UN Multi-Partner Trust Fund Office

General Information

Fund	MPTF_00281: The Systematic Observations Financing Facility					
FMP Record	MPTF_00281_00035: SOFF Suriname Investment Phase					
MPTFO Project Id						
Start Date						
End Date						
Applicants	**Status**	**Contact Type**	**Name**	**e-mail**	**Position**	**Telephone**
	Active: 24-Oct-2024 3:47:00 PM	Project Manager	Montserrat Xilotl	montserrat.xilotl@undp.org		
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	Digital	Signatory	WMO: WMO (World Meteorological Organization)		Celeste Saulo	csaulo@wmo.int
Contacts	**Contact Type**	**Name**	**e-mail**	**Position**	**Additional e-mail**	**Telephone**
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<table>
<tr><td>Description</td><td colspan="4">Suriname is a continental country with a significantly larger land area compared to many other SIDS. The standard density for Suriname, based on GBON requirements is two (2) surface stations and one (1) upper air station. Currently, none of Suriname's surface stations nor its upper air station (located in Paramaribo) is GBON compliant. To address this gap, Suriname has outlined the following Investment Phase Targets: upgrade (five) 5 existing surface synoptic stations and the existing upper air station in Paramaribo.

The initial GBON Global Gap Analysis undertaken by WMO (June 2023), indicated that Suriname with a land area of 163,800 square kilometres and an Exclusive Economic Zone(EEZ) of 127,800 square kilometres, currently is only able to have a resolution of 200 kms. There are currently no marine observations collected in Suriname.

At present the Meteorological Service Suriname (MDS) has registered 9 surface stations in WIGO OSCAR/Surface of which one station has a GBON affiliation, what is visible in the WIGOS Data Quality Monitoring System. Although 9 stations are WIGOS registered, these are not all in use. 5 out of these 9 stations have been in sleeping mode since the internal war in Suriname, and later due to financial constraints.

Suriname is well-positioned to meet the surface GBON low-resolution targets in a timely manner and with a relatively modest investment. However, achieving this objective will require a well-coordinated approach that strategically leverages various ongoing and planned projects, with SOFF playing a critical role in this effort.

The SOFF Investment proposal takes into account the above challenges and opportunities while being mindful of the complications posed by its geography. Much of the hinterland, particularly in the deep south of the country, presents limited or no access, coupled with potential security concerns. These factors currently preclude the possibility of achieving uniform coverage across the entire nation while also posing challenges for sustainability.

With this in mind, the current SOFF investment proposal takes into account the relevance of long-term sustainability of SOFF investments by enhancing capacities within the MDS to package climate information and make use of forecasting models. Hence capacity building at the institutional and technical level has been included within the proposal as well as the investment in a value proposition analysis based on increased capacities of the MDS.

It is important to note that the successful implementation of the SOFF initiative would not only significantly enhance Suriname's meteorological capabilities but also offer substantial benefits to neighboring countries. This would foster a regional perspective that could lead to broader regional gains, strengthening the collective meteorological and climate resilience across the region (both Caribbean and Amazon), particularly in areas where little coverage exists.

The improvement in re-establishment and upgrade to GBON standards of the observation network in Suriname resulting from the SOFF project will feed into the Caribbean-CREWS (Climate Risk and Early Warning Systems), CIMH (Caribbean Institute for Meteorology & Hydrology), and CARICOF (Caribbean Climate Outlook Forum) and thereby contribute to more effective early warnings. The observations will also be submitted to the Regional Climate Centre strengthening the climate change assessments and underpinning of climate change adaptation actions.</td></tr>
<tr><td rowspan="4">Universal Markers</td><td>Gender Equality Marker</td><td colspan="3">Risk</td></tr>
<tr><td>GEM1 - The Key Activity contributes to GEWE in a limited way</td><td colspan="3">Low Risk</td></tr>
<tr><td>WB Income Category</td><td colspan="3">Upper Middle Income</td></tr>
<tr><td>UN LDC</td><td colspan="3">No</td></tr>
<tr><td rowspan="4">Optional Markers</td><td>Small Island Developing States (SIDS)</td><td colspan="3">Yes</td></tr>
<tr><td rowspan="4">Fund Specific Markers</td><td>SOFF Phases</td><td colspan="3">SOFF Phases
Investment Phase</td></tr>
<tr><td>EW4All</td><td colspan="3">Early Warnings for All initial focus countries
No</td></tr>
<tr><td>Fragile and conflict-affected situation</td><td colspan="3">Fragile and conflict-affected situation
No</td></tr>
<tr><td>Peer advisor</td><td colspan="3">Peer advisor
Royal Netherlands Meteorological Institute (KNMI) [Netherlands]</td></tr>
<tr><td rowspan="2">Geographical Scope</td><td>Geographical Scope</td><td>Name of the Region</td><td>Region(s)</td><td>Country</td></tr>
<tr><td>Country</td><td></td><td>Americas</td><td>Suriname</td></tr>
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<table>
<tr><td>Participating Organizations and their Implementing Partners</td><td>UN Participating Organizations</td><td colspan="2">Government/ Multilateral/ NGO/ Other</td><td>New Entities</td><td>Implementing Partners</td></tr>
<tr><td></td><td>• UNDP - UNDP (United Nations Development Programme (UNDP))
• WMO - WMO (World Meteorological Organization)</td><td colspan="2"></td><td></td><td></td></tr>
<tr><td rowspan="11">Programme and Project Cost</td><td>Participating Organization</td><td>Amount (in USD)</td><td colspan="3">Comments</td></tr>
<tr><td colspan="5">Budget Requested</td></tr>
<tr><td>UNDP</td><td>$2,424,178.73</td><td colspan="3">Includes 7% Fee USD 158,591.13</td></tr>
<tr><td>WMO</td><td>$242,631.87</td><td colspan="3">Includes 7% WMO indirect cost (KNMI Fee 226,758.76 + 7% WMO indirecto cost)</td></tr>
<tr><td>Total Budget Requested</td><td>$2,666,810.60</td><td colspan="3"></td></tr>
<tr><td colspan="5">Tranches</td></tr>
<tr><td colspan="2">Tranche 1</td><td colspan="2">Tranche 2</td><td colspan="2">Tranche 3</td></tr>
<tr><td colspan="2">UNDP (70%) $1,696,925.11
WMO (33.33%) $80,869.20
Total: $1,777,794.31</td><td colspan="2">UNDP (30%) $727,253.62
WMO $80,869.20 (33.33%)
Total: $808,122.82</td><td colspan="2">UNDP (0%) $0.00
WMO $80,893.47 (33.34%)
Total: $80,893.47</td></tr>
<tr><td colspan="5">Other Sources (Parallel Funding)</td></tr>
<tr><td>Total</td><td>$2,666,810.60</td><td colspan="3"></td></tr>
<tr><td>Thematic Keywords</td><td colspan="5"></td></tr>
<tr><td rowspan="3">Programme Duration</td><td>Anticipated Start Date</td><td colspan="4">01-Dec-2025</td></tr>
<tr><td>Duration (In months)</td><td colspan="4">48</td></tr>
<tr><td>Anticipated End Date</td><td colspan="4">01-Dec-2029</td></tr>
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Narratives

Title	Text

Close the most significant data gaps	The GBON Global Gap Analysis conducted by WMO in June 2023 (Table I), considers Suriname as SIDS. Suriname is a continental country with a significantly larger size compared to many other SIDS members. The real GBON requirement of internationally shared stations is two (2) surface stations and one (1) upper air station. Although Suriname maintains a dense network of 16 Automatic Weather Stations (AWS) nationwide, these 16 AWS stations experience data gaps, impacting the continuity and reliability of meteorological observations. Currently, none of Suriname's surface stations are GBON compliant, but MDS (MeteorologischeDienst Suriname) does operate an upper air station in Paramaribo, although this is not fully GBON compliant at the moment. The initial GBON analysis undertaken by WMO (June 2023), shown in table below indicated that Suriname hasa land area of 163,800 square kilometres and the EEZ (Exclusive Economic Zone) is 127,800 square kilometres. But with a resolution of 200 km this will mean 4 land stations and 3 marine stations. Given this vast expanse, the recommended four land stations leave significant portions of the southern part of the country inadequately monitored, particularly in ecologically sensitive and economically important regions. An additional land station is essential to bridge this gap and ensure comprehensive data collection across the entire territory. Per the National Gap Analysis the 4 stations consider the area including EEZ with GBON resolution calculation while the 5th station will cover South West of the country that is currently unattended. In parallel, during the period between NCP and IFR, Suriname has received cooperation funds from a collaboration with the Government of India, these funds have allowed for the purchase of an AWS and its installation in Kwamalasamutu, within the South West and whose value will support global models per the National Gap Analysis. The purchase of the station and its installation at Kwamalasamutu will be financed through these co-financing fund however will require SOFF funds to allow for its incorporation into GBON and its OM. At present the Meteorological Service Suriname (MDS) has registered 9 surface stations in WIGO OSCAR/Surface (https://oscar.wmo.int/surface/#/search/station#stationSearchResults) of which one station has a GBON affiliation, which is visible in the WIGOS Data Quality Monitoring System https://wdqms.wmo.int/gbon/land_upper-air/monthly/availability/all/2024-04). Although 9 stations are WIGOS registered, these are not all in use. 5 out of these 9 stations have been in sleeping mode since the internal war in Suriname, and later due to financial constraints.

Type of Station	**WMO GBON Gap Analysis June 2023**				**GBON Natl Cont Plan**	
	Target	**Reporting**	**Gap**		**Gap**	
			Improve	**New**	**Improve**	**New**
Upper Air	1	0	1	0	1	0
Surface	2	0	2	0	5	0
Marine	*when applicable					

Suriname is well-positioned to meet the surface GBON low-resolution targets in a timely manner and with a relatively modest investment. Achieving this objective will require a well-coordinated approach that strategically leverages various ongoing and planned projects, with SOFF playing a critical role in this effort.

