

WEATHER CLIMATE WATER

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# **Terms of Reference**

Global Hydrometry Support Facility Phase II – Mid-term External Evaluation

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# **1. Brief Overview**

Project Title	Global Hydrometry Support Facility – Phase II	
Trust Fund / Project Code	421377 Phase II	
Starting Date	September 2021	
End Date	August 2026	
Type of Evaluation	Mid-term External Evaluation	
Evaluation Period	September 2021 – September 2023	
Countries covered	Cambodia, Costa Rica, Fiji, Laos PDR, Panama, Samoa and South Sudan	
Lead Department	Infrastructure (I)	
Organizational Unit	Earth System Monitoring (ESM)	
Financing Entities	Swiss Agency for Development and Cooperation (SDC), Inter-American Development Bank (IDB) and Climate Risk and Early Warning Systems (CREWS)	
Project cost	CHF 4,724,400 (donors + WMO)	
Evaluation Manager	Assia Alexieva	
Project Executive	Stefan Uhlenbrook	
Head of WMO Earth System Monitoring (ESM)	Dominique Bérod	
Project Coordinator	Sophia Sandström	
ToRs version	April 2023	

# 2. Project Background

## **2.1 Introduction**

The Global Hydrometry Support Facility (WMO HydroHub) was established in 2017 with the financial support of the Swiss Agency for Development and Cooperation (SDC) to enhance water monitoring systems in the world through innovation, and by bringing a broad range of stakeholders from different sectors together and providing them with technical guidance and support for sustainable operations.

The aim of Phase I (2017-2021) was to help expand a reliable and sustainable base of hydrometeorological data and information services in support of informed decisions and policy-making in water management.

In its Phase II that started in September 2021 for another 5-year period, the WMO HydroHub builds on the achievements and lessons learnt of Phase I, and further advances innovation in the hydrometry agenda through providing NMHSs and other actors with capacity, innovation and engagement opportunities in view of enhancing the effective delivery of hydrological services for disaster risk reduction, social and economic development, and environmental protection.

## **2.2 Achievements from Phase I**

The **main achievements** of the WMO HydroHub Phase I include:

## Increased capacity

- The WMO HydroHub supported the implementation of the WMO Hydrological Observing System (WHOS) in the La Plata basin and Arctic region, which led to the free and interoperable international exchange of hydrological data in these regions.
- The WMO HydroHub, together with the Associated Programme for Flood Management (APFM) and in collaboration with the Global Water Partnership (GWP) established a partnership with the Inter-American Development Bank (IDB) to conduct country-wide needs and capabilities assessments of NMHSs and other relevant organizations in Costa Rica and Panama.
- The WMO HydroHub led the development of a Distance Learning Course "Interoperable Data Exchange in Hydrology", in collaboration with the COMET Program (University Cooperation of Atmospheric Research, USA).

## Operationalized Innovation

- The WMO HydroHub conducted two Innovation Calls, aiming at fostering the operational uptake of innovative approaches and technologies by NMHSs in a way that makes their operations more cost effective and sustainable. Projects were implemented in Afghanistan, Bhutan, Tanzania, Belize and the Indian Himalayan region.
- Two Innovation Workshops were co-organized with the International Association of Hydrological Sciences (IAHS) and its working group on measurements and observations in the 21<sup>st</sup> century (MOXXI), bringing NMHSs, academia and the private sector together, in view of starting a dialog on how to foster uptake of innovative solutions in operational environments.

#### Enhanced Engagement

 The WMO HydroHub in collaboration with other WMO divisions developed, designed and conducted the WMO Global Hydrology Survey to collect information on governmental and non-governmental organizations that are responsible for operational hydrology within countries, their capabilities, structure, hydrological networks, data-management and hydrological forecasting characteristics. The survey results are helping to support regional priority activities, inform investment decisions and were used to shape and target the WMO HydroHub activities for its Phase II. The **main lessons learnt** of the WMO HydroHub Phase I include:

#### Innovation

Innovation is a means to achieve the goals of the WMO HydroHub and not an objective in itself. It is not appropriate to ring-fence innovation within the structure of the WMO HydroHub, as it led – in Phase I – to a lack of synergies between innovation and other WMO HydroHub activities, which are essential to achieve its goals. Instead, in Phase II, the WMO HydroHub will leverage innovation through concrete and punctual activities where appropriate, most effective and in synergy with other activities in view of achieving the overall goal.

