General Information

Fund	MPTF_00281: The Systematic Observations Financing Facility
FMP Record	MPTF_00281_00018: Cabo Verde Investment Phase Funding Request
MPTFO Project Id	
Start Date	
End Date	

Applicants

Status	Contact Type	Name	e-mail	Position	Telephone
Active: 04-Apr-2024 6:33:00 AM	Project Manager	Jochem Zoetelief	jochem.zoetelief@un.org		
Active: 04-Apr-2024 2:59:00 AM	Project Manager	Anita Mudzhumdar	anita.mudzhumdar@un.org		
Active: 04-Apr-2024 6:33:00 AM	Project Manager	Ayda Maria Villalobos Castro	ayda.villaloboscastro@un.org		

Signatories

Signature Process	Role	Name of Organization	Name	User Email
Digital	Signatory	UNEP: UNEP (United Nations Environment Programme)	Mr Jochem Zoetelief	jochem.zoetelief@un.org
Digital	Signatory	WMO: WMO (World Meteorological Organization)	Celeste Saulo	csaulo@wmo.int

Contacts

Contact Type	Name	e-mail	Position	Additional e-mail	Telephone
No data available.					

Description

Cabo Verde is an archipelago of ten volcanic islands of which nine are inhabited. Despite harsh environmental conditions including water scarcity, lack of natural forests, arid climate, limited mineral resources and arable territories, Cabo Verde has been developing rapidly, graduating from a least developed to a low-middle-income country in 2007. Still, as a Small Island Developing State (SIDS) Cabo Verde is disproportionately vulnerable to extreme climatic events including desertification and droughts, occasional but highly destructive heavy rains, landslides and sea level rise that can undermine years and even decades of development gains. The need to strengthen climate resilience, including through improving early warning systems and building capacity for observation and monitoring of climate systems has been identified in many documents including the Third National Communication on Climate Change (2017) and 2020 Update to the Nationally Determined Contribution. This project aims to support Cabo Verde in achieving its strategic climate adaptation and resilience goals through strengthening its technical, institutional and human capacity for basic weather and climate observations in line with Global Basic Observing Network (GBON) regulations, underpinning numerical weather predictions at the global and national levels and supporting multi-hazard early warning systems.

In Cabo Verde, Meteorological Services are provided by the "Instituto Nacional de Meteorologia & Geofysica" (INMG). INMG does not rely on international donor aid for the main annual operations budget. However, a significant share of equipment and instruments is funded through cooperation projects outside of the core budget. There is also often insufficient funding for recruitment of new staff and comprehensive capacity development, as well as for maintenance of stations infrastructure and instruments. As a result, there are currently no GBON-compliant stations in the country. The project will support INMG to achieve GBON compliance through:

- Strengthening meteorological network, including upgrade of existing 3 AWSs, installation of 1 new AWS, as well as upgrade of 1 upper-air sounding station;
- Uplifting communications, IT network and data management system to ensure that data is shared through WIS2.0 network;
- Enhancing capacity of INMG for private sector and CSO engagement;
- Recruitment of new staff for 5 years of project implementation;
- Supporting substantial technical training and capacity development activities for INMG staff, as well as providing opportunities for regional collaboration;
- Supporting operations and maintenance of the equipment during the 5 years of project implementation.

UNEP will be the Implementing Entity for the Project and will be responsible for the implementation, financial management, evaluation, reporting and closure of the activities under the Project. The Institute National of Meteorology and Geophysics (INMG) will serve as the national Executing Entity (EE). The INMG will be accountable to UNEP as IE for Project execution at the national level and for the effective and efficient use of resources. Upon further consultations with INMG, UNEP in its executing role could engage relevant Technical Partner agencies to conduct activities such as trainings. These might include Portuguese Institute for Sea and Atmosphere (Instituto Português do Mar e da Atmosfera – IPMA) and other internationally recognised professional agencies with many years' experience of partnership in Africa.

Universal Markers

Gender Equality Marker	Risk
• GEM1 - The Key Activity contributes to GEWE in a limited way	• Medium Risk

<table>
<tr><td>Optional Markers</td><td>WB Income Category</td><td colspan="4">• Lower Middle Income</td></tr>
<tr><td></td><td>UN LDC</td><td colspan="4">• No</td></tr>
<tr><td></td><td>Small Island Developing States (SIDS)</td><td colspan="4">• Yes</td></tr>
<tr><td>Fund Specific Markers</td><td>SOFF Phases</td><td colspan="4">SOFF Phases
• Investment Phase</td></tr>
<tr><td></td><td>EW4All</td><td colspan="4">Early Warnings for All initial focus countries
• No</td></tr>
<tr><td></td><td>Fragile and conflict-affected situation</td><td colspan="4">Fragile and conflict-affected situation
• No</td></tr>
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• Royal Netherlands Meteorological Institute (KNMI) [Netherlands]</td></tr>
<tr><td>Geographical Scope</td><td>Geographical Scope</td><td>Name of the Region</td><td colspan="2">Region(s)</td><td>Country</td></tr>
<tr><td></td><td>• Country</td><td></td><td colspan="2">• Africa</td><td>• Cabo Verde</td></tr>
<tr><td>Participating Organizations and their Implementing Partners</td><td>Participating Organizations</td><td colspan="2">Government/ Multilateral/ NGO/ Other</td><td>New Entities</td><td>Implementing Partners</td></tr>
<tr><td></td><td>• UNEP - UNEP (United Nations Environment Programme)
• WMO - WMO (World Meteorological Organization)</td><td colspan="2"></td><td></td><td></td></tr>
<tr><td>Programme and Project Cost</td><td>Participating Organization</td><td>Amount (in USD)</td><td colspan="3">Comments</td></tr>
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<tr><td></td><td>UNEP</td><td>$3,408,318.00</td><td colspan="3"></td></tr>
<tr><td></td><td>WMO</td><td>$470,800.00</td><td colspan="3"></td></tr>
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WMO (33.33%)
Total:</td><td>$2,726,654.40
$156,917.64
$2,883,572.04</td><td>UNEP (20%)
WMO (33.33%)
Total:</td><td>$681,663.60
$156,917.64
$838,581.24</td><td>UNEP (0%)
WMO (33.34%)
Total:</td><td>$0.00
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$156,964.72</td></tr>
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<tr><td></td><td>Duration (In months)</td><td colspan="4">60</td></tr>
<tr><td></td><td>Anticipated End Date</td><td colspan="4">01-May-2029</td></tr>
</table>

