Vision and Strategy for Operational Hydrology & Action Plan

Hydrological Coordination Panel
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Organisation météorologique mondiale
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Decides that a **Plan of Action** should be prepared better to strengthen operational National Hydrological Services and the capabilities of national service providers that will support Member states’ efforts to fulfil the Long-term Ambitions.
Long-term Ambitions (Cg-18)

- No one is surprised by a flood;
- Everyone is prepared for drought;
- Hydro-climate and meteorological data support the food security agenda;
- High-quality data supports science;
- Science provides a sound basis for operational hydrology;
- We have a thorough knowledge of the water resources of our world;
- Sustainable development is supported by hydrological information;
- Water quality is known.
Vision Statement

“A cooperative global community addressing the growing challenges related to water extremes, water availability and quality, and food security, by advancing operational hydrology, through enhanced science, infrastructure, capacity building and related services, in the context of sustainable development”
Action Plan preparation

Long-term Ambitions = GOALS

Outcomes

Outputs
Action Areas

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Floods

Droughts and food security

Interfaces with science

Water resources management and sustainable development

Water quality
Guiding Principles (Cg-18)

- Hydrological data and products are a global public good: Free and unrestricted access to public and private high-quality hydrological data and products for all;
- Interoperability is key to improved services: Related disciplines, data, models, and risk management systems across all scales need to be interoperable and connected wherever it improves our analysis and optimization capabilities;
- Capabilities are catalysed through digital revolution: Using the full potential of the digital revolution to improve science and operations;
- Innovation and technology will improve: Established systems which will benefit from new sources of information;
- Hydrological services are recognized as being of high priority and of public interest having clearly defined roles and responsibilities and sustainable financing;
- New actors are incorporated along the hydrological value chain from data to product/service;
- Water quality and quantity issues must be addressed in an integrated, holistic way, following the principles of integrated water resources management (IWRM).
Data related outputs needed

• **Improved data policies**, financing schemes, and enhanced political arrangements to collect hydrologic data and derived products.

• Improved development, maintenance and **use of technical platforms to support data exchange for research** and science.

• **Increased availability and international exchange of hydro-meteorological data** for operational flood forecasting and early warning, and enhanced international cooperation especially for transboundary basins on free and unrestricted basis.
Data related outputs needed

• Availability of flood and drought related data and products with global and regional coverage for the use at national scale by Members.

• High resolution data and modelled information availability for actionable planning and operations at the basin scale.
Data related outputs needed

• Development of methods for standard assessment of data quality.
• Quality assured hydrometeorological data by NHSs generated through increased compliance to the culture of Quality Management Framework – hydrology (QMF-H).
• Increased national capacities to collect water-related data and transform them to useful/relevant products through capacity building.
• Creation of basic tools to assist members, including an archive of relevant information, tools for transforming data to information, and maintenance of essential “treasury/heritage” variable to support SD.
Consultations

• Identification, analysis and prioritization of gaps is ongoing at:

https://www.hydroref.com/wmo/hydrology/
Thank You for Your attention