Moreover, achieving full high-resolution compliance is also within reach, given a reasonable time frame and the resources available. However, it is essential to consider the challenges posed by the geography of Suriname. Much of the hinterland, particularly in the deep south of the country, presents limited or no access, coupled with potential securityconcerns. These factors currently preclude the possibility of achieving uniform coverage across the entire nation.

Suriname's unique geographical and economic characteristics necessitate the establishment of additional surface meteorological stations beyond the global target for Small Island Developing States (SIDS).

1. Geographical Scope and Data Resolution: The global standard resolution of 200 km with two surface stations is insufficient to effectively cover Suriname's expansive territory. With a combined area exceeding 290,000 km^2, significant portions of the interior and coastal regions would remain unmonitored, creating critical gaps in weather data and forecasting. Additional stations are essential to ensure comprehensive spatial coverage, especially in remote and ecologically sensitive areas such as the Amazon Basin and coastal plains.

2. Vulnerability to Climate Hazards: Suriname's extensive coastline and interior are highly susceptible to extreme weather events, including floods, droughts, and rising sea levels. Insufficient station coverage would hinder the accuracy of early warning systems, compromising disaster preparedness and risk management. Enhanced coverage ensures timely and precise forecasts, which are vital for protecting human lives, infrastructure, and economic activities.

3. Economic and Environmental Importance: Suriname's economy relies heavily on climate-sensitive sectors such as agriculture, mining, forestry, and fisheries. Inadequate meteorological data could lead to operational inefficiencies and increased vulnerability to weather-related disruptions. Additional stations support sustainable resource management and contribute to the protection of vital ecosystems, including rainforests and coastal wetlands.

4. Regional and International Responsibilities: Suriname plays a crucial role in regional climate monitoring and cross-border data sharing, particularly with neighboring countries like Guyana and French Guiana. Enhanced station coverage strengthens regional cooperation, supports transboundary climate resilience efforts, and ensures compliance with international standards such as those set by the Global Basic Observing Network (GBON).

The proposed upgraded and new meteorological stations address critical gaps in data collection, improving national and regional weather monitoring capabilities:

• Tafelberg 0-20000-0-81250 (Improve): Centrally located in Suriname’s interior, Tafelberg provides essential meteorological data for the central highlands. This region's topography creates unique weather patterns that impact the entire country, and accurate data from this station will enable better forecasting and climate modeling.

• Stoelmanseiland 0-20000-0-81209- (Improve): Positioned in eastern Suriname near the French Guiana border, this station ensures comprehensive cross-border data integration. Accurate data in this transboundary region promotes regional cooperation and enhances forecasting, benefiting both nations and strengthening bilateral relations.

• Kwamalasamutu (Improve): Located near Suriname’s southern border with Guyana and Brazil, this station delivers crucial insights into the climatic conditions of the Amazon Basin. Enhanced data coverage in this area improves understanding of regional weather dynamics and their broader impacts on South America’s climate system. The improvement for this station (originally purchased through the use of cooperation funds from the Government of India) is needed to allow for the same alignment as the other 4 stations that will be improved through SOFF funds. Alignment of this station would allow it to be GBON compliant *hence providing valuable data to inform climate models and would align to the ideal contributions of the Country to GBON based on the National Contribution Plan*.

• Zanderij 0-20000-0-81225 (Improve): As a key coastal station near Suriname’s main airport, it provides critical data for aviation safety, weather forecasting, and climate monitoring.

• Nickerie 0-20000-0-81202 (Impove): Located in a densely populated agricultural region, it supports farming, fisheries, and flood management, ensuring sustainable development in a climate-vulnerable area.

The improvement, establishment and operation of meteorological stations in Tafelberg, Stoelmanseiland, and Kwamalasamutu are strategically essential for enhancing weather monitoring and forecasting across Suriname, particularly in regions where data is scarce. These stations are pivotal for supporting local communities, preserving ecological systems, and fostering economic resilience, contributing significantly to sustainable national development.

The Zanderij and Nickerie surface stations are indispensable for effective meteorological data collection and dissemination. Their strategic location in a densely populated, climate-sensitive coastal region underscores their importance in safeguarding human lives, supporting economic stability, and enhancing climate resilience. Continued investment in these stations is essential to ensure accurate, reliable data, which serves as the foundation for informed decision-making and sustainable development.

Finally, while cognizant of SOFF’s current mandate, it is suggested at a future point investment in 3 marine station as no marine observations are collected in Suriname.

Target easy fixes	*Upgrading the existing infrastructure as needed would require less investment than establishing completely new stations. As such opportunities for easy fixes are as follows:* • *Rehabilitation of the existing 5 AWS transmission, including r*eplacing sensors, implementing regular maintenance, since the stations are easily accesible • *Refurbishing the existing Upper Air Sounding facility and* • *Increasing observations twice a day to meet the GBON requirement.* • *Registering existing stations in OSCAR/Surface and updating metadata as per GBON requirements* *Suriname operates an upper-air station in Paramaribo with soundings conducted twice a week and additional session for Ozone measurements once a week. The station as well as the existing 5 AWS transmission would be able to be upgraded rather than establishing completely new stations.* An argument to incorporate a relatively new land based station (since 2024) in Kwamalasamutu should also be considered as an easy fix. This station has to be improved with the same instruments and connections as the other 4 stations to be improved. This station located in the South of Suriname has been financed with the support of the Government of India and would be able to be made GBON compliant, hence providing valuable data to inform climate models and would align to the ideal contributions of the Country to GBON based on the National Contribution Plan.
Create leverage	*As part of the GCCA+ Phase 1 and 2, a UNDP/EU funded project (Resilience building through integrated water resource management, sustainable use and coastal ecosystems management), five (5) Automatic Weather Stations (AWSs) and nineteen (19) Automatic rain gauges were installed within the country's borders from 2018 to 2024 The installation works were successfully concluded. The experience and learning process has increased the technical and logistical capacity, together with the know-how required to operate and maintain network stations. Nevertheless, the financial capacity of the MDS is not sufficient to sustainably maintain these AWSs.* *The MDS is also involved in three G2G (Government to Government) projects it is important to state that MDS is not currently receiving funds derived from a multilateral nor climate vertical fund:* 1. *India-UN project: 'Enhance early warning service delivery to communities of Suriname in order to build their resilience to flooding due to excess rainfall'. Through this project, 1 (one) new AWS will be installed, as well as procurement of AWS spare parts for the continuity of data collection. Computers for working with ArcGIS Pro as a tool for data visualization, advanced data analysis, and data maintenance in 2D and 3D, which will enhance weather and climatological forecasting. The support also includes training* 2. *The Makandra project with Netherlands*: *Capacity Building* and Institutional strengthening*, Internship, and development of Climate Scenarios* 3. *The Morocco Project: 2 (two) new AWS will be installed with additional spare parts for the continuity of data collection* The improvement in re-establishment and upgrade to GBON standards of the observation network in Suriname resulting from the SOFF project will feed into the Caribbean-CREWS (Climate Risk and Early Warning Systems), CIMH (Caribbean Institute for Meteorology & Hydrology), and CARICOF (Caribbean Climate Outlook Forum) . and thereby contribute to more effective early warnings. The observations will also be submitted to the Regional Climate Centre strengthening the climate change assessments and underpinning of climate change adaptation actions.

Maximize delivery capacity	UNDP is one of the largest resident United Nations agencies in the country, with a strong programme offering comprising democratic governance, social development, natural resources management, and climate change. The UNDP with its presence in the country and strong partnerships with State and non-State actors, has a strong comparative advantage for SOFF partnerships and programme implementation. UNDP has a strong programme and niche in natural resources management, Climate Change Adaptation and supporting data collection, whilst contributing to Disaster Risk Management capacity strengthening and building resilience. The country programme document (CPD) 2022 – 2027 applies and integral and holistic programme approach between Natural Resource management and Climate Change and social development and governance. UNDP under the CPD will continue to build its programme areas, ensuring strong broad-based consultations, raise the visibility of the results achieved and advocate for inclusive development, including vulnerable and marginalized groups. UNDP will look to integrate SOFF investments within a wider adaptation framework focused on enhancing national capacities for climate information and comprehensive early warnings, hence linking global objectives with national needs. UNDP was an implementation body of the Global Climate Change Alliance Plus (GCCA+) Phase 1 and phase Project which is a European Union flagship initiative aimed at helping the world's most vulnerable countries to address climate change. The Global Climate Change Alliance Suriname Adaptation Phase 2 project and the recently concluded Climate Promise Adaptation Pipeline Accelerator and similar initiatives have supported the government of Suriname to adapt to climate change impacts by building resilience through integrated water resource management, sustainable use, and coastal ecosystems management. UNDP has access to existing long term agreements established at a regional and global level that will also facilitate negation with technical providers .
Sub-regional gains	Suriname’s Meteorological Service (MDS) faces critical capacity gaps in infrastructure, technical expertise, and data management, which hinder its ability to fully leverage the benefits of the Global Basic Observing Network (GBON). Addressing these challenges through strategic collaboration with Regional WIGOS Centres in the Caribbean (RWCs) and Global Information System Centres (GISCs) is essential for building a resilient and efficient meteorological network. The MDS is open to collaborating with countries in the region to optimize the installation, operation, and maintenance of the observation network. Regionally, MDS is available to share observational data in near real-time, which will be possible after the upgrade and installation of additional communication facilities as part of the SOFF initiative. This is particularly relevant as Suriname lies in between two regions: the Caribbean and the Amazon. The MDS has an active collaboration with CIMH (Caribbean Institute for Meteorology & Hydrology), the CIMH has been involved in capacity building of the MDS since 2017 and has assisted in the training of MDS staff in the installation, maintenance and operations of automatic weather stations. The MDS also collaborates with the Caribbean Meteorological Organization (CMO), and the Caribbean Disaster Emergency Management Agency (CDEMA) which is a regional inter-governmental agency for disaster management that falls directly under the Caribbean Community (CARICOM), by exchanging meteo-data for the seasonal forecast of the region. Regionally, MDS is available to be part of the initiative implementing Multi-Hazard Early Warning System (MHEWS), sharing the observational data in near real-time. Under SOFF, the Meteorological Service of Suriname will join other Caribbean countries participating in the initiative, fostering a regional approach to enhancing observational networks. This collaboration will enable Suriname to benefit from shared expertise, resources, and best practices within the Caribbean SOFF network. By working alongside other Caribbean nations, Suriname can strengthen its capacity to meet GBON standards, leverage support for remote station operations, and ensure data integration into regional and global systems. This partnership within the SOFF framework enhances regional resilience, enabling Suriname and neighboring countries to contribute more effectively to climate monitoring, early warning systems, and climate adaptation strategies across the Caribbean. Also, with INMET, Instituto Nacional de Meteorologia, Brazil, there is a collaboration on forecasting and extreme weather. After the upgrade and installation of additional communication facilities as part of the SOFF initiative, this would enhance data exchange capacity in the future.

