

Data sharing Innovation Technology

UN-Water Summit on Groundwater 2022
Session – Data and Information
Wednesday, 7th December
11:00 - 12:00



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

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WMO Unified Policy for International Exchange of Earth System Data Adopted in October 2021

- **Integrated Earth System data policy** –weather, climate, hydrology, ocean, atmospheric composition, cryosphere, space weather
- **Free and unrestricted data exchange**
- “Core” data (shall be exchanged) and “Recommended” data (should be exchanged)
- **Implementation of policy via regulatory material** regularly updated
- **Includes guidelines for national implementation and public-private engagement**



https://library.wmo.int/index.php?lvl=notice_display&id=22100#.Y1ZYjHZByUk

Standardization and brokering approaches for facilitating hydrological data sharing

WMO Hydrological Observing System (WHOS)

WHOS



Standardization approach
is key in making data more
findable, accessible,
interoperable and reusable



**compatible
and
complementary**



Brokering approach
addresses
technological, data and
format layers of
interoperability

WaterML2.0: Groundwater page 234

(https://library.wmo.int/doc_num.php?explnum_id=10530#page=234

[WMO-OGC Workshop "GroundWaterML2 standard" | HydroHub](#)

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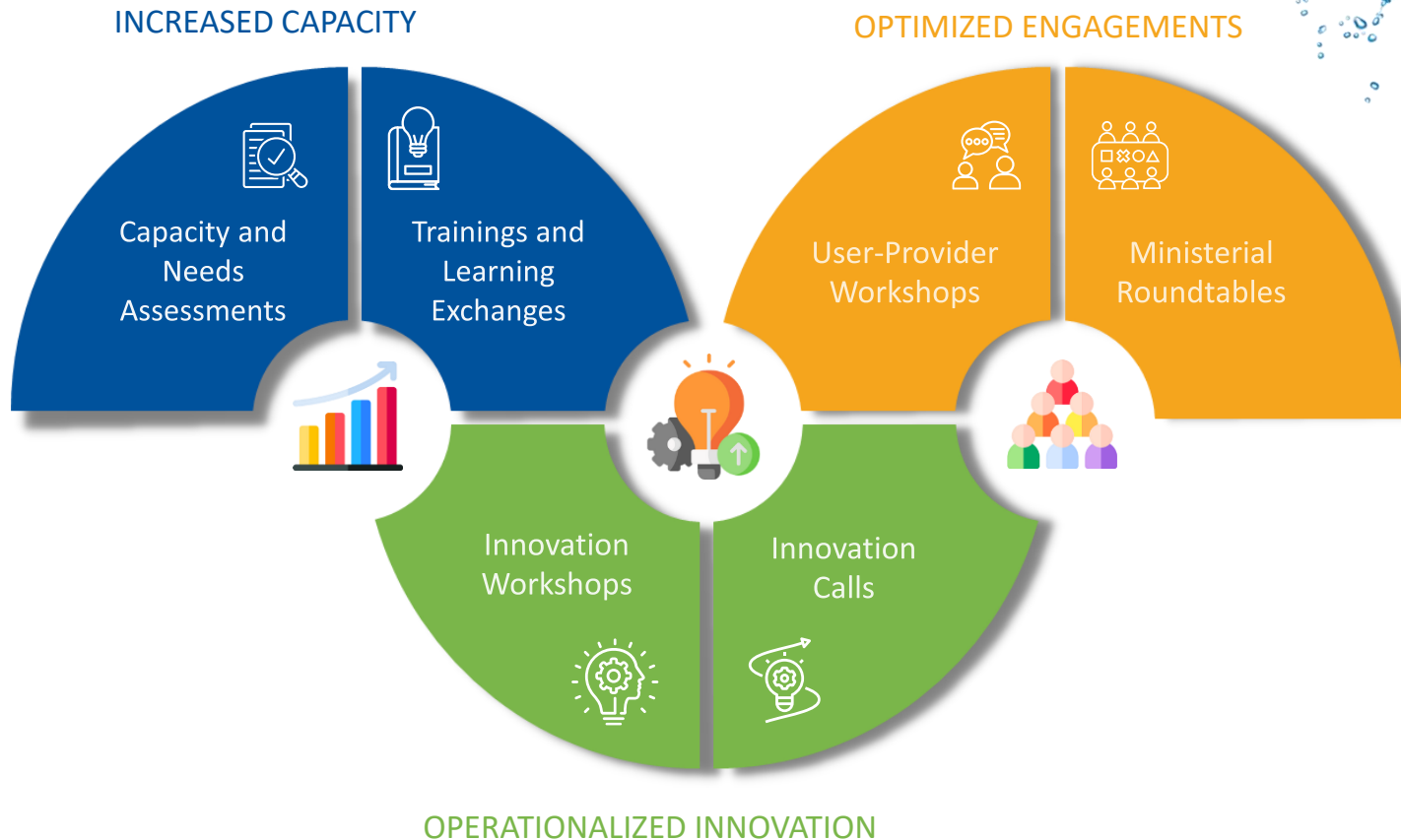