Narratives

Title	Text

Close the most significant data gaps	According to the WMO GBON Global Gap Analysis, Cabo Verde requires four surface stations and one upper-air station to meet the GBON Standard Density requirements. Cabo Verde has quite a large observations network, but only three aeronautical AWS (AWOS) are registered as GBON stations. The overall network includes 41 AWS, 2 manual stations, precipitation gauge network, air quality monitoring network etc. (full details are available in Annex 3. Country Hydromet Diagnostic). Data from most AWS systems are not shared with the GTS, but stored on a national data server, therefore, these stations are not considered as GBON. Three AWOS that are registered as GBON stations operate on a 24/7 basis and issue SYNOP reports (every 3 or 6 hours). They are owned by the Agency of Air Navigation & Safety (ASA) and use Aeronautical Fixed' Telecommunication Network (AFTN) for data transmission. Due to the network settings and ownership conditions, hourly data submission requirement cannot be fulfilled for these stations. Therefore, it is recommended to upgrade three other AWS to meet GBON requirements, and later phase out the current AWOS which are only partially GBON-compliant. Thiswill also help ensure full ownership of the GBON network by Institute National of Meteorology and Geophysics (INMG} which is the national hydrometeorological service in Cabo Verde. There is also a need to install an additional (fourth) station in South-Western part of the archipelago (Brava Island) to meet the spatial resolution of GBON. The INMG Head Office at Sal Island has an upper air sounding station which has been in operation since 1960s until 2018. It is currently out of operation due to equipment age issues and lack of funding for observations. This station should be refurbished with the new equipment (e.g. hydrogen generator, etc.) to meet the GBON requirements.

GBON requirements	Target # of stations	GBON Compliant stations #	Stations gap		Contribution target	
			New	Improve	New	Improve
Surface AWS	4	0	1	3	1	3
Upper-Air sounding stations	1	0	0	1	0	1

Table 1. National Gap Analysis - Cabo Verde (June 2023)

Target easy fixes	Opportunities for easy fixes are as follows: • Installation of WIS 2.0 communication node and linking it to WMO data communication system; • Rehabilitation of the existing 3 AWS to ensure hourly data transmission and linking them to the WIS 2.0 system; • Refurbishing the existing Upper Air Sounding facility and resuming observations twice a day to meet the GBON requirement.
Create leverage	SOFF investments will complement previous international cooperation projects held in Cabo Verde. For example, the AWS network had been enhanced with the funding support of the European Union (EU) through REFLOR-CV project (with FAO as an implementing entity). The maritime (and harbour) AWS observation network (MARINENET) has been enhanced with funding support from Spain (WMO regional cooperation). INMG also works with the KNMI (Netherlands) and Centro de Previsão do Tempo e Estudos Climáticos - CPTEC (Brazil) on capacity building in weather prediction and seasonal forecast) modelling, using e.g., the Eta Numerical Weather Prediction (NWP) model from CPTEC. Cabo Verde is also a part of an ongoing Climate Risk and Early Warning Systems Initiative (CREWS) project for West Africa which strengthens regional entities to engage with national hydrometeorological agencies in the region to improve risk information and early warning services at national level. However, amounting to 3.5 million USD for the whole region, the CREWS project has quite a limited scope. Therefore, there is substantial opportunity for SOFF to build upon this initiative to enhance country capacity for early warning services through closing significant gaps identified in the GBON Gap Analysis, National Contribution Plan and CHD, as well as further supporting regional collaboration. Through this, SOFF project will complement CREWS investments operationalizing the Framework for collaboration for enhancing systematic observation adopted by the 6th SOFF Steering Committee and signed by the secretariats of 5 funds* at COP28. As an accredited entity to the Green Climate Fund (GCF), the implementing entity UN Environment Programme (UNEP) could work in the future to raise GCF funding to further strengthen hydrometeorological and early warning capacity in Cabo Verde based on the needs identified through the Country Hydromet Diagnostics. **Adaptation Fund, Climate Investment Funds, Climate Risk and Early Warning Systems Initiative, Global Environment Facility and Green Climate Fund*