SOFF Beneficiary Country Capacity Assessment	*The MDS will be the principle national entity for the implementation of this project, and will also be supported by the Project Management Unit within the Ministry of Public Works.* ***Technical Capacity:*** *The Meteorological Department of Suriname (MDS) operates a network of sixteen (16) surface weather stations and one(1) upper-air station in Paramaribo, conducting regular observations. Moreover, external weather stations are typically temporary and do not meet GBON standards.* *The MDS collaborates with various agencies and media for data sharing and forecasting, but modernization and expansion are needed to fully comply with GBON requirements.* *Staffing consists of 29 technicians of which investment is needed for one (1) qualification in meteorology & UAS and* for UAS qualification of 2 (two) *meteorological technicians. However,. More over the need for improved data processing and real-time transmission capabilities is critical . Equipment standardization could enhance efficiency, but logistical challenges make this approach costly.* ***Management Capacity:*** *The MDS faces management challenges due to a lack of academically trained personnel. While the department has experience in project management through the Ministry of Public Works, weak leadership impacts overall effectiveness. The creation of a National a Water governance body for coordination, is essential for integrating meteorological services into broader development goals.* ***Administrative Capacity:*** *Administrative functions are managed by another department within the Ministry of Public Works, requiring effective communication and collaboration. The Project Management Unit assists with grant writing and funding, highlighting the need for integrated administrative efforts.* ***Financial capacity*** *The national budget that Suriname allocates for meteorological department is by far not sufficient for:* • *rehabilitataion of a complete meteorological data collection network, regulation of surface and upper air meteorological observations, standardization of national meteorological data and information as well as thepublication of climatological statistics and studies.* • *to establish and maintain a meteorological data center and telecommunication system for the provision of weather and climate data in accordance with guidelines provided by the World Meteorological Organization (WMO), the International Civil Aviation Organization (ICAO), the Intergovernmental Panel on Climate Change (IPCC) and other international and regional bodies working in meteorology.* *If not for the support provided by the UNDP, EU, US-AID, KNMI, India-UN and Morocco, the MDS would not be able to perform at the current level of their duties.* ***National and Regional Partnerships**:* *National: Collaborations include agreements with the University of Suriname, Civil Aviation, Maritime Authority, and a long-term partnership with the Royal Netherlands Meteorological Institute (KNMI).* *Regional/International: Suriname engages with the Caribbean Institute for Meteorology & Hydrology (CIMH), WMO RIC-Barbados, Caribbean Meteorological Organization (CMO), Caribbean Disaster Emergency Management Agency (CDEMA), Caribbean-CREWS, CARICOF, and Instituto Nacional de Meteorologia (INMET), Brazil. These partnerships provide valuable support and opportunities for data sharing and collaboration on meteorological and disaster management initiatives.* *Even though concerted efforts have been made in terms of institutional, administrative and technical capacity, the Technical Needs Assessment, National Adaptation Plan as well as in the National Contribution Plan clearly show that the MDS still lacks sufficient resources to enhance its capacity in observational infrastructure and human capacity building in maintenance of land-based stations and a radiosonde (which will be the first ever in the country). Therefore, there is considerable opportunity for SOFF to support the Meteorological Service in Suriname in overcoming these challenges*

Investment Phase Alignment with the GBON National Contribution Plan	The Suriname National GBON Gap Analysis and Suriname GBON National Contribution Plan are included in Annex 1. The objective of this proposal is that Suriname receives SOFF support to achieve density target , corresponding to rehabilitation of five (5) existing stations. In addition, the existing radiosonde station will also be upgraded as per GBON standard- density requirements. Thisproposal, for consideration and decision by the Steering Committee, was discussed with and endorsed by the WMO Technical Authority andthe SOFF Secretariat. The upgrade of the five (5) AWS ill require new sensors and data loggers which are easy and lowcost fixes. Most importantly, these stations are expected to report good quality observations in international distribution. For the remaining actions, there is nodivergence between the targets stated in the GBON National Contribution Plan and the proposed Investment Phase targets

Execution model and implementation arrangements	UNDP will support the MDS in the implementation of the project under a Direct Implementation Modality (DIM). Under this DIM framework, both UNDP and MDS will work together in the execution of the project activities, however UNDP will be responsible for overall coordination of project implementation including the coordination of annual and quarterly planning of activities and their approval by the project steering committee (which will be established at the beginning of the project implementation). **Governance Structure** A Project Steering Committee (PSC), consisting of national stakeholders, the Beneficiary Country (MDS/Directorate of Research and Services), and the Implementation Partner (UNDP), will provide strategic oversight, monitor progress, and ensure alignment with national priorities. The PSC will be chaired by a senior UNDP Suriname Country Office management, together with a senior official from the Ministry of Public Works. **Implementation Arrangements** The project will be co-managed by key stakeholders: • **MDS/Directorate of Research and Services**: Responsible for overall project execution, including procurement, installation, maintenance, and coordination with government and private sector partners. • **KNMI (Peer Advisor)**: Provides technical guidance, capacity-building, and ensures GBON compliance. • **UNDP (Implementation Partner)**: Manages financials, procurement, and SOFF fund disbursement, while ensuring compliance and facilitating coordination with WMO. • **Collaborating Institutions**: CIMH/RIC Barbados, NCCR, PAHO, and private sector partners will provide technical expertise, hazard mapping, and financial support. UNDP will also perform the financial oversight, handling the project budget, overseeing fund allocations . All management and financial undertakings will be stringently aligned with the standards set by the UNDP, as outlined in the programme and operational policies and procedures (POPP) . Moreover,the MDS will closely monitor the operation of the land-based and the upperair stations, data collection, analysis and reporting. Together the UNDP and the MDS will ensure that all planned activities are executed as scheduled to achieve the project's objectives. The specific roles and responsibilities in project execution will include supporting stakeholder engagement, preparing and submitting annual and quarterly work plan. They will also be responsible for promptly submitting narrative and financial reports to UNDP. The MDS will oversee the operation, maintenance, and calibration of land-based and upper-air stations, as well as handle data collection, analysis, and reporting to ensure compliance with GBON standards. In addition to above-described roles and responsibilities, UNDP and the MDS will work closely to deliver all planned procurement activities. Using its own policies and guidelines, the UNDP will be responsible of the following procurement activities: • Procure needed equipment and supplies for upgrading of 4 surface automatic weather stations, as well as services for training for the staff and maintenance services. • Procure needed equipment and supplies and hire services to upgrade upper-air radio station, equipped with essential tools and 5 year's stock of spare parts. • Hiring a local firm to undertake required civil infrastructure (e.g.,connection to electricity, shelter for hydrogen bottles, room for balloon filling and platform for ground system). • Venues and service for stakeholder working sessions to enhance data collaboration pertinent to the project, thereby refining weather, climate, and water services. • Venue’s and services for the organization of dialogues on the value, shared creation, and ownership of the new national GBON structure. • Commissioning external expertise to augment institutional capabilities in data collection, quality control, data processing, and distribution. UNDP will work with MDS and Peer Advisor KNMI to prepare all specifications and/or Terms of Reference for all tenders to supply, install and provide 5 year maintenance of land-based and upperair stations as well as the technical trainings of MDS staff. Once the specifications/ToRs are ready, all the procurement will be advertised on UNDP’s corporate website and posted in the UN Global Marketplace (i.e., www.ungm.org). All advertisements will remain online for a minimum of two weeks. The most appropriate method of procurement will be applied to procrure needed goods and services. And finally, evaluation

of offers will be done by an independent UNDP procurement committee and the award will be given to the most competitive offeror. KNMI will support in the evaluation of relevant bids.

Implementation of Activities

Key activities include:

- Upgrading and rehabilitation of 4 existing AWS to become GBON-compliant Automatic Weather Stations (AWS) with calibration and upgrades to existing infrastructure for data collection
- Upgrading and rehabilitation of 1 existing GBON-compliant Upper-Air Radio Stations with upgrades to enable twice daily upper sounding as GBON requires
- Capacity-building programs for staff in meteorological techniques and data management.
- Real-time data transmission upgrades to meet international standards.

Flow of Funds

Funds, will be disbursed in tranches based on project milestones and managed by UNDP with close oversight from KNMI and the PSC. Allocations will cover equipment procurement, capacity-building, and operational costs.

Monitoring and Reporting

The UNDP together with the MDS/Directorate of Research and Services will ensure regular reporting to the SOFF Secretariat, tracking station installations, data sharing, and capacity-building progress, ensuring compliance with project goals.

This streamlined execution model leverages both national and international expertise, ensuring strong governance, financial management, and technical capacity to meet GBON standards and enhance Suriname's meteorological services.