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WMO HydroHUB

The Global Hydrometry Support Facility

It strengthens fit-for-purpose and sustainable monitoring capabilities through innovation.



Hydrological Status and Outlook System (HydroSOS)



**An overview of the current
global hydrological status**



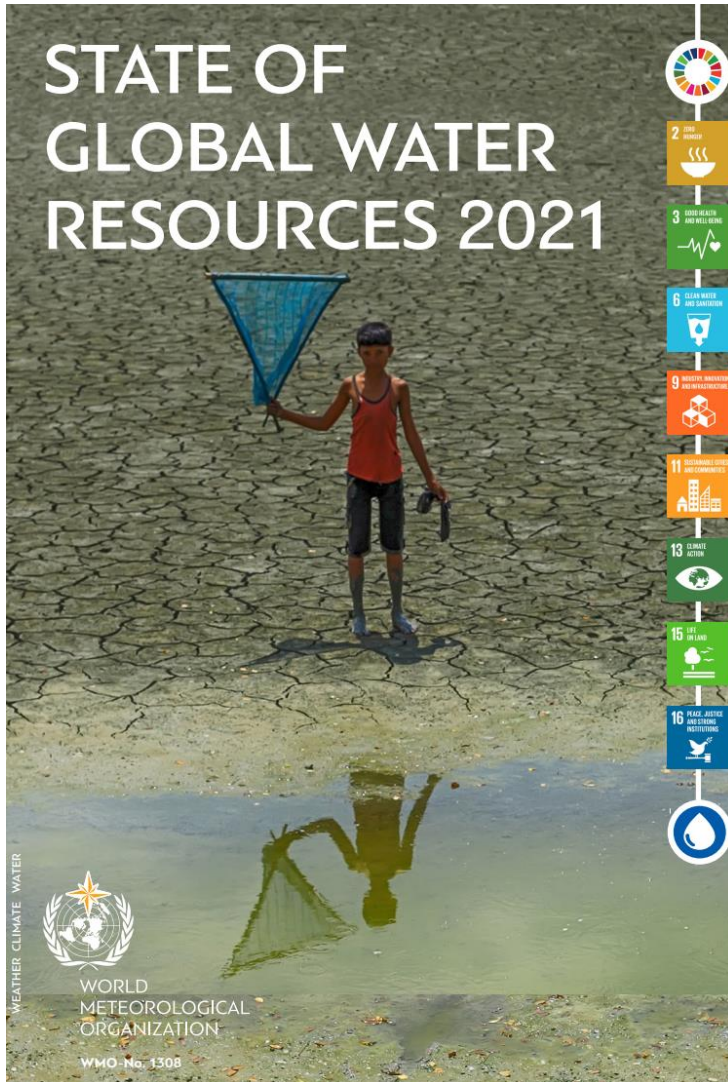
**An appraisal of where the
current status is significantly
different from 'normal'**



**An assessment of whether
this is likely to get better
or worse**

- There is currently no global system capable of assessing the current status of surface and groundwater systems or predicting how they will change in the immediate future (season and sub-seasonal).
- The System will be implemented with/for/by National Meteorological and Hydrological Services (NMHSs), offering simple, accessible hydrological information to the different stakeholders.
- When HydroSOS becomes globally operational, it will be a key input to the annual State of Global Water Resources report.





- The first WMO State of Global Water Resources 2021 report is limited to the conditions of **streamflow, terrestrial water storage and selected cryosphere** parameters.
- **WMO is committed to extending it to include groundwater, soil moisture and water quality in future editions.**
- **Sharing hydrological information in accordance with the WMO Unified Data Policy will help increase the validation process.**

Thank you Merci



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