International Association of Hydrological Sciences (IAHS), Christophe Cudennec, Roundtable #3 on data and information

Open Science in Water

My name is Christophe Cudennec. I am speaking in my capacity of Secretary General of the International Association of Hydrological Sciences (IAHS), under the umbrella of ISC

From our association experience, the strength of the scientific community is the value adding of peer review, transparency, replication, comparative approach, synthesis building, agenda setting – These are all matters of data, information and knowledge management and we really need to guarantee these in the future.

Further, as a weakness, we perceive that research activities are too often isolated, and that the chain Scientific community-Institutions-Citizens is fragmented.

Filling these gaps could be a real "game changer" and, to do that, it is crucial to move towards "Open Science in water"

The UNESCO recommendation on Open Science frames a full paradigm shift and we have a corporate responsibility to implement this in the field of water.

- The first priority is to Open the scientific knowledge. Scientists and the community are inventing new mechanisms in that perspective, but we need support from States in changing the evaluation mechanisms and the relationships with the publication industry, away from narrow bibliometrics and unfair paywalls.
- The second priority is the generalisation of Open science infrastructures and FAIR sharing mechanisms, for sake of better monitoring and understanding water-related processes, interlinkages, crises, hazards and changes.
- The third priority is to reinforce dialogue with other knowledge systems and engagement with societal actors, from crowdsourcing, citizen science and indigenous wisdom towards a better corporate intelligence about hydroclimatic challenges and adaptation.

The scientific community has a self-organisation, reflexivity and imagination to progress on these actions, but the full paradigm shift will be possible only if States, multilateral mechanisms, private sector and others play the game with us.

Thank you