Private sector involvement	The **private sector** will play a key role in supporting the Meteorological Service of Suriname by addressing capacity gaps, particularly in infrastructure, maintenance, IT, calibration, and renewable energy solutions. Anticipated contributions include: 1. **Infrastructure Maintenance**: Private sector partners like the State Oil Company, Consultancy and Engineering firms, and aviation firms will support the maintenance and upgrade of meteorological stations, particularly in oil and aviation zones. 2. **Calibration and Technical Services**: Outsourcing calibration of automatic weather stations to private firms will ensure compliance with international standards, alongside capacity-building initiatives for local technicians. 3. **IT Infrastructure**: Private IT firms will provide data processing, real-time transmission, and cloud storage solutions, enhancing the service's ability to meet international data-sharing requirements. 4. **Aviation Sector**: Private aviation companies will contribute to weather monitoring at strategic locations, improving flight safety through real-time data sharing. 5. **Renewable Energy**: Renewable energy firms will help power remote stations, reducing reliance on traditional energy sources and supporting sustainability goals. Specifically, the project will look to effectively engage Suriname's private sector such as the State Oil Company, aviation sector, and private airlines as below: • State Oil Company: Leverage their technical expertise in infrastructure and data collection, particularly for remote monitoring or environmental assessments. • Aviation Sector and Private Airlines: Utilize their logistical capabilities for data collection in hard-to-reach areas and their experience in managing safety standards and maintenance schedules. • EAS: Ensure reliable power solutions for observation stations, focusing on sustainability and renewable energy options. The proposed strategies are: The project will hence look to develop partnership agreements detailing each entity’s tasks, deliverables, and timelines. For example, the aviation sector could provide aircraft support for weather observations, while the oil company might contribute technical resources for station maintenance. Utilizing airline assets for data collection may reduce the need for costly equipment procurement. Explore public-private partnerships (PPPs) where the private sector shares operational costs. This model can reduce the financial burden on public funds while fostering long-term collaboration. Monitor and Review Implementation: Set up a joint oversight committee with representatives from the government and private sector partners to review contributions, expenditures, and performance outcomes regularly. **Stakeholder Engagement** Engagement with the private sector will be formalized contracts, and joint committees, ensuring clear roles and responsibilities. Regular consultations and capacity-building initiatives will ensure alignment with the Meteorological Service’s goals. Additionally, the service will explore revenue-generating opportunities, such as providing value-added meteorological data services to the private sector. These partnerships will enhance operational capacity, leverage private sector expertise, and promote sustainability, contributing to the long-term success of the Meteorological Service.

Civil society participation	**Civil society organizations (CSOs)** will play a key role in supporting the Meteorological Service of Suriname by enhancing community engagement, disaster preparedness, and public awareness of weather and climate issues. Their anticipated roles include: 1. **Public Awareness and Education**: CSOs will lead efforts to inform communities about weather risks, climate change, and early warning systems. 2. **Disaster Risk Reduction**: CSOs will collaborate with the Meteorological Service to promote disaster preparedness, ensuring communities are ready to respond to extreme weather events. 3. **Community Feedback:** CSOs will act as intermediaries, gathering feedback from local communities to improve the effectiveness of weather services. 4. **Advocacy and Sustainability:** Environmental CSOs will advocate for sustainable practices, supporting the integration of green technologies in meteorological operations. 5. **Capacity Building: CSOs** will train communities on interpreting weather data and fostering preparedness at the grassroots level. **Stakeholder Engagement Process:** • Consultations and Workshops: Regular consultations will ensure CSOs participate in decision-making and program design. • Partnership Agreements: MOUs will define the roles and collaboration areas between the Meteorological Service and CSOs. • Joint Program Implementation: CSOs will co-implement disaster preparedness and public awareness initiatives. • Monitoring and Feedback: CSOs will provide ongoing feedback and help monitor the impact of meteorological services on communities. This partnership will ensure community-focused, inclusive, and effective meteorological services, enhancing resilience to climate risks.
Fiduciary systems	UNDP will support the government of Suriname in the implementation of SOFF through a Direct Implementation Modality (DIM). In this regard UNDP will manage SOFF funds in strict adherence to UNDP's Rules and Regulations. UNDP will be accountable to SOFF in the management of SOFF funds. UNDP will receive funds from MPTF per UNDP Rules and Regulations (https://popp.undp.org/document/operating-guidelines-mptf-projects-implemented-undp-country-offices) ensuring mechanisms for reporting and tracking of financial resources. UNDP will prepare a Project Document (PRODOC) that outlines the work schedule during the implementation phase and the budget allocated for each activity, as approved by SOFF. Additionally, it will define the monitoring and evaluation mechanisms to be followed, as well as implementation arrangements. The roles of participating entities, including beneficiaries and national institutions related to the project's objectives (such as MDS and Ministry of Public Works) will be specified. The PRODOC will also address project risks, mitigation measures, and environmental safeguards. A Project Board will be created to provide project oversight and guidance. The Project Board will be responsible for approving annual workplans that will be developed in tandem between UNDP and the Ministry of Public Works. While the project will managed as a DIM, UNDP may engage the support of Responsible Parties for the implementation of specific actions. To implement any partnership, UNDP ensures that clear and robust fiduciary arrangements are in place before the implementation starts. These include financial management and procurement aspects which enable transparency, accountability, and effectiveness in the utilisation of funds mobilised. **Reporting and Auditing:** Regular financial reports will track progress, while independent audits will ensure transparency and compliance with standards as per UNDP Rules and Regulations. **Procurement:** UNDP and the MDS will work closely to deliver all planned procurement. Using its own policies and guidelines, UNDP will be responsible of the following procurement activities, including purchase of equipment and services. UNDP will work with MDS and KNMI to prepare all specifications and/or Terms of Reference for all procurement of services, equipment, materials and goods and support for maintenance of land-based and upperair stations as well as the technical trainings of MDS Staff. Once the specifications/ToRs are ready, UNDP Procurement guidelines will be followed for acquisission of goods and services. The evaluation of offers will be done by an independent UNDP procurement committee and the award will be given to the most competitive offeror.

Social and environmental safeguards	UNDP follows norms that require an analysis of environmental and social safeguards, which must be conducted and approved before project implementation begins. Social and environmental sustainability will be reinforced through the application of UNDP's Social and Environmental Standards, which can be accessed at UNDP SES Standards at http://www.undp.org/ses. A Social and Environmental Screening Procedure will be applied during project document formulation to identify possible ESS risks and they management measures. *The **Investment Phase social and environmental safeguards** for the Meteorological Service of Suriname ensure that all project activities align with sustainable and inclusive practices.* *These safeguards include measures to mitigate environmental impacts, promote social equity, and integrate gender considerations throughout the project lifecycle.* **Environmental Safeguards:** Sustainable Installations: AWS and AWLS will comply with national regulations and international best practices, minimizing environmental disruption. Renewable energy sources and proper waste management will be prioritized. Climate Resilience: The project will strengthen early warning systems and contribute to climate adaptation strategies, enhancing national resilience. **Social Safeguards:** Community Engagement: Indigenous and local communities will be actively consulted as appropriate such as through Free, Prior, and Informed Consent (FPIC) to avoid land-use conflicts and ensure local support. Site assessments will prevent displacement, and information as it relates to grievance mechanisms by UNDP will be in place. The project will promote local benefits such as training and service access, with ongoing monitoring **Gender Policy:** Gender Equality: A gender-sensitive approach will ensure equal participation of women in training, decision-making, and technical roles. The project will promote women's leadership and employment in meteorology. **Monitoring and Compliance:** Safeguard Monitoring: A framework will track environmental and social safeguards, with gender-disaggregated data and a grievance mechanism for affected communities. These measures ensure the project aligns with sustainable development, social inclusion, and gender equality. UNDP has a well-definedgender policy that is integrated across all project results. Efforts to ensure gender equality in the promotion of meteorological and climatic services will continue and will be enhanced through project implementation by providing an opportunity for targeted technical support to women technicians. Gender considerations have been included in the results framework to ensure that there is at least 50% female representation in capacity development activities.

Dispute resolution mechanism	The **Investment Phase dispute resolution mechanism** for the Meteorological Service of Suriname ensures a transparent process for managing complaints and resolving conflicts. **1. Complaints Management:** Complaints can be submitted via the MDS and Ministry of Public Works email addresses, in person at the One-Stop Window, through the Ministry's digital platform, via WhatsApp, or by calling the 24/7 hotline (available in Dutch and local languages), and through local radio. Acknowledgment and Tracking: Complaints will be promptly acknowledged and tracked until they are resolved. **2. Conflict Resolution:** • Investigation and Mediation: A team of local representatives and trained conflict specialist will address complaints, with escalation to the Project Steering Committee or local authorities if needed. • Conflict resolution will be managed per the valid SBAA Agreement entered upon UNDP and the Government of Suriname. **3. Transparency:** Regular community meetings in local languages and reports will provide updates on complaints and resolutions. A Community Liaison Officers will engage Indigenous and remote communities to ensure their concerns are properly addressed.
Additional relevant policies and procedures	The Implementing Entity for the Investment Phase of the Meteorological Service of Suriname follows several key policies and procedures to ensure effective governance and compliance: **1. Financial Management:** • Budgeting and Reporting: Guidelines for budget preparation and financial reporting, ensuring compliance with donor requirements. • Procurement Procedures: Standard procedures for competitive bidding and contract management. **2. Gender Equality:** • Gender Mainstreaming Framework: Guidelines to integrate gender considerations into all project activities. **3. Risk Management:** • Risk Assessment Procedures: Policies for identifying and managing risks throughout the project lifecycle. **4. Monitoring and Evaluation:** • Performance Monitoring: Guidelines for tracking project progress and outcomes through regular evaluations. **5. Stakeholder Engagement:** • Consultation Procedures: Framework for engaging stakeholders to incorporate their feedback and concerns. It is important to note that UNDP has a robust Programme and Operational Policies and Procedures (POPP) framework. This framework provides comprehensive guidance for project and programme implementation, ensuring effectiveness, transparency, and accountability in all operations. The Project operated as DIM Project will follow UNDP POPP at all times during project implementation.

