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# SOFF Readiness Funding Request Template

Version 1.0

17 January 2023

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Systematic Observations  
Financing Facility

**Weather  
and climate  
data for  
resilience**



## SOFF Readiness Funding Request

The SOFF Readiness Funding Request template includes the following sections:

1. **Basic information**
2. **SOFF Programming criteria**
3. **Readiness phase outputs, timeline and budget**
4. **Monitoring**
5. **Readiness Phase Risk Management Framework**

The **Assignment Terms of Reference** are included in **Annex 1**.

## 1. Basic information

|  |   |
|--|---|
| <b>SOFF Beneficiary Country</b>  | Uganda  |
| <b>Country Focal Point</b>   | Dr. Bob Alex Ogwang<br>Acting, Executive Director<br>Uganda National Meteorological Authority (UNMA) and<br>Permanent Representative of Uganda with WMO |
| <b>Peer advisor</b>  | Royal Netherlands Meteorological Institute (KNMI)   |
| <b>Peer advisor Focal Point</b>  | Rubert Konijn<br>KNMI Strategic business manager Climate<br>Gé Verver /Janet Wijngaard<br>Coordinator International Affairs                             |
| <b>Prospective Implementing Entity</b>   | IsDB  |
| <b>Prospective Implementing Entity Focal Point</b>   | Olatunji Yusuf<br>Senior Climate Change Specialist, IsDB  |
| <b>Total budget USD</b>  | 200.000 US\$  |
| <b>Delivery timeframe</b>  | August 2023 – March 2024  |
| <b>Date of approval</b>  |   |
| Signature SOFF Steering Committee co-chairs (after Steering Committee approval of the funding request) |   |



## 2. SOFF Programming criteria

Table 1: Programming criteria

|  |   |
|--|---|
| <p><b>Close the most significant data gaps</b></p> | <p>Uganda National Meteorological Authority (UNMA) maintains a ground-based observation network consisting of both traditional (manned) observation instruments, Automatic Weather Stations (AWSs), an upper air station and Doppler radars. The observation network is made up of:</p> <ul style="list-style-type: none"> <li>- 38 weather stations with manned instruments;</li> <li>- 89 AWSs in functional state, transmitting the data to the server;</li> <li>- 1 Upper air station (This is currently under rehabilitation, funded by Government of Uganda);</li> <li>- 3 Radars. All are functioning.</li> </ul> <p>The preliminary Global Basic Observation Network (GBON) gap analysis (GBON requirements) for Uganda is estimated to be seventeen (17) ground-based observation stations and two (2) upper-air stations. These need to be upgraded such that they can transmit the data to regional and global centres.</p> <p>In addition, there is a gap in terms of the communication facilities for the real-time observational data transmission to the regional data centre in Nairobi.</p> <p>The anticipated increase in data generated from extensive AWS network will translate into enhance demand for storage facilities as well as a need for refresher training of UNMA staff in quality control techniques.</p> <p>The support is expected include the operation and maintenance and/or repair of the measuring equipment across the observation network in order to ensure the quality and reliability of the observed data.</p> |
| <p><b>Target easy fixes</b></p>                    | <p>In the above section, it is demonstrated that Uganda has an existing ground-based observation network. However, the</p>  |

|  |  |
|--|--|
| <p><b>Maximize delivery capacity</b></p> | <p>limitation in resources is a major bottleneck to the necessary maintenance and upgrading of AWSs.</p> <p>Easy fixes include:</p> <ol style="list-style-type: none"> <li>1. Replacing of the 17 AWS with AWOS that are compliant with Global Transmission System (GTS);</li> <li>2. Revamping of the upper air stations through financing of acquisition of radiosondes and balloons as well as recovering the hydrogen generator;</li> <li>3. Rehabilitating some AWSs through acquisition spares and facilitation of the repairing exercise;</li> <li>4. Rehabilitating and re-equipping the calibration laboratory;</li> <li>5. Providing local data storage facilities.</li> </ol> <p>The KNMI and IsDB (Peer advisor and Implementing Agency respectively) have the experience and capacity to effectively contribute to the Readiness Phase deliverables.</p> <p>KNMI is not yet involved in Uganda. However, the Dutch government has quite a substantial collaboration programme with Uganda. And KNMI is likely to contribute to the "Water at the heart of climate action" programme in the near future. Moreover, air quality and greenhouse gas monitoring by satellite seems a subject worth exploring in more detail together.</p> <p>KNMI is already active in Africa through the regional projects of CREWS and ClimSA, focusing on climate data and indicators of climate extremes.</p> <p>Bi-lateral collaboration with Cabo Verde, supported by funding from the Dutch government, focus on improving data management, data rescue, seasonal forecast, and sea-level rise. This formal cooperation project will be formally closed in spring 2023.</p> <p>KNMI has ample experience in providing support to peer NMHSs outside Europe: i.e., in South America, Southeast Asia and Africa. KNMI is also SOFF peer advisor for Cabo Verde and Senegal.</p> <p>In January 2022, the Ministry of Foreign Affairs received the regional Hub Manager and Head of Office for IsDB in Uganda. IsDB's strategic partnership with Uganda includes investment in energy, agriculture, education, micro finance and several others.</p> |
|--|--|



