitation are limited in their capability to respond to emerging pollutants because of their mandates and legal competencies. Most economic regulators are therefore not implementing practices to address specific emerging pollutants beyond pollutants that are already targeted. She suggested incentivizing investments in micropollutant treatment and polluter-pays schemes to address emerging pollutants.

5.5. STATUS OF THE WSS REGULATION LANDSCAPE IN AFRICA

By Yvonne Magawa

Ms Yvonne Magawa gave an overview of the Water Supply and Sanitation (WSS) landscape in Africa. She began by expressing that the prioritization of water over sanitation is not effective for Africa as it has proved to be for the developed world. She then shared the survey results of regulatory frameworks for water, sanitation and hygiene (WASH) activities across Africa. Results show that most countries have a mixed regulatory arrangement based on multiple regulatory models. Responsibilities are usually split between several actors, sometimes constraining effective WSS regulation. Furthermore, it was found that regulation by agency is the regulatory model typically benefiting from the strongest legal backing and good sector performance. She explained that implementing effective regulation requires advocacy and continuous strengthening to respond to evolving sector dynamics.

Later she expressed that significant work is now required in many African countries to translate policy objectives, or the provisions set out in legal instruments into strengthened or reformed regulatory frameworks. The findings of the study should be able to guide various interventions and actions by sector stakeholders towards improving sector performance. It is envisaged that a dedicated Africa-wide WSS Regulators Association would be opportune to be established for strengthening regulation at scale across the continent through collaboration. She concluded with stating that the first Africa WSS regulators meeting is being convened in 2022 to strengthen regulatory structures.

5.6. INTEGRITY AS A TOOL TO DEAL WITH MAJOR UNCERTAINTIES: LESSONS LEARNT FROM WORKING WITH REGULATORS IN LAC AND AFRICA

By Daniela Patiño

Ms Daniela Patiño's presentation centred on integrity during the process of regulation. She stated that 6-26% of costs are lost due to corruption – another kind of leakage facing the water and sanitation sector. And this is only the financial cost, not accounting for all the connected externalities.

She expressed that integrity is key to face uncertainties in the water sector. Regulating for integrity can have multiple flow through benefits in improving service provision and can improve trust and legitimacy of regulators. She explained that the regulator is a key enabler of integrity through 1. Enabling sustainability of the public sector policy 2. Protecting Consumers, and 3. Overseeing service provision.

In addition, she stated that integrity starts from within and quoted Giovanni Espinal (Regulatory Agency in Honduras – ERSAPS): “One of the main challenges for regulators is to promote integrity within their own organisation before engaging with water providers and users. We are constantly facing complex questions such as: what integrity for us is, how do we manage our own resources, and how do we take decisions.” She stressed that the regulator must be safeguarded against corruption, capture and undue interference from stakeholders to achieve an effective and legitimate regulatory system.

She explained that building integrity in regulation can:

- Improve service delivery, also to leave-no-one-behind, and ensure resources are used more fairly and effectively.
- Increase transparency and accountability for strategic decision making.
- Have a positive effect on trust in regulatory entities (from service providers, other governmental agencies, international donors, and society as a whole).
- Increase responsible management of resources and greater efficiency in processes.
- Provide a bedrock to boost attractiveness and sustainability.

She concluded by stating that utilities that are regulated with integrity have better performance. Integrity is responsibility, accountability, but it is also better management.

5.7. KEY QUESTIONS AND TAKE AWAYS RAISED IN THE SESSION

Key questions

1. How can regulators pave the way for more opportunities, and more synergies in the sector?
2. How do you regulate the unregulatable (groundwater)?
3. We see that in many countries we are still very far from achieving basic cost recovery. If we are trying to reconsider systems, how do we manage this transition?
4. We hear frequently about the systematic lack of investment in infrastructure (referred to report available from the DANVA stand). How do we incentivize utilities to increase the pace of infrastructure renewal?

Key points

To deal with uncertainty, regulators must first have a substantial grasp on the current issues facing them, and getting the basics right:

- a. Ensuring efficiency.
- b. Ensuring effectiveness.
- c. Promoting sustainability.
- d. Creating value through water services.
- e. Regulators can be thinking about engaging with utilities as though utilities are a responsible part of the catchment.

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For more information visit: <https://worldwatercongress.org/international-water-regulators-forum/>

ABOUT THE INTERNATIONAL WATER ASSOCIATION

The International Water Association (IWA) is the leading network and global knowledge hub for water professionals, and anyone committed to the future of water. IWA, which is a non-profit organisation, has a legacy of over 70 years.

IWA connects water professionals in over 130 countries to find solutions to global water challenges as part of a broader sustainability agenda. IWA connects scientists with professionals and communities so that pioneering research provides sustainable solutions.

In addition, the association promotes and supports technological innovation and best practices through international frameworks and standards. Through projects, events, and publications, IWA engages with its members to stimulate innovative ideas and content in support of IWA's vision of a water-wise world.



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