SDG Targets

Target	Description
Main Goals	
Goal 13. Take urgent action to combat climate change and its impacts2	
TARGET_13.1	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Target	Description
TARGET_13.2	13.2 Integrate climate change measures into national policies, strategies and planning
TARGET_13.3	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
TARGET_13.b	13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities
Secondary Goals	
Goal 5. Achieve gender equality and empower all women and girls	
TARGET_5.5	5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

SDG Indicators

Indicator Code	Description
C130b01	13.b.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate c

Contribution to SDGs

Participating Organization	% TARGET_13.1	% TARGET_13.2	% TARGET_13.3	% TARGET_13.b	% TARGET_5.5	% Total
WMO	20	20	15	25	20	100
UNDP	20	20	25	20	15	100
Total contribution by target	**40**	**40**	**40**	**45**	**35**	
Project contribution to SDG by target	**20**	**20**	**20**	**22.5**	**17.5**	**100**

Project Results

Outcome	Output	Description
1. GBON institutional and human capacity developed		
	1.1 National Consultations conducted	1.1 National consultations including with CSOs, and other relevant stakeholders conducted.

Outcome	Output	Description			
	Activities				
	Title	**Description**	**Lead Participating Organization**	**Participating Organization**	**Other Organizations**
	1.1.1 Conduct consultation meetings with experts and stakeholders including private sector to shape a business development strategy		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	Ministry of Public Works and MDS
	1.1.2 Conduct a community engagement meetings with the tribal communities and women in remote areas		UNDP - UNDP (United Nations Development Programme (UNDP))		Ministry of Public Works
	1.1.3 Implement a gender plan to enhance MDS strategic plan and ensure gender streamlining		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	Ministry of Public Works, MDS, KNMI
	1.2 NMHS institutional capacity developed	NMHS institutional capacity required to operate the GBON network developed.			

Outcome	Output	Description			
	Activities				
	Title	**Description**	**Lead Participating Organization**	**Participating Organization**	**Other Organizations**
	1.2.1 Refresh the MDS strategic plan while ensuring gender and community considerations are reflected.		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS
	1.2.2 Implement an operational plan and generate capacities for its implementation (operationalization and staffing).		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS
	1.2.3 Implement a road map for full integration with WIS 2.0 , including an assessment of current infrastructure and necessary upgrades and components	Roadmap implementation should result in SOPs for metadata management and the integration of OSCAR/Surface workflows with national data management systems as well as protocols for real-time and delayed data sharing, per WIS standard.	UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS
	1.2.4 Develop an institutional and regulatory analysis for PPPs to establish the viability for entering into cost sharing agreements with the private sector, parastate companies and ministries		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS
	1.2.5 Establish a joint oversight committee with representatives from the government and relevant private sector partners to review contributions,		UNDP - UNDP (United Nations Development Programme (UNDP))		
	1.3 NMHS human capacity developed	NMHS human capacity required to operate the GBON network developed.			

Outcome	Output	Description			
	Activities				
	Title	**Description**	**Lead Participating Organization**	**Participating Organization**	**Other Organizations**
	1.3.1 Training and development of competencies for the senior leadership team at the MDS leadership, and the Project Management Unit including on financial management, entering into PPP partnerships, project management, and human resource management		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS, KNMI
	1.3.2 Training in data management and data analysis	Trainings will include those on metadata management and collection for OSCAR/Surface as well as on data quality and data formatting for WIS compliance	UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS, KNMI
	1.3.3 Implement a calibration plan appropriate for Suriname to be able to meet GBON requirements along with installed capacities through training and use of calibration kit and for the maintenance of observations		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS, KNMI
	1.3.4 Provide training for meteorologists, technicians, and ICT staff on the new equipment, systems (including WIS 2.0), and SOPs to ensure consistent and accurate operations.	Trainings will include those on transmission protocols for WIS compliance as well as on quality monitoring and error analysis for WDQMS reports	UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS, KNMI, Ministry of Public Works
2. GBON infrastructure in place					

Outcome	Output	Description
	2.2 Improved land-based stations in place.	Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place.

Activities

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
2.2.1 Enhancing 5 land based stations to be made GBON compliant (Nickerie, Zanderij, Tafelberg, Stoelmanseiland, Kwamalasamutu)	Logistics, Physical infrastructure, enclosure, sensors and communications equipment for enhancing four land stations to be made GBON compliant (Nickerie, Zanderij, Tafelberg, Stoelmanseiland and Kwamalasamutu)) plus spare equipment for repairs and resilience	UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS
2.2.2 Set up secure communication systems for data transmission with robust backup and recovery plans.		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS
2.2.3 Update and validate OSCAR/Surface metadata regularly, with standardized collection procedures		UNDP - UNDP (United Nations Development Programme (UNDP))	• WMO - WMO (World Meteorological Organization)	MDS

	2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place.

<table>
<tr><th>Outcome</th><th>Output</th><th>Description</th></tr>
<tr><td></td><td colspan="2">Activities<table>
<tr><th>Title</th><th>Description</th><th>Lead Participating Organization</th><th>Participating Organization</th><th>Other Organizations</th></tr>
<tr><td>2.4.1 Equipment and spare parts for improved upper airstations including storage of parts and helium</td><td></td><td>UNDP - UNDP (United Nations Development Programme (UNDP))</td><td>• WMO - WMO (World Meteorological Organization)</td><td>MDS, KNMI</td></tr>
<tr><td>2.4.2 Modernize Data Storage Solutions: Invest in cloud- based or high- capacity local storage solutions to manage and archive meteorological data securely.</td><td></td><td>UNDP - UNDP (United Nations Development Programme (UNDP))</td><td>• WMO - WMO (World Meteorological Organization)</td><td>MDS, KNMI</td></tr>
</table></td></tr>
<tr><td>3. Sustained compliance with GBON</td><td></td><td></td></tr>
<tr><td></td><td>3.1 GBON land-based stations commissioning period completed.</td><td>GBON land-based stations’ commissioning period completed, country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority</td></tr>
<tr><td></td><td colspan="2">Activities<table>
<tr><th>Title</th><th>Description</th><th>Lead Participating Organization</th><th>Participating Organization</th><th>Other Organizations</th></tr>
<tr><td>3.3.1 Sustained operation for 2 years for 5 GBON Surface stations</td><td>logistics, spares and maintenance, vehicle and fuel costs, Maintenance Team overtime hours</td><td>UNDP - UNDP (United Nations Development Programme (UNDP))</td><td>• WMO - WMO (World Meteorological Organization)</td><td>MDS</td></tr>
</table></td></tr>
<tr><td></td><td>3.2 GBON upper air stations’ commissioning period completed.</td><td>GBON upper air stations’ commissioning period completed, country-specific
standard cost for operations and maintenance established, and data sharing
verified by WMO Technical Authority.</td></tr>
<tr><td></td><td colspan="2">Activities<table>
<tr><th>Title</th><th>Description</th><th>Lead Participating Organization</th><th>Participating Organization</th><th>Other Organizations</th></tr>
<tr><td>3.2.1 Sustained operation for 2 years for 1 GBON upper air station</td><td>staff time, supply of parts for general OM</td><td>UNDP - UNDP (United Nations Development Programme (UNDP))</td><td>• WMO - WMO (World Meteorological Organization)</td><td>MDS</td></tr>
</table></td></tr>
</table>

Signature Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Linked Outcome / Output
No signature indicators available.												

Imported Fund Outcome / Output Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Li O /
Number of land-based stations improved		Number of stations as defined in the National Contributio n Plan.	Progress updates/An nual or quarterly reports	Investment	At closure	Country	Number	0	2025	5	2029	**O :** G in tu pl **O** 2. In la ba st in
Number of upper-air stations improved		Number of stations as defined in the National Contributio n Plan.	Progress updates/An nual or quarterly reports	Investment	At closure	Country	Number	0	2025	1	2029	**O :** G in tu pl **O** 2. In up st re ec nt sy da m m sy ar st op pr in

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Li O /
GBON land-based stations' commissioned		Number of stations as defined in the National Contribution Plan.		Policy	At closure	Country	Number	0	2025	5	2029	**O** : Su cc ce G **O** 3. G la ba st cc or pe cc d.
GBON upper air stations' commissioned		Number of stations as defined in the National Contribution Plan.		Policy	At closure	Country	Number	0	2025	1	2029	**O** : Su cc ce G **O** 3. G up st cc or pe cc d.