|                               |  |
|-------------------------------|--|
|                               |  |
| <b>Create leverage</b>        | <p>The Water at the Heart of the Climate project, the implementation of WMO's Early Warning For All Initiative (EW4A) and Uganda's NDPIII stand to benefit from the anticipated support to revamp and upgrade the GBON stations. The installation of the GBON stations is expected to increase the quality and quantity transitted to regional thereby improve climate change related analysis and underpinning of climate change adaptation actions.</p>  |
| <b>Sub-regional gains</b>     | <p>Uganda has an existing collaboration with other East African countries in the areas of installation of observation equipment, operations (e.g., forecasting at various timescales) and maintenance of the observation network. For example, the provision of meteorological services is catered for in the East African Protocol.</p> <p>Regionally, Uganda strategically located in the "centre" of East Africa. This presents an opportunity to Uganda to share the weather observations from the GBON stations with all East African countries. Therefore observations generated from the GBON stations are likely to translate into improved forecasts across East Africa.</p>  |
| <b>Ensure country balance</b> | <p>The United Nations classifies Uganda as one of the Least Developed Countries (LDCs) in Africa. The country's weather station network deteriorated during the civil war in the mid 1980's and has not recovered todate. The deterioration has been excecated by inadequate funding.</p> <p>Uganda is an East African landlocked country with a landmass of more than 240,000km<sup>2</sup>. It is boarded by Kenya in the East, Democratic Republic of Congo in the west, South Sudan in the North, and Tanzania in the south. The country has a diversity of landscape that include mountains both in the Eastern and western flanks of the country. The countries current population is estimated to be more than 40million people. Rain-fed agriculture sector employs nearly 72% of Ugandan's population and in the fiscal year 2020/2021, agriculture contributed about 23.7% of the country's Gross Domestic Products (GDP). An investment into weather observation equipment has an immense</p> |

value to not only the farming communities but also to other sectors of the economy.

In the recent past, Uganda has experienced a seemingly increased number of extreme weather events, damaging heavy rains, persistent droughts, and prolonged dry spells. The extreme rainfall events have caused landslides, damage to social infrastructure, crops and livestock.

### 3. Readiness phase outputs, timeline and budget

The Terms of Reference for the development of the SOFF Readiness phase outputs (see Annex I) provide more detailed information. They also summarize the roles and responsibilities, as stated in the [SOFF Operational Manual](#), of the beneficiary country, the peer advisor, the prospective Implementing Entity and WMO Technical Authority for the delivery of the Readiness phase outputs.

The budget for the development of the SOFF Readiness phase outputs by the SOFF peer advisor shall be a lump-sum, fixed cost amount. It shall be calculated using a cost-recovery approach based on the peer advisors' standard cost recovery rates.

**Table 2: outputs, timeline and budget**

| Outputs                                | Timeline  |         |         |         |         |         |         |         |
|--|-----------|---------|---------|---------|---------|---------|---------|---------|
|  | Month 1   | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 |
| <b>National GBON Gap Analysis</b>      |           |         |         |         |         |         |         |         |
| <b>GBON National Contribution Plan</b> |           |         |         |         |         |         |         |         |
| <b>Country Hydromet Diagnostic</b>     |           |         |         |         |         |         |         |         |
| <b>Total budget USD<sup>1</sup></b>    | 200,000US |         |         |         |         |         |         |         |

<sup>1</sup> Eligible expenditures are limited to: Staff and consultants; Consultations, national technical workshops, and communications; Travel and transportation costs; Other incidental expenditures.