Triggering innovation is partially a trial-and-error process and will inevitably lead to failures. Lessons learnt from these failures should be shared to help others learning from errors. A culture of smart failure will help learn and provide opportunities to suggest other elements for ideas to succeed.

#### Governance

An updated governance structure is necessary in order to reflect the fact that technical guidance is needed not only on the innovation activities but on all WMO HydroHub activities. The updated governance structure shall strengthen contributions to and from the WMO Constituent Bodies (Technical Commissions, Research Board, Regional Associations). Proposed new Terms of Reference (ToRs) for the AC are annexed to this Proposal (Annex I).

#### Work Efficiency

The WMO HydroHub stakeholders represented in its governing body must play a more active role in the delivery of the WMO HydroHub activities and their funding as well as supporting its outreach and growth. The work efficiency of the WMO HydroHub will be increased with more frequent monitoring and evaluation of progress by the AC. This would allow the AC to provide timely and strategic guidance to the WMO Secretariat and technical experts, in turn increasing work efficiency, mitigating risks and enabling more responsive management.

#### Communication

During Phase I, there was not enough communication between the WMO HydroHub, NMHSs and WMO Regional Offices. This did not maximize synergies with other ongoing and future development projects in the countries/regions. Also, communication between NMHSs and their key stakeholders and end-users were not fostered enough, in a way that ensures that the development of NMHSs reflects their needs and requirements. Activities outlined in the WMO HydroHub Phase II Proposal build on consultations with beneficiary NMHSs as well as the WMO Regional Offices.

## Spending of funds

Phase I experienced underspending of the project for two main reasons: 1) lack of implemented activities, and 2) 3-4-month delay in the start of the project team. For Phase II, it is suggested to provide regular financial updates throughout the duration of the project during AC meetings. This would help put light on potential under/overspending, have open discussions and help make decisions on how to overcome finance-related issues,

also in dialogue with other external funders at an appropriate point in time within the project implementation.

#### Implementation

As highlighted in the WMO HydroHub 2019 External Evaluation, tangible results were only visible at a late stage of Phase I. More time than expected was needed for the project to be operational (development of strategic documents). The Phase II Proposal has been designed in a way that includes specific activities and a timeline in order to allow enhanced monitoring and evaluation of progress.

The main achievements and lessons learnt of the WMO HydroHub Phase I mentioned above, along with the recommendations of the 2019 External Evaluation helped to shape and design the activities for Phase II as well as its operational structure.

#### 2.3 Overall goal and expected outcomes

In its Phase II, it is foreseen that the WMO HydroHub will reach the following overall goal and outcomes.

#### Overall goal:

Enhanced and sustainable monitoring and information support NMHSs' effective delivery of hydrological services for disaster risk reduction, social and economic development, and environmental protection.

#### **Outcome 1: Increased Capacity**

NMHSs, with improved staff technical expertise, sustainably operate hydromet monitoring systems with enhanced data management and improved national and international data sharing.

#### **Outcome 2: Operationalized Innovation**

NMHSs continuously develop and innovate their hydrometric approaches and technologies in collaboration with academia and private sector.

#### **Outcome 3: Optimized Engagements and Investments**

NMHSs catalyse development opportunities and impact for the overall hydromet community through strengthened internal and external engagements that offer greater visibility, knowledge sharing and communication.

#### **2.4 Governance**

The WMO HydroHub governing body, the Advisory Council (AC) is placed at a high level, falling into the Hydrological Assembly as a body of the WMO Congress. The Hydrological Assembly considers progress with the WMO HydroHub and its future plans. The Hydrological Assembly – which convenes every 4 years as part of the WMO Congress – also approves any changes to the ToRs and Membership of the current AC and Think Tank (TT). The WMO Technical Commissions – Infrastructure Commission (INFCOM) and Services Commission (SERCOM) – are kept informed of project workplan and progress.