Project Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Lin Ou / O
1.1.1 Number of Consultations held		consultation meeting with experts and stakeholders, including private sector	Consultation meeting report	Capacity	At closure	Country	Number	0	2025	3	2029	**Ou** : 1. GB inst nal hur cap dev d **Ou** 1.1 Nat Cor ion cor d
	At least 50% of all stakeholders consulted are women	At least 50% of all stakeholders consulted are women	Attendance list	Capacity	At closure	Country	Percentage	0	2025	50%	2029	

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Lin Ou / O
1.1.2 # tribal communities and relevant women's association are consulted		# tribal communities and relevant women's associations are consulted	Consultation meeting reports	Capacity	At closure	Country	Number	0	2025	4	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.1 Nat Co ion cor d
	At least 50% of all stakeholders consulted are women	At least 50% of all stakeholders consulted are women	Attendance list	Capacity	At closure	Country	Percentage	0	2025	50%	2029	
1.2.1 # of Strategic Plans Updated and Approved		Updating of the MDS Strategic Plan	MDS Updated and Approval Documentation (Minutes, official communication as relevant)	Policy	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.2 NM inst nal cap dev d
	No components available.											
1.2.2 # of Operational Plans Developed for the Operation of the GBON Network		- Develop an operational plan and generate capacities for its implementation (operationalization and staffing).	Operational Plan	Policy	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.2 NM inst nal cap dev d
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Lin Ou / O
1.3.1 # of senior leadership team trained		5 people comprise senior management positions of which 2 are women	Attendance Lists and training plan	Capacity	At closure	Country	Number	0	2025	5	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.3 NM hur cap dev d
	At least 40% are women	2 women make up senior management positions	Attendance list	Capacity	At closure	Country	Percentage	0	2025	40%	2029	
1.3.2 # of trainings in data management to enhance national capacities to deliver observations and information to GBON Network			Training reports	Capacity	At closure	Country	Number	0	2025	3	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.3 NM hur cap dev d
	50% technicians trained are women		Attendance list	Capacity	At closure	Country	Percentage	0	2025	50%	2029	
1.3.3 Implementation of an operation and maintenance plan (including calibration) and training program for its operationalization			Callibration plan and training program developed and project reporting reports	Policy	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.3 NM hur cap dev d

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Lin Ou / O
	# of technicians trained	On the callibration program including OM and onsite safety	Attendance Lists	Capacity	At closure	Country	Number	0	2025	10	2029	
	50% technicians trained are women	On the callibration program including OM and onsite safety	Attendance lists	Capacity	At closure	Country	Percentage	0	2025	50%	2029	
	# of meteorologist trained		Attendance list	Capacity	At closure	Country	Number	0	2025	6	2029	
	50% meteorologist are women		Attendance list	Capacity	At closure	Global	Percentage	0	2025	50%	2029	
1.3.4 # trainings for meteorologists, technicians, and ICT staff on the new equipment, systems (including WIS 2.0), and SOPs to ensure consistent and accurate operations.			Annual reports and training reports	Capacity	At closure	Country	Number	0	2025	4	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.3 NM hur cap dev d
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Lin Ou / O
1.2.3 Implemented Roadmap for full integration with WIS 2.0		Implemented Roadmap for WIS.20.	Roadmap and WMO verification	Policy	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.2 NM inst nal cap dev d
	No components available.											
1.2.4 Completed regulatory analysis for PPPs			Regulatory analysis developed and project reporting reports	Policy	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.2 NM inst nal cap dev d
	No components available.											
1.2.5 Joint Oversight Committee created			Meeting minutes of joint oversight committee meetings	Other	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.2 NM inst nal cap dev d
	No components available.											

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Lin Ou / O
1.1.3 Gender plan impleme nted			Workshop meetings, gender plan progress report	Capacity	At closure	Country	Number	0	2025	1	2029	**Ou : 1** GB inst nal hur cap dev d **Ou** 1.1 Nat Co ion cor d
	No components available.											

Risks

Event	Category	Level	Likelihood	Impact	Mitigating Measures	Risk Owner
Financial instability or insufficiency, due to fluctuating currency values, changes in donor funding levels, or unforeseen costs	• Financi al	High	Possible	Moder ate	Identify economic trends and risks in advance. Diversify funding sources. Obtain funding from governments, private sector, and international organizations. This will be supported through various ongoing initiatives including funding that will be received by the Government of India a well as the GCF through the EW4All Multi Country Proposal. The project will also ensure outreach to private sector within stakeholder engagement. Apply a flexible financial planning and monitoring to ensure efficient fund utilization and budget adjustment where needed.	MDS and UNDP
Challenges in Cooperation, Joint coordination and mis-alignment of goals and processes.	• Operat ional	Medi um	Unlikely	Moder ate	Project goals and responsibilities of partners/stakeholders are clearly formulated in the Investment plan. Regular communication and feedback is maintained, keeping stakeholders informed of updates and risks. Regular performance review to identify issues and areas for improvement.	UNDP, Ministry of Public Works, MDS
Non-compliance with fiduciary and procurement standards in some SOFF activities	• Financi al	Low	Rare	Insignif icant	UNDP procurement rules and regulations will be followed, ensuring that the value for money is considered in all activities and the quality of deliverables ensured. Engage relevant stakeholders in the procurement process to promote transparency and accountability.	UNDP

SOFF-funded investments cause environmental or social impacts		Low	Unlikely	Minor	The remaining activities are upgrades, training and capacity building. The project will involve local communities and stakeholders as well as will establish a monitoring framework, provide staff training on safeguards in general and UNDP Social and Environmental Standards (SES), and implement these standards. Adaptive project management will be applied to ensure environmental recommendations in the National Contribution Plan are followed.	UNDP and Ministry of Public Works
NMHS staff depart after being trained	• Organizational • Operational	High	Possible	Moderate	To improve staff retention, implement retention programs including mentorship systems, and incentives for completing training through ongoing training opportunities and opportunities for advancement. Ensure knowledge sharing, internal dissemination of clear protocols to all relevant staff, and efficient onboarding process . Systematize training through manuals and procedures to support new staff hires so that information is not lost. These measures aim to reduce staff departures after training and ensure effective onboarding of new staff after the separation of staff, resulting in a stable and capable workforce at NMHS.	Ministry of Public Works and MDS
Operational efficiency risk, causing slow implementation and delays in procurement, installation and capacity building activities, resulting in failure of the project		High	Possible	Major	Use established project management methodologies. Develop and monitor KPIs to assess progress, and implement feedback and monitoring mechanisms for continual improvement, and enhances operational efficiency. Commit resources and dedicated expertise for successful implementation UNDP will look to leverage existing LTAs to facilitate procurement. The project will be able to leverage global and regional support. A procurement plan will also be developed with each annual workplan with key dates and milestones.	UNDP and Ministry of Public Works
After the conclusion of the Investment phase, GBON data are not collected or shared or are shared of insufficient quality	• Strategic	Low	Unlikely	Minor	To ensure high-quality meteorological data and mitigate risks MDS will ensure regular audits to address quality issues, maintain existing and establish new data-sharing agreements with stakeholders, such as KNMI while continuing collaboration with international organizations to align data standards, monitor and report on data collection and sharing activities, create feedback channels for continuous improvement.	MDS

Destruction or theft of SOFF-financed equipment and infrastructure	• Operational	Low	Unlikely	Minor	Quarterly community feedback surveys, security incident logs, and station condition report. Regular security assessments should be conducted at all installation sites to identify vulnerabilities and address them. Install security features like locks and place signs on the station fence to deter theft and vandalism, as well as secure insurance for all SOFF-financed equipment and infrastructure. Implement an inventory management system to track equipment and collaborate with local communities and law enforcement to enhance security awareness and raise also the importance of the station. Provide staff training on security protocols and develop clear emergency response plans for reporting theft or damage and outline recovery steps. These measures will help mitigate the risk of destruction or theft, ensuring the integrity and sustainability of SOFF-financed investments.	Ministry of Public Works
Countries cannot make optimal use of data, including accessing or using improved forecasts products from the Global Producing Centers throughout the hydromet value chain	• Strategic	Low	Unlikely	Minor	Train meteorologists and data managers to use improved forecast products. Invest in infrastructure for better access to global data sources. Establish partnerships with Global Producing Centers for continuous support. Develop tools to integrate global data into local systems. Engage stakeholders from various sectors to ensure diverse data usage. Establish feedback mechanisms to assess forecast product effectiveness. Conduct awareness campaigns to promote the importance of improved forecasts. By implementing these measures, the project aims to enhance the capacity of countries to effectively access and use data throughout the hydromet value chain	MDS
Political instability and regulatory risks which will impact the successful completion of the Investment Phase	• Political	High	Possible	Moderate	Based on the Suriname second NDC, the Technical Needs Assessment, and the 3rd NC, the importance of climate data for Suriname's Climate Change adaptation and mitigation has been reinforced. Continued involvement and communication with government stakeholders to ensure alignment with national priorities. Foster collaborations with local civil society organizations to enhance community support and stability. Monitor relevant laws and policies and establish real-time alert systems for potential impacts. Professional and ethical lobbying and advocacy efforts can ensure project compliance and support.	Ministry of Public Works, UNDP

Capacity gaps in technical skills after completion of the investment phase	• Operational	High	Possible	Moderate	Implement comprehensive training and capacity-building programs for staff. Establish partnerships with regional meteorological institutions for knowledge exchange. Ensure knowledge sharing, internal dissemination of clear protocols to alle relevant staff, and efficient onboarding process of new staff.	MDS , KNMI
Natural disasters	• Social and Environmental	Medium	Possible	Minor	Develop contingency plans and disaster risk reduction strategies. Enhance early warning systems to improve community preparedness.	Ministry of Public Works and UNDP

Budget by UNSDG Categories: Over all

Budget Lines	Description	UNDP (7%) *	WMO (7%) *	Total
1. Staff and other personnel		$378,000.00	$0.00	$378,000.00
2. Supplies, Commodities, Materials		$71,000.00	$0.00	$71,000.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation		$966,635.60	$0.00	$966,635.60
4. Contractual services		$519,430.00	$226,758.76	$746,188.76
5. Travel		$260,522.00	$0.00	$260,522.00
6. Transfers and Grants to Counterparts		$0.00	$0.00	$0.00
7. General Operating and other Direct Costs	Workshops	$70,000.00	$0.00	$70,000.00
Project Costs Sub Total		**$2,265,587.60**	**$226,758.76**	**$2,492,346.36**
8. Indirect Support Costs		$158,591.13	$15,873.11	$174,464.25
Total		**$2,424,178.73**	**$242,631.87**	**$2,666,810.61**

Performance-based Tranches Breakdown

Tranche			Total
Tranche 1	UNDP (70%)	$1,696,925.11	$1,777,794.31
	WMO (33.33%)	$80,869.20	
Tranche 2	UNDP (30%)	$727,253.62	$808,122.82
	WMO (33.33%)	$80,869.20	
Tranche 3	UNDP (0%)	$0.00	$80,893.47
	WMO (33.34%)	$80,893.47	
			$2,666,810.60

