

# ICT4Water cluster Structure and operation

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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

2023- Updated public at [www.ict4water.eu](http://www.ict4water.eu)



# 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, NEXUS... climate scenarios/data)
  - B. Intelligent and Smart Systems (AI, data analytics, smart sensors, DSS...)
  - C. Critical Infrastructure Protection (Physical and Cyber Threats to water infrastructures, including Resilience)
  - D. Actor Engagement and Co-creation (including AR, VR, Serious Gaming, Citizen Science, Capacity Building)
  - 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)

Thank you for your attention !

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