#### The WMO HydroHub Governance Structure is schematized below:



WMO HydroHub Governance Structure

## **2.5 Project Implementation**

The WMO HydroHub is part of WMO's Earth System Monitoring (ESM) Division – *in the Infrastructure Department* – which oversees WMO's activities on monitoring and information systems on water, cryosphere and ocean. The ESM team supports the implementation of the various WMO HydroHub activities. The Hydrological and Water Resources Services Division (HWR) – *in the Services Department* – which promotes the effective use of hydrology in sustainable development to reduce the risk and impacts of water-related disasters and supports effective environmental management at international, regional, national and basin levels, also supports the implementation of WMO HydroHub activities.

The WMO HydroHub team comprises three full time members: a project Coordinator, a project Officer and a Communication Officer (short-term). The team is part of the ESM Division and benefits from close collaborations with team members from both the ESM and the HWR Divisions as well as from other departments and teams within WMO.

## 2.6 Overall Budget

The overall budget of the project (donors + WMO) amounts to CHF 4,724,400.

# **3. Evaluation Purpose, Scope and Objectives**

## 3.1 Context

Two external evaluations were included in the WMO HydroHub Phase II Project Proposal that was approved by the SDC in August 2021, and which serves as basis for the SDC – WMO Agreement that was signed in September 2021. The first external evaluation will be conducted halfway into the Phase II project duration, whereas the second external evaluation will be conducted towards the end of Phase II.

## **3.2 Purpose and objectives**

The main purpose of the mid-term external evaluation is to provide an independent assessment of the implementation progress of the project in the period September 2021 – September 2023, through an analysis of relevance, effectiveness, efficiency, coherence and sustainability of the project activities.

The specific objectives of the evaluation are as follows:

- 1. Assess the extend to which the recommendations of the WMO HydroHub Phase I External Evaluation have been addressed in the design of Phase II;
- Assess the level of implementation of the project activities within the evaluation period against those laid out in the WMO HydroHub Phase II Logframe and its set of indicators;
- Assess the relevance, effectiveness, efficiency, and coherence of the project's activities, as well as the engagement process with countries in developing proposals;
- 4. Identify existing or potential bottlenecks to the successful implementation of planned activities and provide recommendations for future activities;
- 5. Assess the extent to which measures are being put in place to ensure impact and sustainability of outcomes of the project;
- 6. Assess communication and knowledge sharing strategies so far, in view of making the WMO HydroHub a "Global Hub for Hydrometry".

The evaluation's purpose is to:

**Learn and improve**: To provide useful and relevant information to ongoing and future activities, explore why implementation actions and interventions have been successful or not, provide suggestions on how to strengthen the project.

In other words, the evaluation is envisioned as a formative appraisal which takes stock of past performance but is oriented towards improving future work. The evaluation can also be used to draw useful lessons on the implementation of a complex cross-cutting project which involves contributions from and collaborations with multiple WMO Secretariat divisions, technical programmes and essentially all levels of the WMO governance.

The primary audience of this mid-term review report is the Swiss Agency for Development of Cooperation, as the main donor for the WMO HydroHub Phase II and the Inter-American Development Bank which is increasing its financial support to selected activities.

## 3.3 Scope and limitations

The mid-term evaluation will cover the period September 2021 – September 2023. It will cover all the planned outputs and outcomes under the project, with attention to synergies with other WMO Programmes and contribution to NMHSs.

More specifically, links to and coherence with the WMO Hydrological Observing System (WHOS) and the World Hydrological Cycle Observing System (WHYCOS) as components of WMO HydroHub will be assessed, as well as with other technical programmes such as the Associated Programme on Flood Management, the Integrated Drought Management Programme, the Climate Risk and Early Warning Systems Initiative (CREWS), the UN Early Warnings for All initiative (EW4All), the World Water Data Initiative (WWDI) and the Global Hydrological Status and Outlook System (HydroSOS) among others will be assessed.