Maximize delivery capacity	As part of the UN system, UNEP is represented and strongly engaged in the Cabo Verde UN Country Team through its Africa Regional Office and Sub Fegional Office for West Africa located in Abidjan focusing on climate change, digital connectivity, blue economy, sustainable food systems and other priorities. UNEP also has significant experience in implementing projects on strengthening climate adaptation, climate resilience, climate information services and early warning systems in various countries in West Africa, including Gambia, Sao Tome and Principe, and others. UNEP has strong expertise and experience in supporting observation and monitoring systems in developing countries, particularly in small island developing states (SIDS). It is currently working on implementing a GCF-funded 5-year project "Enhancing Early Warning Systems to build greater resilience to hydro-meteorological hazards in Timor-Leste" and a GCF-funded 5-year program "Enhancing Climate Information and Knowledge Services for resilience in 5 island countries of the Pacific Ocean" where strengthening observational capacity of the NHMSs is one of the key components. UNEP is an implementing partner under the Early Warnings for All Initiative (EW4All) and a member of a technical working group under Pillars 1 (Risk Knowledge) and 2 (Observations & Forecasting). Launched by the UN Secretary-General in November 2022 at the COP27, the EW4All Initiative calls for the whole world to be covered by early warning systems by the end of 2027. The SOFF investment funding will represent a major contribution as part of the EW4All overall support to developing countries.
Sub-regional gains	Cabo Verde has currently no immediate direct cooperation in joint meteorological observations with national hydrometeorological services of neighbouring countries. In 2013-2018, Cabo Verde was a part of a regional WMO cooperation project (MARINMET), funded by Agencia Estatal de Meteorología - AEMET (Spain), related to marine observations. For INMG this collaboration has resulted practically in 3 marine harbour AWS including tidal and wave observations. This project was suspended due to the SARS-CoV19 pandemic. INMG is also taking part in an Economic Community of Western African States (ECOWAS) region project “Intra ACP-ClimSA” where it performs diagnostic on meteorological observations and data collection in the Permanent Interstates Committee for Drought Control in the Sahel (CILLS) and ECOWAS region countries. In addition, INMG is cooperating with General Directorate of Meteorology – DGM (Morocco) in manually transferring AWS data to the WIS2.0 system via a small WIS2.0-DGM Morocco web interface and protocol. On November 16-17, a workshop on SOFF Regional Implementation in Atlantic Small Island Developing States (SIDS) took place in Cabo Verde to discuss regional approach for SOFF implementation in three Atlantic SIDS: Cabo Verde, Guinea-Bissau and São Tomé and Príncipe. Some of the outcomes included: • Decision to include co-development and shared trainings in funding requests. A strong emphasis was made on the need to facilitate capacity-building sessions in Portuguese language tailored for Portuguese-speaking countries. • Decision to explore opportunities for peer support in calibration among the three Atlantic SIDS. • Suggestion to replicate Cabo Verdean model for civil society engagement in other countries. • Suggestion to explore regional collaboration in procurement. The following opportunities for regional cooperation will be pursued within SOFF project: • When required, instruments will be sent for inspection and calibration to the DGM (Morocco) which is the WMO Regional Instrument Centre, or IPMA (Portugal). In line with the outcomes of the SOFF workshop, the project will also explore opportunities for collaboration in calibration among three Atlantic SIDS. • For increasing staff mobility, engagement and fostering regional collaboration, the project will support participation of INMG in regional events and partner study visits (e.g. Morocco, Senegal, Guinea-Bissau, São Tomé & Princípe). Through these, INMG could also engage in experience sharing with other countries, e.g. on CSO engagement. • In line with the outcomes of the SOFF workshop, the project will facilitate shared training courses and programs for Atlantic SIDS (in Portuguese), which can take place e.g. on Sal Island in Cabo Verde. These trainings could be, for example, co-developed by Netherlands Meteorological Institute (Koninklijk Nederlands Meteorologisch Instituut – KNMI) with INMG and delivered to all three countries. • The peer advisors supporting the three countries will collaborate for the preparation of tender documents based on WMO specifications. Countries will explore mutual procurement opportunities among Implementing entities or utilize tender results from other UN agencies, if possible. Joint procurement will most likely not be feasible. Moving forward, it is also recommended to re-initiate collaborative maritime observation projects with neighbouring countries since it is seen as a high priority by INMG.

SOFF Beneficiary Country Capacity Assessment	INMG – the main national authority in meteorology – has a long history in operating meteorological instruments and making weather observations. It operates and maintains a network of 41 AWS (including 3 non fully compliant GBON stations) and 2 manual stations. It also operated an upper air sounding station until 2018. A detailed protocol for observations, especially for the aviation sector is available and used by the observers. However, there are no formal SOPs for GBON stations and/or a national WIGOS governance mechanism in place. INMG uses a manual WIS2.0 web-application to manually submit data from GBON station to DGM – Morocco every 3 hours, however hourly data transmission to WIS2.0 is not available yet. INMG is equipped with a total of 74 staff members, including 36 women and 38 men. Women participation in the work processes in Cabo Verde is very high, including senior management and decision role positions. The current chief administrator council of INMG includes 1 man and two women. Some of the staff (meteorologists, oceanographer, agrometeorologists and geophysics staff) have received training abroad, while meteorological technicians are trained locally. Currently, there is no formal training policy and no specific institutional arrangements for capacity development. There is a need for comprehensive capacity building programmes, including BIP-MT training for meteorological technicians, trainings on data management and WIS2.0 for ICT staff, training of trainers, etc. There is also a need to recruit and train a meteorologist and two meteorological technicians to operate the upper air sounding station when refurbished. Furthermore, it is recommended to hire two additional project management staff to manage SOFF project implementation from the INMG side. The current national legislation and regulations on meteorological observations in Cabo Verde are adequate for GBON implementation. INMG is the main national authority in meteorology authorised to conduct meteorological observations. For the provision of aeronautical meteorological services, it collaborates closely with the Agency of Air Navigation & Safety (ASA). INMG does not rely on international donor aid for the main annual operations budget. The aviation and aeronautical services cover 74.4% of the annual budget, while direct government funding is 8.8%. At the same time, significant station equipment and instrument deployments are funded through national and international cooperation projects related to different sectors (security, agriculture, maritime, environment and others). INMG is legally allowed to contract external services from private sector and other entities to support the observation process chain. There are also no special legal requirements (or customs constraints) related to importing meteorological instruments and related equipment. However, the current budget does not easily support development of other operational activities, including e.g., weather and climate research and the expansion of the other functional observation networks, related to maritime, agrometeorology, climate and other e.g., MHEWS purposes. This can be enhanced if INMG can develop new strategies with (e.g., public-private partnerships), government authorities and international partners supporting the full weather and climate observation chain, including capacity development. There is also no formal data sharing policy in place for sharing other station data generated by the service. Data are provided upon request to inquiring users (at a minor cost for the private and commercial sector and free of charge to government services and higher education institutions). INMG has a significant experience in executing international collaborative projects, including MIA-VITA - Mitigate and assess risk from volcanic impact on terrain and human activities (2008-2012); GMOS – Global Mercury Observing System (2010-2015); TSHAPS - Towards Seismic Hazard Assessment in Portuguese Speaking African Countries (2022-2024) and others. The financial management of all projects is carried out through a government digital platform named SIGOF (Sistema Integrado de Gestão Orçamental e Financeira) which has been praised as a giant leap forward towards modernizing and simplifying the state's financial management capacity. Once INMG has signed an agreement with the Implementing Entity (UNEP), a special account for the project will be set up on SIGOF. This account will be managed by INMG. Therefore, no obstacles which would prevent INMG from receiving funds are foreseen. Overall, INMG has a solid technical, management, and administrative capacity for investment phase execution. At the same time, there is substantial opportunity for SOFF to support the INMG team in addressing the challenges mentioned above.
Investment Phase Alignment with the GBON National Contribution Plan	No differences between the proposed Investment Phase targets and the requirements of the GBON National Contribution Plan have been identified.

