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UN 2023 Water Conference Side Event

Global Water Analysis Laboratory (GloWAL) Network

Side Event Room 8, 12:30 – 13:45, Wednesday 22 March, UN HQ

Organized by: IAEA, UNESCO, WMO, UNEP, Eawag, iGRAC, IHE-Delft, El Salvador, Moldova, Namibia, Pakistan, Paraguay, St Kitts and Nevis, Switzerland, Tajikistan, USA, BGR Germany and WBG

Background

The International Atomic Energy Agency (IAEA) is the global centre for cooperation in the nuclear sciences and seeks to promote the safe, secure, and peaceful use of nuclear technologies. The IAEA does this through technical and scientific capacity development as well as technology innovation, development, and transfer. In this capacity, the IAEA has developed a number of networks that have made fundamental differences in ocean sciences, zoonotic diseases, emergency response preparation, and food safety networks. The IAEA is now bringing its considerable resources and expertise to improve water analysis capacity and contribute towards the attainment of SDG6. Many issues hinder the attainment of SDG6, including financial and scientific sustainability of actions, disparities in adequate infrastructure and capacities, and availability of data and information. Laboratories capable of generating reliable data, in a timely manner, are the cornerstone of any country's capacity to understand and manage their water resources, and to support national water governance. However, many countries do not have the technical and scientific resources to independently generate their own data. The GloWAL Network is intended to address this challenge and would support improved access to water analysis capacity and data generation, provide physical focal points for technical capacity activities, and drive innovation and cooperation in water analysis and management.

Water Action Agenda

The GloWAL Network's focus will be on establishing, developing, and coordinating national technical capacity in water analysis. In its initial phase, the network will have regional sub-networks in Africa, Latin America and the Caribbean, Asia and the Pacific, and Central Asia and will incorporate SIDS. Partnerships between developed and developing countries will be encouraged to support the growth of network nodes. Member States and laboratories working with the IAEA can apply to be one of three different types of nodes within the network, Anchor, Growth and Development Nodes. The GloWAL Network would facilitate the following specific activities that support SDG6, and the Water Action Agenda.

- Provision of analytical services for the analysis of water samples, including isotope analyses, and participation in interlaboratory proficiency tests to ensure the validity of the data being generated and international acceptance of analysis results
- Facilitation of technical and scientific capacity development actions including hosting of training fellowships and exchange of technical staff through IAEA programmes, including the technical cooperation programme and coordinated research.
- Development of national, regional and/or interregional R&D and technical cooperation projects to address water management problems
- Stimulation of critical thinking and innovation development that addresses region specific needs
- Sustainability of laboratories through cross-pollination of ideas and actions.
- Integration of data management platforms for secure curation of data
- Reporting of SDG6 indicators

[Global Water Analysis Laboratories \(GloWAL\) Network | Department of Economic and Social Affairs \(un.org\)](https://www.un.org/development/desa/poverty/data-inequality/water/glowal/)

Key Issues discussed (5- 8 bullet points)

1. The importance of improving regional and national water laboratory analytical capacity;
2. The need for effective and sustainable financial investment.
3. The significance of developing countries having the ability to independently generate their own water data;
4. Mechanisms to support coordination and harmonization of regional and transboundary approaches to water management and data reporting;
5. Strategies to enable more effective adaptation strategies to address climate change; and
6. The building of trust among water stakeholders through enhanced transparency.

Key recommendations for action (5 - 6 bullet points)

1. Development of the terms of reference for the network structure and operation, including agreement on the management board composition and identification of Scientific Advisory Board participants
2. Evaluation of a baseline reference position for analytical capacity to enable measurement of the impact of the GloWAL network.
3. Identification of initial nodes to start the network, including at both global and regional scale
4. Initial capacity and needs assessment conducted for first anchor node laboratories to compose the GloWAL Network
5. Development of training programme to build capacity in the laboratory nodes.
6. Identification of the financial mechanisms to support the national capacity development and network operation.