Results based budget

Outcome *	Output *	Agency *	Budget (USD) *
1. GBON institutional and human capacity developed		**Sub Total**	**$1,350,131.87**
	1.1 National Consultations conducted	UNDP (7%)	$132,500.00
	1.2 NMHS institutional capacity developed	UNDP (7%)	$275,000.00
	1.3 NMHS human capacity developed	UNDP (7%)	$700,000.00

	1.3 NMHS human capacity developed	WMO (7%)	$242,631.87
2. GBON infrastructure in place		**Sub Total**	**$245,587.60**
	2.2 Improved land-based stations in place.	UNDP (7%)	$125,587.60
	2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place.	UNDP (7%)	$120,000.00
3. Sustained compliance with GBON		**Sub Total**	**$912,500.00**
	3.1 GBON land-based stations commissioning period completed.	UNDP (7%)	$196,550.00
	3.2 GBON upper air stations' commissioning period completed.	UNDP (7%)	$715,950.00
Total			**$2,508,219.47**

Programme Outcome Costs

Outcome	Output	Activity	Implementing Agent	Time Frame			
				2025	2026	2027	2028
				1	1	1	1
1. GBON institutional and human capacity developed							
	1.1 National Consultations conducted						
		1.1.1 Conduct consultation meetings with experts and stakeholders including private sector to shape a business development strategy					
			UNDP	☑	☐	☑	☐
			WMO	☑	☐	☑	☐
		1.1.2 Conduct a community engagement meetings with the tribal communities and women in remote areas					
			UNDP	☑	☑	☐	☐
		1.1.3 Implement a gender plan to enhance MDS strategic plan and ensure gender streamlining					
			UNDP	☑	☑	☑	☐
			WMO	☑	☑	☑	☐
	1.2 NMHS institutional capacity developed						
		1.2.1 Refresh the MDS strategic plan while ensuring gender and community considerations are reflected.					
			UNDP	☐	☑	☐	☐
			WMO	☐	☑	☐	☐
		1.2.2 Implement an operational plan and generate capacities for its implementation (operationalization and staffing).					
			UNDP	☐	☑	☐	☐
			WMO	☐	☑	☐	☐
		1.2.3 Implement a road map for full integration with WIS 2.0 , including an assessment of current infrastructure and necessary upgrades and components					
			UNDP	☑	☑	☑	☐
			WMO	☑	☑	☑	☐
		1.2.4 Develop an institutional and regulatory analysis for PPPs to establish the viability for entering into cost sharing agreements with the private sector, parastate companies and ministries					
			UNDP	☑	☑	☑	☐
			WMO	☑	☑	☑	☐
		1.2.5 Establish a joint oversight committee with representatives from the government and relevant private sector partners to review contributions,					
			UNDP	☑	☑	☐	☐
	1.3 NMHS human capacity developed						
		1.3.1 Training and development of competencies for the senior leadership team at the MDS leadership, and the Project Management Unit including on financial management, entering into PPP partnerships, project management, and human resource management					
			UNDP	☑	☐	☑	☐

Outcome	Output	Activity	Implementing Agent	Time Frame			
				2025	2026	2027	2028
				1	1	1	1
			WMO	☑	☐	☑	☐
		1.3.2 Training in data management and data analysis					
			UNDP	☑	☑	☐	☐
			WMO	☑	☑	☐	☐
		1.3.3 Implement a calibration plan appropriate for Suriname to be able to meet GBON requirements along with installed capacities through training and use of calibration kit and for the maintenance of observations					
			UNDP	☑	☐	☐	☐
			WMO	☑	☐	☐	☐
		1.3.4 Provide training for meteorologists, technicians, and ICT staff on the new equipment, systems (including WIS 2.0), and SOPs to ensure consistent and accurate operations.					
			UNDP	☑	☑	☐	☑
			WMO	☑	☑	☐	☑
2. GBON infrastructure in place							
	2.2 Improved land-based stations in place.						
		2.2.1 Enhancing 5 land based stations to be made GBON compliant (Nickerie, Zanderij, Tafelberg, Stoelmanseiland, Kwamalasamutu)					
			UNDP	☑	☑	☐	☐
			WMO	☑	☑	☐	☐
		2.2.2 Set up secure communication systems for data transmission with robust backup and recovery plans.					
			UNDP	☑	☑	☑	☐
			WMO	☑	☑	☑	☐
		2.2.3 Update and validate OSCAR/Surface metadata regularly, with standardized collection procedures					
			UNDP	☑	☑	☑	☐
			WMO	☑	☑	☑	☐
	2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place.						
		2.4.1 Equipment and spare parts for improved upper airstations including storage of parts and helium					
			UNDP	☑	☐	☐	☐
			WMO	☑	☐	☐	☐
		2.4.2 Modernize Data Storage Solutions: Invest in cloud- based or high- capacity local storage solutions to manage and archive meteorological data securely.					
			UNDP	☑	☑	☐	☐
			WMO	☑	☑	☐	☐
3. Sustained compliance with GBON							
	3.1 GBON land-based stations commissioning period completed.						
		3.3.1 Sustained operation for 2 years for 5 GBON Surface stations					
			UNDP	☐	☐	☑	☑
			WMO	☐	☐	☑	☑
	3.2 GBON upper air stations' commissioning period completed.						
		3.2.1 Sustained operation for 2 years for 1 GBON upper air station					
			UNDP	☐	☐	☑	☑
			WMO	☐	☐	☑	☑

Signatures

UNDP: UNDP (United Nations Development Programme (UNDP)) (Digital) Mr Berdi Berdiyev Deputy Resident Representative, and Head of Office UNDP Suriname berdi.berdiyev@undp.org	**SIGNATURE:** **DATE:**
WMO: WMO (World Meteorological Organization) (Digital) Celeste Saulo Secretary General csaulo@wmo.int	**SIGNATURE:** **DATE:**

Annex: Terms of Reference for the provision of technical advisory services during the SOFF Investment Phase

1. Purpose and scope

These Terms of Reference describe the provision of technical advisory services by KNMI to the Suriname to contribute to the delivery of the SOFF Investment Phase outputs as described in Section 3.

The Terms of Reference are based on the SOFF Operational Manual, Section 4.4.3 on the Operational Partners and Section 4.5.2 on the Investment Phase; as well as on the SOFF Investment Framework, Section 4.5 on the Peer Advisors and WMO Technical Authority.

2. Roles and responsibilities

Beneficiary country National Meteorological and Hydrological Service

- Is responsible for implementing the activities of the SOFF Investment Phase activities with the support of the Implementing Entity and the peer advisor.
- Submits the SOFF Investment Phase funding request using the standardized template provided by the SOFF Secretariat, including the Terms of References for the peer advisor's technical advisory services during the Investment Phase.
- Is responsible for collaborating with the Implementing Entity to provide all the necessary information, participate in and facilitate the national activities that the Implementing Entity and peer advisor need to conduct in order to deliver the SOFF Investment Phase outputs.
- Confirms the completion of all the Investment Phase activities and provides comments as needed on the final report prepared by the Implementing Entity.

Peer advisor

- Is accountable to the beneficiary country and the Implementing Entity.
- Is contracted via the WMO pass-through mechanism and operates on a cost-recovery basis.
- Provides technical advisory services to support beneficiary countries and Implementing Entities in the design and implementation of the SOFF Investment Phase activities.
- Contributes to the final report of the SOFF Investment Phase.

Implementing Entity

- Prepares the Investment Phase funding request in collaboration with the beneficiary country and the peer advisor, including the Terms of References for the provision of technical advisory services during the SOFF Investment Phase.
- Manages the Investment Phase activities following the terms specified in the funding request and in collaboration with relevant national partners, including civil society organizations.

- Delivers the Investment phase outputs and is responsible for their quality and timely delivery, in coordination with the country and the peer advisor.
- Provides quarterly updates to the SOFF Secretariat according to a simple standardized form and annual reports according to the United Nations Multi-Partner Trust Fund Office's reporting requirements indicated in the legal agreements.
- Informs the SOFF Secretariat of circumstances that could materially impede the implementation of the Investment phase or any considerable deviation in the conditions of the funding request to achieve its objectives.
- Submits the final report to the SOFF Secretariat including the beneficiary country's comments and the peer advisors' feedback. The final report describes the institutional arrangements to secure sustained operation and maintenance of the investments made.

WMO Technical Authority

- Provides basic on-demand technical assistance to the beneficiary country, Implementing Entity and peer advisor on GBON regulations, including on monitoring and assessing the data-sharing status of the stations using the WDQMS web tool[1]
- Is responsible for the verification of data sharing of the new or rehabilitated surface and upper -air stations as per GBON regulations.
- WMO provides a verification report to the SOFF Secretariat, upon which the Investment Phase can be considered completed.
- Establishes and administers the pass-through mechanism for contracting and funding of the advisory services provided by the peer advisors.

SOFF Secretariat

- Facilitates communication, coordination and collaboration between the beneficiary country, the Implementing Entity, the peer advisor and WMO Technical Authority.
- Reviews the SOFF Investment Phase funding request, including the Terms of Reference for the provision of technical advisory services and provides feedback as needed. Then transmits the funding request to the SOFF Steering Committee for their decision.
- Compiles quarterly updates and annual reports and monitors implementation based on information received from the Implementing entity, the peer advisor and the beneficiary country. Regularly informs the Steering Committee of progress.
- Coordinates regional implementation approaches to the SOFF Investment Phase.
- Confirms receipt of the final report by the Implementing Entity and completion of the Investment Phase based on WMO verification of data sharing.
- Organizes exchange of knowledge and experiences and captures lessons learned.