Execution model and implementation arrangements	UNEP will be the Implementing Entity for the Project and will be responsible for the implementation, financial management, evaluation, reporting and closure of the activities under the Project. UNEP will monitor and supervise the execution of the Project and ensure the proper management and application of SOFF Grant Proceeds. UNEP will ensure that the Grant Proceeds are utilised in accordance with the terms of the current Funding Request and that procurement is carried out according to relevant UN principles: a. Best Value for Money; b. Fairness, integrity, and transparency; c. Effective international competition; d. The interest of the UN. UNEP will deploy a hybrid executing model comprising a National Executing Entity and, at the request of the SOFF Beneficiary Country focal point, limited Executing Entity functions by UNEP itself. Through its Global Support Services Agreement with UNOPs, UNEP is able to operate at the country level without necessarily having a national office. The Agreement covers the provision of HR and procurement services. UNEP will execute the Project in line with its programme manual and standard business procedures. As a part of its executing functions, UNEP will contract Technical Partner organizations to undertake relevant activities as appropriate. The engagement of Technical Partners with a proven track record in supporting Cabo Verde will contribute to effectiveness, coordination, and sustainability of outcomes. The Institute National of Meteorology and Geophysics (INMG) will serve as the national Executing Entity (EE). The INMG will be accountable to UNEP as IE for Project execution at the national level and for the effective and efficient use of resources. UNEP will enter into an appropriate agreement (Project Cooperation Agreement) with the INMG for the execution of the Project. The Project Cooperation Agreement (PCA) will establish clear roles and responsibilities for the delivery of the proposed activities, and the schedule and conditions for instalments, the determination of the prevailing fiduciary standards and the terms and conditions for arbitrations and termination of contract. The PCA will include specific obligations for the national EE on Project execution, financial management, personnel administration and reporting, as well as arbitration and liability terms. Upon further consultations with INMG, UNEP in its executing role could engage relevant Technical Partner agencies to conduct activities such as trainings. These might include Portuguese Institute for Sea and Atmosphere (Instituto Português do Mar e da Atmosfera – IPMA) and other internationally recognised professional agencies with many years' experience of partnership in Africa.
Private sector involvement	INMG remains the prime national authority in meteorology. At this stage, no private sector operators were identified which provide meteorological observations and data services in the country. However, INMG is allowed to contract external services from private sector and other entities to support the observation process chain (e.g., for station maintenance or another work process). Furthermore, several private entities e.g., water supply & sanitation and the tourism / hotel sector show interest in collaborative weather observations. While due to the limited number of required GBON AWS, INMG does not immediately have a need to outsource operation and maintenance of GBON stations to other agencies, it is now actively exploring partnerships with private companies and other government agencies. There is room for further enhancing and widening partnerships nationally and internationally to ensure GBON compliance throughout the value chain of observation. As a part of new strategy development (2023-26), INMG is investigating multiple options for private sector engagement including outsourcing meteorological station maintenance and management on a service contract or using a public-private partner contract model or similar. The maintenance of the GBON station network could also be part of this outsourcing process. SOFF could help broaden opportunities for further private sector engagement through supporting organization of business development and private sector engagement workshops in Praia and Mindelo, as well as supporting participation and exchange in various regional events.
Civil society participation	The project will prioritize engagement of a wide range of stakeholders in GBON through multiple activities. As recommended in the National Contribution Plan, two stakeholder engagement workshops will be organized to explore opportunities for wider engagement of private sector and CSOs in GBON. Furthermore, to deepen CSO engagement INMG recommends and proposes using a Triple Sensor approach. It would engage communities in climate information and GBON through enabling them to gather weather and climate data using low-cost sensors and comparing the data with the official network, NWP model and satellite data. For more detail on the proposed project, please refer to the National Contribution Plan. While the entire initiative goes well beyond the scope of SOFF, the current SOFF-funded project could support its planning, strategy development, as well as extensive stakeholder consultations and workshops with CSO engagement. Gender considerations will be strongly prioritized in all stakeholder engagement activities. 50% female participation in all the workshops will be targeted. These measures will support equal participation of male and female in climate information services in Cabo Verde and will help INMG maintain its current almost 50/50 gender balance in staffing.