## 4. Monitoring

The beneficiary country and peer advisor shall notify the SOFF Secretariat on any delays that may impede the timely delivery of the Readiness phase outputs. If the assignment takes more than six months, the SOFF peer advisor shall submit semi-annual progress reports to the SOFF Secretariat (form to be provided by the SOFF Secretariat) stating the delivery status of the outputs.

The Readiness phase completion will be monitored by the peer advisor and the SOFF Secretariat using the following country-level Results Framework for the Readiness phase.

**Table 3: Result framework**

| Outputs   | Indicator  | Target  |
|---|--|---|
| <b>1. GBON National Gap Analysis</b>              | GBON gap established and reviewed (Y/N)                              | GBON gap analysed and reviewed by WMO Technical Authority                         |
| <b>2. GBON National Contribution Plan</b>         | GBON national contribution plan developed (Y/N)                      | GBON national contribution plan developed and reviewed by WMO Technical Authority |
|   | GBON National Contribution Plan includes gender considerations (Y/N) | GBON National Contribution Plan includes gender considerations                    |
| <b>3. Country Hydromet Diagnostic (on demand)</b> | Country Hydromet Diagnostic developed (Y/N)                          | Country Hydromet Diagnostic developed   |

## 5. Evaluation

An evaluation from both, Uganda and IsDB on the quality of support received by the peer advisor will be conducted at the end of the Readiness phase and the peer advisor's assignment (form to be provided upon completion of the Readiness phase by the SOFF Secretariat).

## 6. Readiness Phase Risk Management Framework

**Table 3: Risk Management Framework**





| Risk category   | Description  | Probability | Mitigation action  |
|---|--|-------------|--|
| <b>Contextual risks</b><br>Risks related to conflicts, safety and political insecurity jeopardizing the delivery of the Readiness phase outputs | <i>The travel advise for Uganda by the Dutch government is negative (code Orange or Red) or travel is impossible for other reasons, making in-person meetings impossible. Deliverables might be delayed.</i> | Low/medium  | <i>All meetings will be online, and more meetings will be organised.</i>   |
| <b>Institutional risks</b><br>Risks related to the beneficiary country's institutions participation in the Readiness phase activities           | <i>UNMA does not provide personnel, information, or expertise needed to prepare deliverables</i>   | Low         | <i>This will be closely monitored and discussed in the regular meetings/visits. UNMA will assign multiple persons to contribute to the deliverables, thus avoiding single points of failure.</i>   |
| <b>Programmatic risks</b><br>Risks related to country ownership of the Readiness phase outputs  | <i>The gap analysis and the national contribution plan is not endorsed by peer advisor, implementing agency and beneficiary country</i>  | Low         | <i>The IE engages in an early stage and monitors and takes part in the assessment process of the readiness phase ensuring the development of a shared vision. In case there are remaining unresolved issues, the WMO technical authority may be consulted.</i> |

## **Annex 1. Assignment Terms of Reference for the development of the SOFF Readiness phase outputs**

### **1. Purpose and scope**

The purpose of this Assignment is to provide SOFF peer advisory services the Royal Netherlands to Uganda to develop the outputs of the SOFF Readiness phase as described in section 3 of these Terms of Reference.

The provisions defined in the Terms of Reference are based on the SOFF Operational Manual, in particular Section 4.4 on Operational Partners and Section 4.5.1 on the Readiness phase.

### **2. Roles and responsibilities**

#### **Beneficiary country National Meteorological and Hydrological Service**

- Is responsible for implementing the activities of the Readiness phase with the support from the peer advisor and the prospective Implementing Entity.
- Prepares the Assignment Terms of Reference following the standard Terms of Reference provided by the SOFF Secretariat, in collaboration with the peer advisor and in coordination with the prospective Implementing Entity.
- Submits the funding request for the SOFF Readiness phase support using the standardized template provided by the SOFF Secretariat.
- Is responsible for collaborating with the peer advisor to provide all the necessary information and participate in and facilitate the national activities the peer advisor needs to conduct in order to develop the Readiness phase outputs.
- Confirms receipt of the peer advisors' report with the Readiness phase outputs and provides comments on the outputs as needed.