[1] The WDQMS web tool monitors the availability and quality of observational data based on near -real-time information from the four participating global Numerical Weather Prediction centres: the German Weather Service (DWD), the European Centre for Medium range Weather Forecasts (ECMWF), the Japan Meteorological Agency (JMA) and the United States National Centers for Environmental Pre diction (NCEP). These are four of the ten World Meteorological Centres, designated by WMO to provide global numerical weather prediction products for all WMO Members.

3. Peer advisors' activities during the SOFF Investment Phase

The peer advisor will contribute to the delivery of the SOFF Investment Phase outputs as described in the *RBM* section of the SOFF UNMPTF Gateway through the following activities:

Output	**Indicator** (Please copy the indicators from RBM section of the Investment Funding request.)	**Activities conducted / contributions** (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	**Implementation plan**				
			Y1	**Y2**	**Y3**	**Y4**	**Y5**
1.1 **National consultations**, including with CSOs and other relevant stakeholders conducted	# of Consultations held with experts and stakeholders including private sector	Provide support with MDS consultation meetings with experts and stakeholders, including private sector. Review the meeting outcomes.	1		1		1
	At least 50% of all stakeholders consulted are women	Support the development of a comprehensive gender action plan detailing specific activities, targets, and timelines for achieving gender balance and enhancing gender opportunities. Review the final plan. (Co)-organise a gender workshop. Report the results.	50 %		50 %		50 %
	# tribal communities and relevant women's associations consulted:	Provide support with MDS a community engagement meeting with the tribal communities and women in remote areas. Review the meeting outcomes.	4	4			4
	Gender plan implemented	Provide a Gender action plan including questionnaire and workshops to strengthen gender awareness and also recognise vulnerable groups in EWS.				1	

Output	Indicator (Please copy the indicators from RBM section of the Investment Funding request.)	Activities conducted / contributions (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	Implementation plan				
			Y1	Y2	Y3	Y4	Y5
1.2 **NMHS institutional capacity** required to operate the GBON network developed	# of Strategic Plans Updated and Approved	Provide guidance for the development of the strategic plans. Review the final plan and report.		1			
	# of Operational Plans Developed for the Operation of the GBON Network	Provide expert guidance for the development of the operational plans. Review the final plan and report.		1			
	Implemented Roadmap for full integration with WIS 2.0	Provide an assessment of current infrastructure and provide guidance and training together with WMO on WIS 2.0 integration.				1	
	Completed regulatory analysis for PPPs	Provide guidance for PM to explore PPP				1	
	Joint Oversight Committee created	Guidance with set-up of committee and monitor and evaluate				1	
1.3 **NMHS human capacity** required to operate the GBON network developed	# of senior leadership team trained	Provide and develop training materials and conduct training for 5 persons. In Y5 the training will be focused on evaluation and how to retain the acquired competencies	5		5		5

Output	Indicator (Please copy the indicators from RBM section of the Investment Funding request.)	Activities conducted / contributions (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	Implementation plan				
			Y1	Y2	Y3	Y4	Y5
	% of senior leadership team that is trained are women	Support the development of a comprehensive gender action plan detailing specific activities, targets, and timelines for achieving gender balance and enhancing gender opportunities. Review the final plan. (Co-) Organise a gender workshop. Report the results.	40		40		40
	# of trainings in data management to enhance national capacities to deliver observations and information to GBON Network	Advise in data management and support capacity building based on WMO guidelines. Within the inception phase the peer advisor will secure that a qualitative good training will be developed based on the latest and local situation at that time. And the peer advisor also assures that the training will be organised in an effective and comprehensive way, ,possibly in synergy with other SOFF countries. Coordination with WMO (preferable Caribbean WIS2.0) needs to be set-up. Y1: Conduct a comprehensive assessment of current infrastructure and identify necessary upgrades for WIS 2.0 compatibility. Y2: Prioritize specific WIS 2.0 components (e.g., data hubs, metadata standards) and map these to project timelines. Y4: Full integration with WIS 2.0, (improved data quality and international compliance), including training for staff and technical support (WMO, KNMI)	1	1			1

Output	Indicator (Please copy the indicators from RBM section of the Investment Funding request.)	Activities conducted / contributions (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	Implementation plan				
			Y1	Y2	Y3	Y4	Y5
	% of female participants	Support the development of a comprehensive gender action plan detailing specific activities, targets, and timelines for achieving gender balance and enhancing gender opportunities. Review the final plan. (Co-) Organise a gender workshop. Report the results.	50	50			50
	# Development of an operation and maintenance plan and training program for its operationalization	Support in development of operation and maintenance plan. Review final plan. And support the development of training material for its operationalization	1				
	# of technicians trained on calibration plan	Support MDS in training technicians, by providing training materials. Within the inception phase the peer advisor will secure that a qualitative good training will be developed based on the latest and local situation at that time. And the peer advisor also assures that the training will be organised in an effective and comprehensive way, possibly in synergy with other SOFF countries.	10		10		10
	% of female participants	Support the development of a comprehensive gender action plan detailing specific activities, targets, and timelines for achieving gender balance and enhancing gender opportunities. Review the	50		50		50

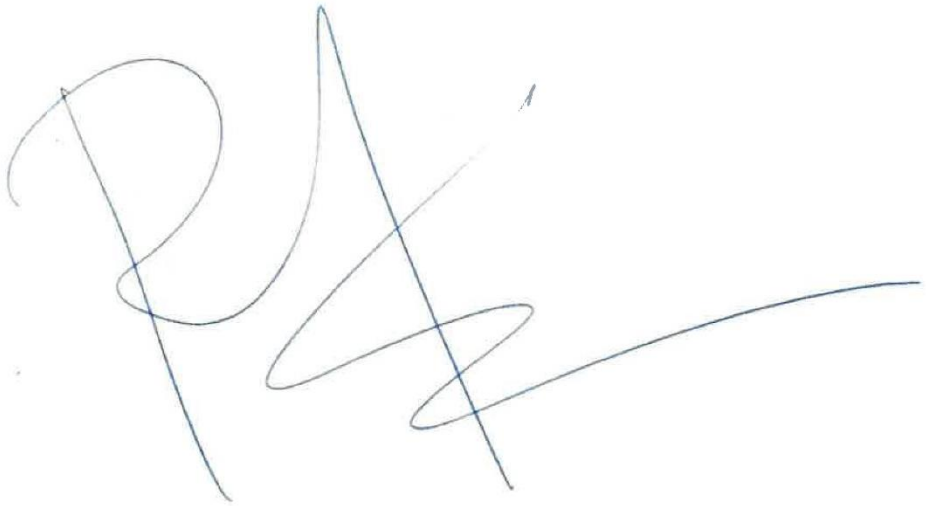
Output	Indicator (Please copy the indicators from RBM section of the Investment Funding request.)	Activities conducted / contributions (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	Implementation plan				
			Y1	Y2	Y3	Y4	Y5
		final plan. (Co-) Organise a gender workshop. Report the results.					
	# of meteorologist trained	Support MDS in training meteorologists, by providing training materials.		6		6	
	% of female participants	Support the development of a comprehensive gender action plan detailing specific activities, targets, and timelines for achieving gender balance and enhancing gender opportunities. Review the final plan. (Co-) Organise a gender workshop. Report the results.		50		50	
	# trainings for meteorologists, technicians, and ICT staff on the new equipment, systems (including WIS 2.0), and SOPs to ensure consistent and accurate operations.	Provide training together with WMO on WIS2.0 and other trainings where needed		2		2	
2.1 **New land-based stations** and related equipment, ICT systems, data management	# of new stations installed as per the GBON National Contribution Plan	*Not required.*					

Output	Indicator (Please copy the indicators from RBM section of the Investment Funding request.)	Activities conducted / contributions (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	Implementation plan				
			Y1	Y2	Y3	Y4	Y5
systems and standard operating practices in place							
2.2 **Improved land-based stations** and related equipment, ICT systems, data management systems and standard operating practices in place	# of stations improved as per the GBON National Contribution Plan	Technical guidance to AWS tender process for equipment. Technical guidance for IT hardware tender process, including set-up of WIS2.0 (see also item 1.3) Support in preparing/enhancing SOPS Support in plan for life cycle management of AWS including maintenance protocols	2	2	1		
2.3 New upper-air stations and related equipment, ICT systems, data management systems and standard operating practices in place	# of stations installed as per the GBON National Contribution Plan	*Not required.*					

Output	Indicator (Please copy the indicators from RBM section of the Investment Funding request.)	Activities conducted / contributions (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	Implementation plan				
			Y1	Y2	Y3	Y4	Y5
2.4 **Improved upper air stations** and related equipment, ICT systems, data management systems and standard operating practices in place	# of stations improved as per the GBON National Contribution Plan	Technical support in radiosonde tender process Update together with MDS ToR regarding the upper air station Support in plan for life cycle management of upper-air station including maintenance protocols Advise on data storage solutions			1		
3.1 **GBON land-based stations' commissioning period completed**, country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority	# of stations commissioned as per the GBON National Contribution Plan	support/advise to keep the GBON surface land observations at the expected standard Support in the commissioning period				5	
3.2 **GBON upper air stations' commissioning period completed**, country-specific standard cost for	# of stations commissioned as per the GBON National Contribution Plan	support/advise to keep the GBON upper air observations at the expected standards Support in the commissioning period					1

Output	**Indicator** (Please copy the indicators from RBM section of the Investment Funding request.)	**Activities conducted / contributions** (Please list all activities that will be conducted by the peer advisor relevant to the output. Please add rows if more than one activity will be conducted.)	**Implementation plan**				
			Y1	**Y2**	**Y3**	**Y4**	**Y5**
operations and maintenance established, and data sharing verified by WMO Technical Authority							

Signatures

Peer advisor focal point	Rubert Konijn Strategic business manager 23 October 2025 
Country focal point	Graselle Jozefzoon Acting Permanent Secretary 24 october 2025