Fiduciary systems	The financial management and procurement within the Project will be guided by the UN financial regulations, rules and practices, as well as UNEP's Project manual. The financial rules of UNEP, which follow International Public Sector Accounting Standards (IPSAS), are promulgated pursuant to the Financial Regulations and Rules of the UN. Within this context, funding allocation mechanisms are managed in accordance with the UN rules and procedures, including eligibility criteria, proposal evaluation processes, quality assurance and control, project monitoring and supervision. UNEP is audited annually by the UN Board of Auditors. UN financial regulations and rules require the segregation of duties, and safeguards to ensure compliance with UN financial rules and regulations. Through its Global Support Services Agreement with UNOPs, UNEP is able to operate at the country level without necessarily having a national office. This Agreement covers the provision of HR and procurement services. Generally, UNEP's modality for project implementation results in funds being transferred in tranches to the Executing Entities (EEs) and Technical Partners (TPs) once they have satisfied the conditions that are defined under the legal instrument (Project Cooperation Agreement(s): PCAs to be signed between UNEP and the EEs/TPs. The PCAs will include specific obligations on financial management, reporting and procurement, and will require periodic reporting from the EEs/TPs. INMG as the national EE follows the Government of Cabo Verde's financial and procurement rules. Similarly, Technical Partners and the Peer Advisors supporting execution in Cabo Verde are subject to financial and procurement policies of their governments/Member States.
Social and environmental safeguards	Project activities are subject to national and international law, as well as UNEP's Environmental and Social Safeguard Principles and Standards in accordance with the UNEP Environmental and Social Sustainability Framework (ESSF). The UNEP Environmental and Social Sustainability Framework (ESSF) was approved in February 2020 and has an overall aim to strengthen the sustainability and accountability of UNEP programmes and projects. The framework identifies UNEP's commitment to sustainable development and environmental and social standards that are designed to promote human well-being and the protection of the environment. The framework identifies the following purposes: • To enhance outcomes by systematically integrating environmental, social and economic dimensions in the UNEP-funded programmes and projects. • To strengthen alignment of UNEP's work with the SDGs and other UN entities and partners in addressing the environmental and social sustainability of development efforts. • To set standards of sustainability for UNEP's operations thereby confirming UNEP's accountability to its member States, and other funders. • To enable UNEP to work in a safer and smarter manner, thereby minimizing potential risks and harm to intended beneficiaries while enhancing UNEP's capabilities and credibility. The framework is structured around guiding principles, safeguard standards and related operational modalities. The guiding principles of the framework are derived from the 2030 Agenda for Sustainable Development and include the following: Leave No One Behind, Human Rights and Gender Equality and Women's Empowerment, Sustainability and Resilience and Accountability. The safeguard standards of the framework include the following: • Safeguard Standard 1: Biodiversity, Ecosystems and Sustainable Natural Resource Management • Safeguard Standard 2: Climate Change and Disaster Risks • Safeguard Standard 3: Pollution Prevention and Resource Efficiency • Safeguard Standard 4: Community Health, Safety and Security • Safeguard Standard 5: Cultural Heritage • Safeguard Standard 6: Displacement and Involuntary Resettlement • Safeguard Standard 7: Indigenous Peoples • Safeguard Standard 8: Labour and Working Conditions The following sections set out the overarching approach UNEP will take to operationalize this Framework: a) screening, assessment, management and monitoring of environmental and social risks; and b) steps for ensuring meaningful stakeholder engagement and accountability. To screen projects, UNEP utilizes the Safeguard Risk Identification Form (SRIF). The form is used to identify any potential environmental and social risks and impacts associated with the proposed activities, and to identify opportunities to support other positive changes to the environment and society. UNEP's Gender Equality and Environment policy recognizes the role of gender equality as a 'driver of sustainable environmental development.'6 As the lead organization to coordinate environmental matters within the United Nations System, UNEP has the responsibility to drive the achievement of the System's gender equality mandate in its environmental assessments and analyses, norms, guidelines and methods, for use by stakeholders looking for guidance on how to effectively manage the environment for their sustainable development and economic growth. To that end, UNEP has sought to formalize and bolster agency-wide gender mainstreaming efforts and has the expertise and personnel to support the analytical underpinning of project-level gender mainstreaming during implementation.

Dispute resolution mechanism	As a part of the UNEP's ESS Framework, stakeholders who may be adversely affected by the project can communicate their concerns about the environmental and social performance of the project to UNEP. The Grievance Redress Mechanism has been designed to the extent possible according to the effectiveness criteria for non-judicial grievance mechanisms outlined in the UN Guiding Principles on Business and Human Rights. UNEP's Stakeholder Response Mechanism (SRM) is established through the Independent Office for Stakeholder Safeguard-related Response (IOSSR). The IOSSR serves two functions: 1. Compliance Review: processes for responding to claims by Stakeholders alleging that UNEP activities are not in compliance with the ESS Framework; 2. Grievance Redress: provides access to dispute resolution mechanisms used to address project-related disputes that relate to UNEP's activities. The IOSSR is responsible for the SRM, and thus carries out the following responsibilities: • Receives and screens complaints for eligibility; • Maintains a roster of accredited independent experts related to compliance review and dispute resolution; • Develops the appropriate TOR for facilitating the compliance review or dispute resolution; • Manages and oversees all experts engaged in compliance review and dispute resolution; • Maintains the IOSSR website that provides the public with access to all relevant documents related to compliance review and dispute resolution; • Issues reports to the UNEP Executive Director with findings and recommendations for compliance reviews, and outcomes for dispute resolution processes; • Monitors the implementation of decisions related to compliance review and grievance redress; • Reports on the IOSSR operations and provides advice based on lessons learned; • Conducts outreach to Stakeholders regarding the IOSSR; • Seeks to minimise risks of retaliation to complainants. Complaints can be filed to the Stakeholder Response Mechanism through the online project concern form, email or mail to the following address: Independent Office for Stakeholder Safeguard-related Response (IOSSR) & Director of Corporate Service Division United Nations Environment Programme Nairobi, Kenya Email: unenvironment-IOSSR@un.org Details are available in the UNEP's SRM Operating Procedures.
Additional relevant policies and procedures	As part of the Secretariat, UNEP follows UN policies, rules and regulations.