A full-scale evaluation of the WMO HydroHub would imply evaluating major elements of many other WMO programmes. Such an approach is neither considered feasible nor relevant for the sake of the evaluation's analytical depth and practical value, as the idea is rather to explore the efficiency of collaboration given interdependencies with other programmes.

In terms of geographical scope of activities implemented, the following countries should be taken into consideration:

- Costa Rica and Panama for the country assessment with the IDB
- Fiji and Samoa for the Innovation Call implementation (Fiji) and the User-Provider Webinars and Workshops (Fiji and Samoa)
- South Sudan for the Online training, Capacity and Needs Assessment, Learning Exchange, Innovation Call and Ministerial Roundtable
- Cambodia and Laos PDR for the data sharing activities within the CREWS Cambodia and Laos PDR project

At the global/regional levels, the following activities should be taken into consideration:

- Webinar on the WMO Hydrological Observing System (WHOS)
- Distance Learning Course "Interoperable Data Exchange in Hydrology" (2022 Edition in English and 2023 Edition in Spanish)
- Innovation Workshop "WMO HydroHub Phase II Innovation Roadmap"
- WMO Global Hydrology Dashboard and Webinars
- WMO-OGC Workshop "GroundWaterML2 standard"
- WMO-UNEP-UNESCO-WHO-OGC Workshop on Water Quality Monitoring
- WMO HydroHub Youth Symposium
- 2023 Trialogue on Innovation for Education
- Innovation Call in Latin America and the Caribbean
- WMO-UNEP-WWQA Innovation Workshop "Innovative approaches and technologies for Water Quality Monitoring"
- Innovation Call with ESA (tbc)
- Regional Socio-economic benefit analysis side-event in Asia and the Pacific (tbc)
- Adaptation Fund Innovation Project "Enhancing Hydromet Services through Regional Monitoring Innovation Hubs in Africa" (tbc)
- Joint WMO-UNEP-UNESCO-OGC and CIC Project "Enabling improved water quality (WQ) knowledge in the La Plata basin" (tbc)

Gender equality and youth engagement are important cross cutting policy drivers of the WMO. To the extent possible, the evaluation will link the findings and recommendations to the broader cross-cutting aspect of the project as well as the extent to which the planned and implemented activities are able to mainstream gender equality and youth engagement. The evaluation will also look particularly at how gender equality and youth engagement concerns were integrated throughout its methodology, strategies/approaches, data and all deliverables, including in the final report.

The results of the mid-term evaluation will be used by the Advisory Council and the WMO HydroHub team in the formulation of a management response that will outline how the recommendations may be taken forward. The results of the mid-term evaluation will also inform SDC on the project progress and provide initial input to their decision on potential further financing support beyond August 2026.

## **3.4 Evaluation Criteria and Key Questions**

Within this framework, the following criteria and questions have been identified as indicative of the key information requirements to meet the evaluation objectives. They will be further refined during the inception phase of the evaluation.

## 3.4.1 Relevance

The extent to which the WMO HydroHub activities are needed, consistent with and advancing priorities, recommendations and policy frameworks in the field of hydrometry.

Specific evaluation questions include (but are not limited to):

- How relevant are the WMO HydroHub activities undertaken in the evaluation period to WMO's vision, mission and strategic objectives?
- What is the extent to which the project approach is strategic and based on WMO's comparative advantages?
- To what extent does the project contribute to implementation of the WMO Gender Equality Policy and Action Plan and SDG5?
- How are future plans and activities being identified and designed?
- Are the WMO HydroHub activities coherent with the needs of NMHSs and do they support the goals and policies of WMO?

#### 3.4.2 Effectiveness

The extent to which the objectives, activities and expected outputs and outcomes outlined in the WMO HydroHub Phase II Logframe have been achieved or are likely to be before August 2026.

