

ICT4Water cluster Structure and operation

Dr Lydia S. Vamvakeridou-Lyroudia

KWR Water Research, NL and University of Exeter, UK

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ICT4WATER-Scope

- Created in 2013 with 5 sister projects. Today with over 60 EU funded projects.
- As a cluster of EU-funded projects on ICT and Water
- Combining the value of water to the value of data
- Encompassing the whole water cycle.
- Acting as a hub for innovative activities contributing to EC strategic views
- Creating synergies, organizing and participating at major exhibitions and scientific events, disseminating results through major channels, including publications of plans and actions.
- Contributing to the digital transformation of the water sector at EU level → *Digital Single Market for Water Services Action Plan*.

EU Publications-Assisting EU policies

2018- Digital Water Action Plan (under revision/updating-2022)

2020- Business Models for Digital Water Solutions

2021- The need for Digital Water in a Green Europe

2021- Vision and showcases

Other important action: 2021: Link to the energy BRIDGE cluster and participation in their publications

2022- Revision and update of the Actions and Activities of the Digital Action Plan



The EC landscape today for Digital Water

What was the situation some years ago (when the ICT4WATER cluster was created)

- Gaps on ICT were more focused on:
- DSS and strategic/operational “optimal” management of water systems
- Smart water applications development (real time)- Computational strengths, sensors
- Standardisation/Interoperability (still not developed enough for the water sector)
- Cross-sector initiatives not prominent
- **Emphasis on “Smart”, “optimal”.**

What is the situation now and for the future

- **Broader aspects** are related to ICT for Water- Green Deal policies related to ICT (→cross sector synergies, e.g. with the energy sector, climate change issues are now prominent)
- **New themes** (e.g. Circular Economy, Resilience to climate change, citizen science) linked to the water sector
- European **Data Spaces** being promoted and created, also for water (Various sectors, Ethics, Legal issues, Structure)
- Smart Cities/**Digital Twins**, IoT ecosystem, **AI methodologies**, AI **credibility and robustness** issues becoming mainstream and prevalent (e.g. explainable AI)
- **Supercomputers and new IT architectures** emerging (e.g. cloud, edge, quantum computing)
- **Emphasis on “Intelligent” , “Holistic” , “Across” (Themes, sectors), “Co-creation” ,**

Action Groups/ Structure and role

ICT4WATER: Organised in 6 Thematic Groups

- A. Enabling Data Sharing (Interoperability and Data sharing/exchanging)
 - B. Intelligent and Smart Systems (AI, data analytics, smart sensors, DSS...)
 - C. Critical Infrastructure Protection (Physical and Cyber Threats)
 - D. Actor Engagement and Co-creation (including AR, VR, Serious Gaming and Citizen Science)
 - E. Policies
 - F. Business models
- Working in specific thematic Areas- Volunteers from the cluster projects
 - Identifying trends, gaps and needs- conducting interviews with the projects
 - Preparing and working on actions and publications together with the EC (REA)

Plans and actions for 2022-2023

- A. Finalised and revise the (new) Digital Water Action Plan –to be presented today
- B. Activate new projects (and persons) within the AG
- C. Promote the clustering of sister projects and projects with similar topics for common actions and synergies (e.g., DW2020)
- D. Promote and continue synergies with clusters from other domains (e.g. BRIDGE...)
- E. Produce updated publications on specific topics
- F. Disseminate the ICT4WATER and its work to the EC, conferences and events (including digital events), e.g. Water Europe events

The meeting today (organised by WE)

- Introduction of the ICT4WATER cluster
- Each Action Group will present their main topics, challenges, plans and (some) relevant EU projects
- Physical Attendance: The attendees will split in 6 Tables, one Table for each AG
- Remote Attendance: There will be only 1 digital (remote room), so no breakout rooms.
- Discussion:
 - The main challenges for each Action Group. There are some questions and challenges, which WE has already printed to be distributed, but more challenges may be discussed.
 - We want your opinions, views and suggestions. The moderator for each Table and for the remote participants will report back.
- This is important for the future actions, policies and calls related to HE.

Thank you for your attention
and your cooperation
(after the break)!

Lydia.vamvakeridou-Lyroudia@kwrwater.nl

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