

ICT4WATER Workshop: Digital Tools and Technologies enhancing water resilience

June 19, 2024 – 9.30-16.00 . A Water Innovation Europe (WIE) event

Location: Blue Point, Brussels

Organised by the ICT4WATER cluster: www.ict4water.eu

TIME	Session/Keywords	Description
9.30-9.35	Welcome	Water Europe- <i>Durk Kroll/Andrea Rubini</i>
9.35-9.55	RTD/REA- Introduction	RTD (<i>Bertrand Vallet</i>) REA (<i>Vasileios Tyriakidis</i>)
9.55-10.00	ICT4WATER cluster- Structure and Action Groups (AG)	Introduction: How can the actions and show cases related to each ICT4WATER cluster AG contribute to Resilience? (<i>Lydia Vamvakeridou-Lyroudia KWR</i>)
Showcases from mature, finishing and recently finished projects thematically grouped by the (most) relevant Action Group. <i>Chairing: Lydia Vamvakeridou-Lyroudia (KWR)</i>		
Enabling Data Sharing Action Group: Water Data Management Ecosystem and Enabling Data Sharing through FIWARE		
10.00-10.10	Preparing the ground for a Water European Data Space -	WATERVERSE : Water Data Management Ecosystem (WDME) - The Concept. (<i>Gerasimos Antzoulatos -CERTH</i>)
10.10-10.20	Enabling data sharing for a Smart City through FIWARE	WATERVERSE : Real time flood management with FIWARE and WDME for a Smart City (Etteln/ Germany). (<i>Fernando Lopez-FIWARE</i>)
Intelligent and Smart Systems Action Group: Advances in Artificial Intelligence and harnessing the potential of Digital Twins for the Water Sector		
10.20-10.30	Designing Resilient Urban Water Systems for an uncertain future	Water-Futures : Advances in Artificial Intelligence approaches for resilient urban water systems (<i>Lydia Tsiami- KWR</i>)
10.30-11.00	Coffee break	
11.00-11.10	Digital Twins and real time analytic tools	WATERVERSE and DIGIWATER : Leveraging the potential of water digital twin and water analytics tools in Limassol-Cyprus. <i>George Millis (PHOEBE)</i>
11.10-11.20		ARSINOE :Digital twin for the impacts of flooding to critical infrastructure- The case of Torbay, UK- (<i>Gareth Lewis University of Exeter, UK</i>)
Critical Infrastructure Protection Action Group: Assessments for Contamination events, disruptions to services due to natural hazards, and stress testing for cyber-physical threats.		
11.20-11.30	Investigating contamination for first responders	PATHOCERT : PathoINVEST: Waterborne Pathogen Contamination Investigation (<i>Demetris Eliades- University of Cyprus/KIOS</i>)
11.30-11.40	Assessing disruptions for interconnected Critical Infrastructure Systems due to natural hazards	ARSINOE : Disruption to urban services: The Torbay (UK) cascading failure online interface for Critical Infrastructures (<i>Mehdi Houry, University of Exeter, UK</i>)
11.40-11.50	Stress testing for cyber-physical threats	STOP-IT : PROCUSTES: A stress testing platform for cyber-physical threats on urban water systems. Germany/Berlin – Spain/Barcelona – Norway/Oslo (<i>Christos Makropoulos-National Technical University of Athens</i>)
Actor Engagement and Co-creation AG: Immersive experiences and serious gaming for engagement and raising awareness.		
11.50-12.00	Serious Game online open to all, for raising awareness	NEXTGEN : The NEXTGEN serious game for water in the circular economy. (<i>Mehdi Houry, University of Exeter, UK</i>)

	and informing about Circular Water	
12.10-13.30	Lunch	
13.30-13.40	Immersive Tools developed or used by ICT4Water Cluster for Actor engagement and co-creation	Multiple projects (NEXTGEN , PATHOCERT , ARSINOE iWAYS , ULTIMATE , iWIDGET , B-WaterSmart) Immersive experiences with Digital Tools (<i>Ilias Karachalios – National Technical University of Athens</i>)
Business Models Action Group- Circular economy tools for a water smart industry		
13.40-13.50	Decision Support System (DSS) for optimal WWTP operational and sustainability performance	DEEP PURPLE : Conversion of diluted mixed urban bio-wastes into sustainable materials and products in flexible purple photo biorefineries Linares/Spain (<i>Vasileia Vasilaki & Evina Katsou-Imperial College UK</i>)
13.50-14.00	Interactive Decision Support Tool for Water Smart Industrial Symbiosis (WSIS)	ULTIMATE : An interactive online tool for decision co-creation focusing on water, allowing the exploration of circular economy and industrial symbiosis paradigms (Netherlands, Greece, Israel) (<i>Mehdi Khoury-University of Exeter</i>)
Policies Action Group- Hotspots and vulnerability to climate change, assessment of potential future environmental policies		
14.00-14.10	Assisting Bathing Water quality policies implementation	WATERVERSE : Developing a qualitative model of water quality to protect and inform wild swimmers in the river Dart, UK (<i>Albert Chen, University of Exeter, UK</i>).
14.10-14.20	Multi hazard hotspot identification for prioritising policies and interventions	IMPETUS : Climate change hot-spot identification and prioritization service (HIPS) for all EU biogeographical regions (<i>Christos Makropoulos-National Technical University of Athens</i>)
14.20-14.30	Assessing future environmental policies for sustainability- a Nexus approach	NEXOGENESIS : Using simulation tools to support robust environmental policies in an uncertain future- Lielupe River (Latvia-Lithuania) (<i>Henry Amorocho-Daza- IHE Delft</i>)
14.30-15.00	Coffee break	
Policy recommendations for building water smart and resilient society and economy for Europe		
15.00-15.50	Building resilience to climate change and sustainability for Europe. Policy recommendations	Panel discussion Panellists: Bertrand Vallet (RTD), DG ENV/C1 , National Representation (Belgium) TBD Selected from the cluster: Gabriel Anzaldi (EURECAT) and Evina Katsou (Imperial College) Moderator: Richard Elelman (EURECAT)
15.50-16.00	Closure-summing up-next steps	ICT4WATER (<i>Lydia Vamvakeridou-Lyroudia</i>) +Water Europe (<i>Andrea Rubini/Durk Kroll</i>)

Notes:

- Each Showcase presentation needs to conclude with one (at least) Policy recommendation related/originating from the specific showcase. Please include this on your last slide. These recommendations will be used as feeders for the panel discussion.
- Extended descriptions of the showcases will be uploaded at the ICT4WATER cluster website (www.ict4water.eu) after the event, together with a report from the event (by Eloy Hernandez-EURECAT and Sander Smit)
- Each showcase presentation will last 7 minutes, with 3 minutes for discussion. Please keep to the time. The detailed description of each Showcase will be in the booklet in any case with public access.