Specific questions include (but are not limited to):

- Does the WMO HydroHub implement an adequate Theory of Change?
- Is a risk mitigation mechanism in place?
- To what extent were the objectives /outcomes and outputs achieved or are likely to be achieved?
- Does the WMO HydroHub have an adequate M&E Plan? How are the results being monitored?
- What were/are the major factors influencing the achievement or non-achievement of the project objectives?
- Has there been progress towards the stated outcomes and what evidence/early markers are available? Which approaches/actions seem to be most effective, and which not? Are there any challenges to delivering on time and within budget?
- Has the knowledge sharing strategy been effective in raising the profile of the project within the global hydrometry community?
- What is the likelihood of achieving the intended impacts? Is there any early evidence of impact?

#### 3.4.3 Efficiency

The extent to which the resources of the WMO HydroHub are managed cost-effectively and coordination with other stakeholders in this cross-cutting programme achieved.

Specific questions include (but are not limited to):

- Have resources (financial, human, technical support etc.) been allocated strategically to achieve the project outputs and outcomes?
- How are WMO resources being planned for future activities of the WMO HydroHub?
- Is the current project management structure and technical capacity sufficient and adequate?
- What are the systems in place for financial management and workplan monitoring?
- Are there more cost-effective ways of achieving the same results?
- How WMO HydroHub activities are linked and contributing to WMO Technical Commission and Regional Associations' work?

#### 3.4.4 Coherence

The extent to which the WMO HydroHub activities are compatible with other interventions in a country, sector or institution

- To what extent are WMO Divisions and Regional Offices contributing (and informed) to meeting/achieving the WMO HydroHub's objectives, including but not limited to avoiding duplications and enhancing synergies?
- How consistent is the WMO HydroHub with other actors' interventions?
- How does the WMO HydroHub complement and coordinate with others?
- To what extent does the WMO HydroHub add value while avoiding duplication of effort?
- To what extent has the project integrated gender equality and youth engagement into its design, implementation and monitoring?

#### 3.4.5 Sustainability

The extent to which the WMO HydroHub Resource Mobilization Plan is likely to achieve its goals.

Specific questions include (but are not limited to):

- To what extent has the WMO HydroHub Resource Mobilization Plan achieved its goals so far?
- Is the WMO HydroHub Resource Mobilization Plan designed in an optimal way to achieve its goals? How can it be improved?

## 4. Methodology

The independent mid-term evaluation will comply with WMO's evaluation approach and criteria, which is based on the norms and standards of the United Nations Evaluation Group (UNEG). The UNEG Guidance Integrating Human Rights and Gender Equality in Evaluations will also be observed. The final methodology and evaluation questions will be determined by the consultant(s) in consultation with WMO HydroHub Coordinator, Head of ESM and Project Executive.

#### 4.1 Documentation and Preliminary Review

The evaluation will begin with a preliminary review of documentation, website, communication material and other relevant sources identified in collaboration with the WMO HydroHub team.

## 4.2 Inception phase

<u>An evaluation matrix</u>: The Evaluator will develop an evaluation matrix designed to guide the data gathering and analysis process. The matrix will detail the issues to be addressed and sub-questions to be covered, as well as performance indicators, sources of information and information-gathering methods for each issue.

<u>A list of stakeholders and draft questionnaires</u>: In cooperation with the WMO HydroHub team, the Evaluator will identify a list of stakeholders to be consulted in the context of the review. The potential stakeholder groups identified at this stage are: (a) WMO Secretariat (D/HCC, H/ESM and Division staff, technical programmes contributing to or having linkages with the WMO HydroHub); (b) Governance (members of the Advisory Council and Think Tank); and (c) External stakeholders and beneficiaries such as other UN Organizations, CREWS, Donors, Academia, Foundations, private sector, and especially NMHSs (to assess if the WMO HydroHub responds to their needs and demands). Draft interview questionnaires for stakeholder groups will be designed.