#### **Peer advisor**

- Is accountable to the beneficiary country.
- In dialogue with the beneficiary country, provides independent technical advice, analysis and recommendations to support the beneficiary country in implementing the activities of the Readiness phase.
- Develops the Readiness phase outputs and is responsible for their quality and timely delivery. Communicates regularly with the beneficiary country and the Implementing Entity.
- Engages with the civil society, including on the identification of stakeholders of relevance for GBON implementation.

- Submits the final report with the Readiness phase outputs to the country for comments and to the prospective Implementing Entity for feedback.
- Submits the final report including the beneficiary country's comments and the prospective Implementing Entity's feedback to the SOFF Secretariat.
- Notifies the SOFF Secretariat and the prospective Implementing Entity of any delays that may impede the timely delivery of the outputs, and for assignments for which the delivery takes more than six months submits a semi-annual progress report.

### **Implementing Entity**

- Participates in the Readiness phase activities and collaborates with the beneficiary country and the peer advisor to ensure a common understanding of the Readiness phase outputs and that they address the technical needs for the design and implementation of the Investment phase.
- Contributes to the definition of the Terms of Reference and provides feedback on the outputs delivered by the peer advisor.
- Based on its experience in the beneficiary country, supports the work of the peer advisor, e.g. by sharing its knowledge and facilitating access to the network of relevant stakeholders.

### **WMO Technical Authority**

- Provides basic technical support to the beneficiary country, peer advisor, and prospective Implementing Entity on GBON regulations.
- Is responsible for the technical screening of the draft GBON National Gap Analysis and the draft GBON National Contribution Plan against the GBON regulations.
- Is responsible for establishing and administering the pass-through mechanism for contracting and funding of the technical assistance provided by the peer advisors.

### **SOFF Secretariat**

- Facilitates communication, coordination and collaboration between the beneficiary country, the peer advisor, the prospective Implementing Entity and WMO Technical Authority.
- Reviews the Readiness funding request, including the Terms of Reference, for compliance and consistency with the information requirements in the template and provides feedback as needed. Transmits the funding request to the SOFF Steering Committee for its decision.
- Confirms receipt of the peer advisors' report with the Readiness phase outputs.
- Organizes exchange of knowledge and experiences and captures lessons learned.

## **3. Readiness phase outputs**

The peer advisor should perform the following tasks following the technical guidance and using the templates provided in the [operational guidance documents](#) for each one



- **Module 5. Risk Management:** Operational risks of the observing network and required mitigation measures
- **Module 6. Transition to SOFF Investment phase:** Support the beneficiary country and the Implementing Entity in preparing the Investment phase funding request (template provided by the SOFF Secretariat).

### 3.3 Country Hydromet Diagnostics

The Country Hydromet Diagnostic (CHD) complements the GBON National Gap Analysis and the GBON National Contribution Plan. It is a standardized, integrated and operational tool and approach for diagnosing National Meteorological Services across the meteorological value chain, their operating environment, and their contribution to high-quality weather, climate, hydrological and environmental information services and warnings. Its assessment serves as a basis for investments beyond SOFF, across the whole value chain, by the SOFF Implementing Entity and other development partners.

The peer advisor should **assess the 10 CHD elements** with its respective indicators following the matrix provided in the CHD guidance document.

- Governance and institutional setting
- Effective partnerships to improve service delivery
- Observational infrastructure
- Data and product management and sharing policies
- Numerical model and forecasting tool application
- Warning and advisory services
- Contribution to climate services
- Contribution to hydrological services
- Product dissemination and outreach
- Use and national value of products and services

To develop the Country Hydromet Diagnostic, the following **steps** should be completed.

- Stage 1 – Information gathering. As input, the WMO Monitoring Evaluation Risk and Performance unit will provide available country data structured along the CHD elements and their indicators (performed remotely)
- Stage 2 – Validation and analysis (performed in-country if feasible)
- Stage 3 – Closure

#### 4. Delivery process

The peer advisor in collaboration with the beneficiary country and in coordination with the prospective Implementing Entity should establish the specific activities and consultations needed to complete the outputs. The development of the outputs should include the following:

- Collaboration arrangements between Uganda and the peer advisor, including at least one country visit, unless the country context does not allow it:

There will be two visits of two KNMI experts and a consultant to Uganda: the first meeting will take place soon after the start of the Readiness Phase. The main goal will be to prepare the GBON Gap Analysis (step 1 and 2), and to plan and prepare for the National Contribution plan and the Country Hydromet Diagnostics (CHD). In month 2 the gap analysis will be sent to the WMO technical authority for screening. In months 2 to 5 regular virtual meetings (KNMI, IsDB, Consultant) will take place to discuss and prepare for the National GBON contribution plan. During these months the stakeholders in Uganda that will be consulted for the CHD will be selected and contacted.