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_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
No data available.	

Contribution to SDGs

Participating Organization	% TARGET_13.1	% TARGET_5.5	% TARGET_13.2	% TARGET_13.b	% TARGET_13.3	% Total
UNEP	20	20	20	20	20	100
WMO	20	20	20	20	20	100
Total contribution by target	**40**	**40**	**40**	**40**	**40**	
Project contribution to SDG by target	**20**	**20**	**20**	**20**	**20**	**100**

List of documents

Document	Document Type	Document Source	Document Abstract	Document Date	Classification	Featured	Status	Modified By	Modified On
SOFF-Investment-Phase-Funding-Request_Cabo-Verde_FINAL-1.pdf	Other Docs	Project		15-Feb-2024	Internal	No	Finalized - Signature Redacted	anita.mudzhumdar@un.org	08-Apr-2024 9:11:45 AM

Project Results

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

Activities

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Face to face inception workshop followed by stakeholder engagement workshop on CSO inclusion in weather and climate		UNEP - UNEP (United Nations Environment Programme)		
Consultations with CSOs and mobilization of CSO inclusion in weather and climate observations using Triple Sensor approach		UNEP - UNEP (United Nations Environment Programme)		

	1.2 NMHS institutional capacity required to operate the GBON network developed.	

Outcome	Output	Description
	Activities	

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Organization of stakeholder and private sector engagement workshops where potential partners from public and private sector will be invited to discuss and elaborate on business models		UNEP - UNEP (United Nations Environment Programme)		
Participation in regional activities related to SOFF and GBON, including SOFF Atlantic SIDS workshops		UNEP - UNEP (United Nations Environment Programme)		

	1.3 NMHS human capacity required to operate the GBON network developed.	

	Activities				
	Title	**Description**	**Lead Participating Organization**	**Participating Organization**	**Other Organizations**
	Recruiting additional (3) staff for operating and maintaining the renovated upper-air station		UNEP - UNEP (United Nations Environment Programme)		
	Meteo Technician Station O&M Training programme, Upper Air station training programme, Observer WMO BIP-MT trainings, ToT competence training (from WMO-RTC)		UNEP - UNEP (United Nations Environment Programme)		
	ICT & Data Communication trainings (Python, WIS2Box)		UNEP - UNEP (United Nations Environment Programme)		
	Trainings on CDMS (Geospatial and relational Databases, ClimSoft v.4 Data Rescue and climate data analysis)		UNEP - UNEP (United Nations Environment Programme)		
	Workshops and staff study visits for QMS trainings		UNEP - UNEP (United Nations Environment Programme)		
	Capacity development for senior management related to GBON implementation		UNEP - UNEP (United Nations Environment Programme)		

2. GBON infrastructure in place		

Outcome	Output	Description
	2.1 New 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
Installation of a new AWS, including site preparation, station installation, instruments and equipment		UNEP - UNEP (United Nations Environment Programme)		
Review of current practices and recommendations for improved ICT infrastructure		UNEP - UNEP (United Nations Environment Programme)		
Computer hardware procurement and upgrade of software		UNEP - UNEP (United Nations Environment Programme)		

	2.2 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
Upgrade of the three AWS, including data loggers, sensors, communication and transportation		UNEP - UNEP (United Nations Environment Programme)		
Procurement of field calibration and laboratory calibration equipment, as well as related toolsets		UNEP - UNEP (United Nations Environment Programme)		

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

Activities

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Upgrade of an upper-air station, including rehabilitation works, hydrogen generator and storage, shipping and transportation, ground-based monitoring system		UNEP - UNEP (United Nations Environment Programme)		

3. Sustained compliance with GBON		
	3.1 GBON land-based stations' commissioning period completed.	

Outcome	Output	Description
	Activities	

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Procurement of sensors and spare parts for equipment maintenance		UNEP - UNEP (United Nations Environment Programme)		
Local technical assistance services, local expenditures and communication costs		UNEP - UNEP (United Nations Environment Programme)		

	3.2 GBON upper air stations' commissioning period completed.	
	Activities	

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Procurement of consumables (radiosondes and balloons)		UNEP - UNEP (United Nations Environment Programme)		
Procurement of a back up helium cylinder		UNEP - UNEP (United Nations Environment Programme)		
Operations and maintenance		UNEP - UNEP (United Nations Environment Programme)		

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	Linked Outcome / Output
Number of new land-based stations installed		Number of stations as defined in the National Contribution Plan.	tbd	Investment	Yearly	Country	Number	0	2024	1	2026	**Outcome:** 2. GBON infrastructure in place **Output:** 2.1 New land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place.

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Linked Outcome / Output
Number of land-based stations improved		Number of stations as defined in the National Contribution Plan.	tbd	Investment	Yearly	Country	Number	0	2024	3	2026	**Outcome:** 2. GBON infrastructure in place **Output:** 2.2 Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place
Number of upper-air stations improved		Number of stations as defined in the National Contribution Plan.	tbd	Investment	Yearly	Country	Number	0	2024	1	2027	**Outcome:** 2. GBON infrastructure in place **Output:** 2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place.
GBON land-based stations' commissioned		Number of stations as defined in the National Contribution Plan.		Policy	At closure	Country	Number	0	2024	4	2029	**Outcome:** 3. Sustained compliance with GBON **Output:** 3.1 GBON land-based stations' commissioning period completed.
GBON upper air stations' commissioned		Number of stations as defined in the National Contribution Plan.		Policy	At closure	Country	Number	0	2024	1	2029	**Outcome:** 3. Sustained compliance with GBON **Output:** 3.2 GBON upper air stations' commissioning period completed.