## 4.3 Data Collection

Data collection methods will include literature and documentation review, a

survey, and interviews – *both face-to-face and online* – of WMO HydroHub team, colleagues from the Services and Infrastructure departments, members of the WMO HydroHub Advisory Council (see section 6.5) and the key stakeholders listed above (see section 4.2).

## 4.4 Data Analysis and Reporting

At the data analysis stage, the Evaluator will analyze all the data collected. To the extent possible, data triangulation will be achieved by analyzing information from multiple sources. The evaluation report will indicate the extent to which gender and youth issues and considerations were incorporated, where applicable. A final report adhering to the evaluation terms of reference and highlighting the principal findings of the review will finalize the evaluation process.

All data collection tools are to be included as an annex to the final report. The link between evaluation questions, data collection, analysis, findings and conclusions will be made and set out in a transparent manner in the presentation of the review findings.

## 5. Expected Deliverables and Schedule

## **5.1 Expected Deliverables**

The key deliverables that are required from the Evaluator include:

1. Draft **Inception report** (not exceeding 20 pages excluding the annexes) – based on available documents and an initial discussion with the Project Coordinator and Project Executive. The inception report should set out any changes proposed to the methodology or any other issues of importance in the further conduct of the evaluation. The inception report will:

- Describe the conceptual framework that will be used to undertake the evaluation;
- Set out in some detail the approach for data collection, the evaluation methodology i.e. how evaluation questions will be answered by way of data collection methods, data sources, sampling and selection criteria, and indicators;
- Set out the detailed workplan for the evaluation, which indicates the phases in the evaluation and their key deliverables;
- Set out the list of key stakeholders to be interviewed;

- Set out a plan for data collection, interviews or discussions;
- Set out the outline for the final mid-term evaluation report;
- Summarize the main findings of the preparation phase.

2. Conduct **interviews and consultations** with relevant stakeholders and hold informal feedback meetings with stakeholders. Draft findings should be discussed and validated with key stakeholders.

3. Carry out an online **Evaluation Workshop** to share the preliminary findings with the WMO HydroHub Advisory Council. A brief review of the key results for each evaluation criteria should be provided. The workshop should be organized by the consultant.

4. Produce a **draft evaluation report** including an Executive Summary of key findings, conclusions and recommendations. The draft evaluation report will be reviewed by the WMO HydroHub Project Coordinator from a methodological point of view. The draft evaluation report will also be shared with relevant stakeholders and a request for comments will be made within a specified time.

5. Develop a PowerPoint (or other visual, shareable format) **presentation** of the final findings and recommendations for the key audiences and users of the evaluation.

6. Produce a **final evaluation report** incorporating feedback from WMO and other stakeholders. The final evaluation report provides direct and explicit evaluative answers to the key questions. The report describes the findings, challenges and shortcomings and provides conclusions and recommendations. The final evaluation report should also include a section on output and outcome level results against indicators and targets of each activity and comments on each one.

The total length of the report should be a maximum of 40 pages, excluding annexes. Annexes can provide background and further details on specific components of the project.

The evaluation report should include:

- 1. Cover page with key project data
- 2. Table of contents
- 3. Acronyms
- 4. Executive Summary
- 5. Background and project description
- 6. Purpose and scope of evaluation
- 7. Evaluation methodology and evaluation questions
- 8. Project status and findings by evaluation criteria
- 9. Main challenges and shortcomings
- 10. Conclusions and recommendations
- 11. Lessons learnt and potential good practices