The second visit will take place in month 5 or 6 with the goal to deliver the National Contribution Plan and to gather information from the stakeholders in Uganda to prepare the CHD.

The CHD will be delivered at the end of month 8.

- Coordination arrangements with the prospective Implementing Entity:

The Implementing Agency, IsDB, will be invited to all meeting, unless the agenda contains pure technical matters. Especially for the preparation of the CHD and the consultations of the stakeholders IsDB will be involved.

- In-person or virtual consultation meetings with relevant national and international stakeholders and partners:

This will be done in-person meetings during the 2nd visit to Uganda as well as through virtual meetings. The consultant in Uganda in coordination with the UNMA will organise this (selecting, inviting, and preparing the stakeholders, short reporting of these meetings).

- Delivery partners that support the peer advisor in the delivery of the outputs, as applicable:

KNMI works together regularly with Dutch private companies or consultants providing additional expertise on weather and climate services in developing



countries, such as Uganda. This will also be the case in this readiness phase contributing mainly to deliver the CHD.

- Peer advisor delivery team and focal point:

The team of experts from the KNMI will consist of Rubert Konijn (FP), Janet Wijngaard, Gé Verver, supported by an external, experienced consultant.

- Timeline for the development of the outputs:

If the project starts in time (e.g. August) the Gap analyses should be finalised before December and during the first visit. The national Contribution plan should then be ready by the end December 2023. It will be delivered right after the second visit to Uganda. We plan to have a draft version of the CHD ready by the end of December, if it is feasible to collect the input from the stakeholders for this during the second visit to Uganda. A final version of the CHD will be delivered in month 7 - 8.

## 5. Reporting and completion

**Reporting.** For assignments for which the delivery of advisory services takes more than six months, the SOFF peer advisor shall submit a semi-annual progress report to the SOFF Secretariat (form to be provided by the SOFF Secretariat).

### Completion

- **Step 1.** The peer advisor submits the draft GBON National Gap Analysis and the GBON National Contribution Plan reports to WMO Technical Authority and, as applicable, the draft Country Hydromet Diagnostics to the Monitoring Evaluation Risk and Performance unit of the WMO Secretariat. The draft reports have to follow the templates provided in the SOFF operational guidance documents.
- **Step 2.** WMO Technical Authority screens the draft GBON National Gap Analysis and the draft GBON National Contribution Plan to ensure consistency with the GBON regulations. The WMO Monitoring Evaluation Risk and Performance unit screens the draft Country Hydromet Diagnostics and provides feedback for revisions as needed.
- **Step 3.** The peer advisor submits the report with the Readiness phase outputs for beneficiary country and prospective Implementing Entity feedback.
- **Step 4.** The peer advisor finalizes the report for confirmation of receipt by the beneficiary country and, as needed, beneficiary country comments. Following beneficiary country receipt of the report, the peer advisor submits the report,



including beneficiary country's comments and the prospective Implementing Entity's feedback, to the SOFF Secretariat.

- **Step 5.** The SOFF Secretariat confirms the satisfactory receipt of the report and informs the country and the prospective Implementing Entity accordingly. The SOFF Secretariat authorizes WMO to proceed with the release of the final payment, and informs the SOFF Steering Committee of the completion of the SOFF readiness phase.

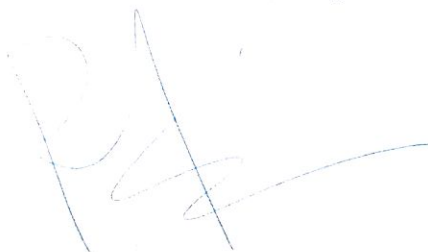
## 6. Signatures

By signing this document, the beneficiary country, peer advisor and the prospective Implementing Entity agree with the provisions stated in this Terms of Reference.

**Beneficiary country:** Republic of Uganda



**Peer advisor:** The Royal Netherlands Meteorological Institute (KNMI)



**De Bilt, 15-05-2023**

Rubert Konijn  
Strategic Business Manager  
Climate Change

**Prospective Implementing Entity:** IsDB

Olatunji Yusuf, Senior Climate Change Specialist, IsDB