Project 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
Number of workshops and related activities				Other	At closure	Country	Number	0	2024	4	2029	**Outcome :** 1. GBON institutional and human capacity developed **Output:** 1.1 National consultations including with CSOs, and other relevant stakeholders conducted.
	% female participants in workshops			Other	At closure	Country	Percentage	0	2024	50	2029	
Number of workshops				Other	At closure	Country	Number	0	2024	2	2029	**Outcome :** 1. GBON institutional and human capacity developed **Output:** 1.2 NMHS institutional capacity required to operate the GBON network developed.
	% female participants in workshops			Other	At closure	Country	Percentage	0	2024	50	2029	

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year	Linked Outcome / Output
Number of trainings				Capacity	At closure	Country	Number	0	2024	10	2029	**Outcome :** 1. GBON institutional and human capacity developed **Output:** 1.3 NMHS human capacity required to operate the GBON network developed.
	No components available.											
Number of staff salaries paid through the project				Capacity	Yearly	Country	Number	0	2024	3	2029	**Outcome :** 1. GBON institutional and human capacity developed **Output:** 1.3 NMHS human capacity required to operate the GBON network developed.
	No components available.											

Risks

Event	Category	Level	Likelihood	Impact	Mitigating Measures	Risk Owner

Non-compliance with fiduciary and procurement standards in some SOFF activities	• Operational	Medium	Rare	Major	UNEP will undertake an assessment of the financial management capacity of the national Executing Entity (EE) to identify risk elements and to prepare appropriate mitigation measures, including ongoing capacity development support by UNEP. UNEP will also closely monitor the financial management of the Project using the established Monitoring and Evaluation procedure and financial reporting mechanism, including an annual audit; and establish internal controls for the Project and project fund management. The Project Cooperation Agreements (PCAs) between UNEP and the national EE and Technical Partners will include warranties and caveats by the EE to inter alia ensure compliance with the Anti-Fraud and Anti-Corruption Framework of the United Nations Secretariat.	
SOFF-funded investments cause environmental or social impacts	• Social and Environmental	Medium	Unlikely	Moderate	The potential impacts are likely to be very limited in terms of magnitude and easily avoided by proactive planning. Many of the project activities are related to capacity building and training, which are inherently low-impact activities. While the activities related to infrastructure development and installation of new observation equipment will require low-level monitoring, management of environmental and social risks will be a matter of following industry best practice. As a mitigation measure, it is recommended that all contractors involved are made aware of their environmental and social responsibilities, and that professional oversight is engaged where necessary in order to ensure that those responsibilities are upheld.	
NMHS staff depart after being trained	• Organizational	High	Possible	Major	To mitigate the risk of the staff departing, the Investment Phase will work on providing additional incentives for the staff including regular opportunities for regional trainings and workshops. It is recommended that the Compliance phase includes budget to cover salaries for the new staff, as well as to cover participation in some of the trainings and workshops which would contribute to the staff wellbeing.	
Slow implementation and delays in procurement, installation and capacity building activities	• Operational	Low	Unlikely	Minor	Seamless collaboration between the Implementing Entity, peer advisor, beneficiary country and technical partners will help to ensure that the project activities are executed without any delays.	
After the conclusion of the Investment phase, GBON data are not collected or shared or are shared of insufficient quality	• Organizational	Medium	Rare	Moderate	The Investment Phase will include budget operations and maintenance of the equipment to ensure that GBON Infrastructure has been installed and internationally exchanges data. This will also help in smooth transition to the compliance phase. After this the country will receive SOFF support in the compliance phase which will help to ensure that all the equipment is properly functioning and sharing data. In addition, trainings held during the Investment Phase will help to ensure that the beneficiary country has the capacity to manage quality of the data.	

Destruction or theft of SOFF-financed equipment and infrastructure	• Organizational	Medium	Unlikely	Moderate	The Investment Phase will ensure that all the observation sites will be fenced and guarded to minimize the risk of theft. Communities will be engaged through awareness-raising activities, i.a. to prevent vandalism. Cabo Verde is vulnerable to various natural hazards, which could pose a risk of equipment destruction, especially in case of a new station expected to be located on a remote island (Brava). The project will support Standard Operating Procedures (SOPs) for equipment, including early action protocols in case of climate-related hazards. Mitigation measures will be taken as a part of site preparation. Regular special attention will be provided to the most vulnerable station.	
Countries cannot make optimal use of data, including accessing or using improved forecasts products from the Global Producing Centers throughout the hydromet value chain	• Organizational	Medium	Unlikely	Moderate	To mitigate the risk, it is proposed that the Investment Phase includes extensive and comprehensive training for the INMG staff from the peer advisor and technical partners, including on observations, data management, data processing and impact-based forecasting. This will help to ensure that the country has enough capacity to make the optimal use of data, including accessing or using improved forecasts products from the Global Producing Centers throughout the hydromet value chain.	

