



SESSION DESCRIPTION FORM 2.

10TH WORLD WATER FORUM

This Session Description Form 2 is for the specified program of the session. Please complete this form no later than 28th of February 2024.

**The session description 1 (online form) is separately requested for the session coordinators to deliver a concise session outline with the contact info and the logistical requests.*

Session Code and Title:

T6A3. Methods and tools for measuring and improving Smart Water Management Capabilities (Water4All)

Session Coordinators (Name, Position, Organization, email, mobile number):

Katrien Van Hooydonk
Strategic Partnerships & Internationalisation at WaterClimateHub VITO
Co-lead Pillar E Internationalisation of Water4All Partnership
katrien.vanhooydonk@vito.be
+32470865293

Session Description including objectives and expected outcomes (500 words maximum):

The final session of topic 6A ‘Smart Water Management’ will share experiences with methodologies and tools for Smart Water Management. It explores how to learn from others and draw lessons in terms of human capacity, technical aspects, financial development, and governance, thus supporting the transition towards the achievement SDG6, SDG17 and the 2030 Agenda.

This session delves into examples and best practices of tools, methods and technologies to gain further insights into water dynamics, quality, and consumption patterns, ranging from advanced sensor technologies for real-time monitoring to data analytics and modelling techniques. Robust data management strategies are explored, ensuring the efficient collection, storage, and analysis of vast datasets, thereby aiding evidence-based decision-making.

Furthermore, recognizing that the water crisis extends beyond geographical borders, the session emphasizes the significance of international cooperation. By looking at the bigger picture, participants explore collaborative frameworks and shared methodologies, fostering a global approach to Smart Water Management. It serves as a catalyst for forging partnerships, aligning diverse tools and methods, and collectively addressing the complex interplay of climate change and water resource management on a worldwide scale.

This session will therefore be based in three main pillars to which it will provide useful and actionable recommendations to work further on:

1. Boost technological innovation for smart water systems
2. Lessons learnt on impact scale from implementation of smart water management solutions
3. Enhance opportunities for smart water social innovations

Detailed Session plan:

ESTIMATED TIMING	ITEM DESCRIPTION / ROLE	SPEAKERS	SPEAKERS STATUS (OK OR TBC)
5 min	Welcome, introduction, takeaways from previous sessions 6A1 and 6A2, agenda of this final session	Ignacio Deregibus, IWRA (France)	OK
5 min	Opening testimony: the value of water in the Hindu Balinese culture	Nyoman Suman Atha, Rikolto (Indonesia)	OK
Total: 40 min	Keynote presentations: real examples of implementation of tools/methodologies with measured impact	Moderated by Katrien Van	OK

		Hooydonk, VITO/ Water4All (Belgium)	
8 min	Water quality and environmental monitoring in the Tanganyika and Kivu Lake Basin through technological innovation, data sharing and community engagement	Sylvain Tusanga, Lake Tanganyika Authority (Burundi)	OK
8 min	Practice and Challenges of Digital Twin Water Conservancy Construction	Liu Hairui, China Water Resources (China)	OK
8 min	Smart water management in the agricultural sector: adopted automation, remote monitoring allowing for the follow-up of existing irrigation programs	Ahmet Şeren, General Directorate of State Hydraulic Works (Turkiye)	OK
8 min	SCADA system for leakage detection, pressure control, record keeping and effective water distribution	Asif Kabir, Dhaka Water Supply and Sewerage Authority (Bangladesh)	OK
10 min	Q&A for keynote speakers	Moderated by Katrien Van Hooydonk, VITO/ Water4All (Belgium)	OK
Total: 30 min	Panel discussion of solution providers and stakeholders: What makes the solutions smart? What is the impact of your solution and how can it become even smarter?	Moderated by Helena Alegre, LNEC (Portugal)	OK
Panelist 1	Local Water Forums for water quality data for national regulatory data submitted to SDG 6.3.2 (ambient water quality)	Nina Raasakka / Anham Salyani, UNEP (Nairobi)	OK
Panelist 2	River modelling software as a tool to assist governments and decision-making	Prima Sekarsari, Antea Group (Belgium)	OK
Panelist 3	Introduction of new recently published technologies: Virtual flowmeters and night-time minimum flow prediction	Sangsoo Lee, Korea Water Resources Cooperation (South Korea)	OK
Panelist 4	Decentralized systems	Jacob Bossaer, BOSAQ (Belgium)	OK
Panelist 5	Aquawatch	Alex Held, CSIRO (Australia)	OK
Panelist 6	Smart Watershed Health Monitoring System in the Upper Citarum Sub-watershed: parameters and status	Irfan Pramono, Government (Indonesia)	OK
5 min	Conclusion remarks	Katrien Van Hooydonk, VITO/ Water4All (Belgium)	OK

Detailed Session plan: Keywords to describe the content of the session (5 keywords max.)

Digital? monitoring
Smart, smarter, smartest water management
Multistakeholder data sharing
Science - policy - society interface
Real-world examples of impact

Promotional Short Session Description (3-5 sentences) in media-friendly language:

Smart, Smarter, Smartest water management: in this session, real-world examples are shared with their impact, pro's and cons, challenges and solutions, learning curve and missing links to make the water management even smarter. Look at the bigger picture to integrate the different water systems, and connect technological and social innovations: water does not stop at administrative borders nor at the end of the pipeline, the value of water also depends on its societal relevance. Join this session to be inspired on how Smart Water Management can be implemented, and which tools and methodologies can support you in this.



Expected outcomes, concrete solutions, impacts, and follow up linkages with events and initiatives after the Forum

Outcomes:

- Insight in Smart Water Management through real-world examples of implemented solutions in different contexts
- Better understanding what Smart Water Management in implementation is about: adding the social, cultural and holistic perspective
- Impact monitoring of Smart Water Management
- Creation of an updated visual on Smart Water Management

Possible follow up events:

- 22 March 2024 - Water-oriented Living Labs, Water4All workshop @ Lisbon, Portugal
- 4-7 June 2024 - IAHR Europe Congress @ Lisbon, Portugal
- 11-15 August 2024 - IWA World Water Congress & Exhibition @ Toronto, Canada
- 25-29 August 2024 - World Water Week @ Stockholm, Sweden

Networks of initiatives and projects:

- Water4All Partnership
- Capitan Taki - integration of outcomes and lessons learned in program

Expected number of participants

- 50-100 pax
- 100-150 pax
- 150-200 pax

Preferred Room Type (no information)

- Theatre (with 5 chairs on the podium + 1 speaker stand)
- Classroom
- Roundtable