12. Annexes (list of interviews, overview of meetings, proceedings stakeholder meetings, other relevant information)

## 5.2 Schedule

Month	Tasks	Responsible
December 2022	Preliminary draft of the Terms of Reference (ToRs)	Head of WMO Monitoring, Evaluation, Risk and Performance Unit; and WMO HydroHub Project Coordinator
January 2023	Review of the ToRs by ESM team and Chair of the Advisory Council and Think Tank and adjustments provided	WMO HydroHub Project Coordinator
February 2023	Review and approval of the ToRs by members of the Advisory Council	WMO HydroHub Project Coordinator
April 2023	Call for expression of interest	WMO HydroHub Project Coordinator
May 2023	Selection of independent Evaluator	Head of WMO Monitoring, Evaluation, Risk and Performance Unit; Head of WMO ESM; and WMO HydroHub Project Coordinator
September 2023	Discussion (online) with the Evaluator on the project and the ToRs	WMO HydroHub Project Executive; Head of ESM; and Project Coordinator
September 2023	Documentation review, identification of key respondents; Development of evaluation matrix and interview protocols; Preparation and review of Inception Report.	Evaluator; Head of WMO Monitoring, Evaluation, Risk and Performance Unit; and WMO HydroHub Project Coordinator
October 2023	Interviews and Consultations	Evaluator
October 2023	Evaluation Workshop presenting the preliminary findings to the members of the Advisory Council	Evaluator
November 2023	Preparation of draft evaluation report	Evaluator
November 2023	Circulate draft report among key stakeholders for feedback and comments	WMO HydroHub Coordinator
December 2023	Finalize the report	Evaluator
December 2023	Submit the final report	Evaluator

## 6. Management and Responsibilities

## **6.1 Overall Evaluation Management**

The WMO HydroHub Coordinator shall serve as team leader and have responsibility for the evaluation's timely completion and reporting of results.

## 6.2 Quality Assurance and Guidance for Management Response

The Head of the WMO Monitoring, Evaluation, Risk and Performance Unit (MERP) will provide guidance on the quality assurance of the methodology and the evaluation report as well as on the management response.

#### **6.3 Application**

Candidates are asked to send their application (in English) including: 1) CV and 2) 2 references and their contact details, who can speak to candidate's past experiences and capabilities in implementing similar activities to Sophia Sandström ssandstrom@wmo.int and Dominique Bérod dberod@wmo.int no later than 30 April 2023.

The total budget to carry out the assignment is to cover the overall costs including fees for the mid-term evaluation, and travel cost to Geneva (including air fares and DSA). The estimated number of days of work is 20 days. The payment rates will be according to WMO consultant pay bands. The payments will be made based on the approved deliverables submitted.

The following payment schedule is proposed:

Deliverable 1: should be delivered by end of September, against 30% of total payment.

Deliverables 2-3-4: should be delivered by end of November 2023, against 30% of total payment.

Deliverable 5 and 6: should be delivered by end of December 2023, against 40% of total payment.

## 6.4 Selection of independent Evaluator

This will be an external evaluation managed and conducted by the independent Evaluator that would have been successfully selected by a WMO selection board comprising the following persons: (1) Ms Assia Alexieva, Head of the WMO Monitoring, Evaluation, Risk and Performance Unit; (2) Mr Dominique Bérod, Head of WMO Earth System Monitoring Division; and (3) Ms Sophia Sandström, WMO HydroHub Coordinator.

## **6.5 Evaluator Qualifications**

The main qualifications required include:

- Master's degree in a field relevant to operational hydrology;
- Proven track record of technical knowledge and experience working in the area of operational hydrology/hydrometry/environmental monitoring. Knowledge of stateof-the-art monitoring, and innovations/new techniques/recent advances. Knowledge of gender and youth issues would be an asset.
- The capacity, resources and relevant expertise to handle the evaluation need to be demonstrated.
- Experience in evaluation of international organizations including the United Nations and Specialized Agencies. Experience working with the WMO and/or National Meteorological and Hydrological Services would be an asset.
- A minimum of 8 years' experience working in the design, management and evaluation of development projects, experience in designing evaluation tools, conducting desk reviews and evaluation missions, drafting of evaluation reports, including a minimum of 2 references.
- Excellent analytical skills and communication skills;
- Demonstrated excellent report writing skills in English.

## 6.6 Role of stakeholders

In addition to WMO HydroHub, ESM team, colleagues from the Services and Infrastructure Departments, it is suggested to interview the following stakeholders: 1. members of the WMO HydroHub Advisory Council; and 2. 1 or 2 members of the WMO HydroHub Think Tank.