Budget by UNSDG Categories: Over all

Budget Lines	Description	UNEP (7%) *	WMO (7%) *	Total
1. Staff and other personnel		$843,500.00	$0.00	$843,500.00
2. Supplies, Commodities, Materials		$0.00	$0.00	$0.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation		$0.00	$0.00	$0.00
4. Contractual services		$0.00	$0.00	$0.00
5. Travel		$225,000.00	$0.00	$225,000.00
6. Transfers and Grants to Counterparts		$2,116,844.00	$440,000.00	$2,556,844.00
7. General Operating and other Direct Costs		$0.00	$0.00	$0.00
Project Costs Sub Total		**$3,185,344.00**	**$440,000.00**	**$3,625,344.00**
8. Indirect Support Costs		$222,974.08	$30,800.00	$253,774.08
Total		**$3,408,318.08**	**$470,800.00**	**$3,879,118.08**

Performance-based Tranches Breakdown

Tranche			Total
Tranche 1	UNEP (80%)	$2,726,654.40	
	WMO (33.33%)	$156,917.64	$2,883,572.04
Tranche 2	UNEP (20%)	$681,663.60	
	WMO (33.33%)	$156,917.64	$838,581.24
Tranche 3	UNEP (0%)	$0.00	
	WMO (33.34%)	$156,964.72	$156,964.72
			$3,879,118.00

Results based budget

Outcome *	Output *	Agency *	Budget (USD) *
1. GBON institutional and human capacity developed		**Sub Total**	**$2,538,504.00**

	1.1 National consultations including with CSOs, and other relevant stakeholders conducted.	UNEP (7%)	$305,875.00
	1.2 NMHS institutional capacity required to operate the GBON network developed.	UNEP (7%)	$364,000.00
	1.3 NMHS human capacity required to operate the GBON network developed.	UNEP (7%)	$1,428,629.00
	1.3 NMHS human capacity required to operate the GBON network developed.	WMO (7%)	$440,000.00
2. GBON infrastructure in place		**Sub Total**	**$682,090.00**
	2.1 New land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place.	UNEP (7%)	$139,740.00
	2.2 Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	UNEP (7%)	$147,100.00
	2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place.	UNEP (7%)	$395,250.00
3. Sustained compliance with GBON		**Sub Total**	**$404,750.00**
	3.1 GBON land-based stations' commissioning period completed.	UNEP (7%)	$92,500.00
	3.2 GBON upper air stations' commissioning period completed.	UNEP (7%)	$312,250.00
Total			**$3,625,344.00**

Programme Outcome Costs

Outcome	Output	Activity	Implementing Agent	Time Frame					
				2024	2025	2026	2027	2028	2029
				1	1	1	1	1	1
1. GBON institutional and human capacity developed									
	1.1 National consultations including with CSOs, and other relevant stakeholders conducted.								
		Face to face inception workshop followed by stakeholder engagement workshop on CSO inclusion in weather and climate							
			UNEP	☑	☑	☑	☐	☐	☐
		Consultations with CSOs and mobilization of CSO inclusion in weather and climate observations using Triple Sensor approach							
			UNEP	☐	☐	☑	☑	☐	☐
	1.2 NMHS institutional capacity required to operate the GBON network developed.								
		Organization of stakeholder and private sector engagement workshops where potential partners from public and private sector will be invited to discuss and elaborate on business models							
			UNEP	☐	☐	☐	☑	☑	☐
		Participation in regional activities related to SOFF and GBON, including SOFF Atlantic SIDS workshops							
			UNEP	☑	☑	☑	☑	☑	☑
	1.3 NMHS human capacity required to operate the GBON network developed.								
		Recruiting additional (3) staff for operating and maintaining the renovated upper-air station							
			UNEP	☑	☑	☑	☑	☑	☑
		Meteo Technician Station O&M Training programme, Upper Air station training programme, Observer WMO BIP-MT trainings, ToT competence training (from WMO-RTC)							
			UNEP	☑	☑	☑	☑	☑	☑
		ICT & Data Communication trainings (Python, WIS2Box)							
			UNEP	☑	☑	☐	☐	☐	☐
		Trainings on CDMS (Geospatial and relational Databases, ClimSoft v.4 Data Rescue and climate data analysis)							
			UNEP	☑	☑	☑	☐	☐	☐
		Workshops and staff study visits for QMS trainings							
			UNEP	☐	☐	☐	☑	☑	☑
		Capacity development for senior management related to GBON implementation							
			UNEP	☐	☐	☐	☑	☑	☑
2. GBON infrastructure in place									
	2.1 New land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place.								
		Installation of a new AWS, including site preparation, station installation, instruments and equipment							
			UNEP	☐	☐	☑	☐	☐	☐

Outcome	Output	Activity	Implementing Agent	Time Frame					
				2024	2025	2026	2027	2028	2029
				1	1	1	1	1	1
		Review of current practices and recommendations for improved ICT infrastructure							
			UNEP	☐	☑	☑	☐	☐	☐
		Computer hardware procurement and upgrade of software							
			UNEP	☐	☐	☑	☐	☐	☐
	2.2 Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place								
		Upgrade of the three AWS, including data loggers, sensors, communication and transportation							
			UNEP	☐	☐	☑	☐	☐	☐
		Procurement of field calibration and laboratory calibration equipment, as well as related toolsets							
			UNEP	☐	☐	☑	☐	☐	☐
	2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place.								
		Upgrade of an upper-air station, including rehabilitation works, hydrogen generator and storage, shipping and transportation, ground-based monitoring system							
			UNEP	☐	☐	☑	☑	☐	☐
3. Sustained compliance with GBON									
	3.1 GBON land-based stations' commissioning period completed.								
		Procurement of sensors and spare parts for equipment maintenance							
			UNEP	☐	☐	☑	☐	☐	☐
		Local technical assistance services, local expenditures and communication costs							
			UNEP	☐	☐	☑	☑	☑	☑
	3.2 GBON upper air stations' commissioning period completed.								
		Procurement of consumables (radiosondes and balloons)							
			UNEP	☐	☐	☐	☑	☐	☐
		Procurement of a back up helium cylinder							
			UNEP	☐	☐	☐	☑	☐	☐
		Operations and maintenance							
			UNEP	☐	☐	☐	☑	☑	☑

Signatures

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WMO: WMO (World Meteorological Organization) (Digital) Celeste Saulo Secretary-General csaulo@wmo.int	**SIGNATURE:** Andrea Celeste Saulo **DATE:** 02-05-2024