Government of Samoa
MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT

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Pacific Region Preparedness, Adaptation and Resilience Program (PREPARE) – Samoa

PROCUREMENT ACTIVITY: WS-MNRE-534287-CS-INDV

TERMS OF REFERENCE for the Systems Coordinator – Samoa

Position:	MHEWS Systems Coordinator [SOFF] (Individual Consultant)
Location:	Apia, Samoa
Duration:	24 months; may be extended based upon Government needs and performance of the consultant
Expected start date:	December 2026

Background

Samoa is exposed to natural hazards including floods, droughts, tropical cyclones, storm surges, earthquakes, and tsunami. In 2009, it was hit by a devastating tsunami, causing damage valued at 20 percent of their GDP. In December 2012 Samoa was hit by Tropical Cyclone (TC) Evan which reached windspeeds of 185 km/h, causing extensive damage and losses. In more recent times, Samoa has faced health-related natural disasters, notably the measles outbreak in 2019 and the COVID-19 outbreak in 2022. These incidents placed considerable strain on healthcare systems, leading to substantial health and socio-economic challenges and required Samoa's emergency operation systems to provide essential support. The Government of Samoa (GoS) is undertaking a series of measures to improve its management of climate and disaster risks, these include taking steps to strengthen its multi-hazard early warning systems, address climate and disaster related risks to coastal areas and flood plains and revising its national building code to reduce the damage and destruction caused by increased wind speeds.

The effective use of early warning systems during past disaster events in Samoa has been instrumental in avoiding loss of life and highlights the potential of such systems; however, gaps in reliability and effectiveness remain. The Framework for Resilient Development in the Pacific 2017–2030 includes a regional commitment to establish and strengthen “end-to-end” Multi-

Hazard Early Warning Systems (MHEWS)1 across the Pacific. Samoa has made efforts toward providing actionable information to guide decision making during disasters, yet faces challenges in operating, maintaining, and leveraging advanced technologies and systems. The sustainable maintenance of observation and monitoring networks for both hydrometeorological and geophysical hazards is a known challenge across the Pacific region. The unavailability of funds for spare parts, insufficient capacity to repair and calibrate instruments, and obsolescence of equipment all contribute towards lack of sustainability. To address these challenges, Samoa has requested support to participate in several critical global and regional initiatives. A grant from the Systematic Observations Financing Facility (SOFF), a global initiative to improve weather and climate data, was approved in May 2024 to address critical data gaps for extreme weather observations through additional land-based and upper air monitoring stations. The SOFF grant is providing co-financing to Component 1 under the broader Pacific Region Preparedness, Adaptation, and Resilience – Samoa Project (PREPARE-Samoa).

The SOFF grant will support Samoa in achieving compliance with the Global Basic Observing Network (GBON) standards. The Samoa Meteorology Division (SMD), under the Ministry of Natural Resources and Environment (MNRE), currently operates 2 staffed weather stations, 17 automatic weather stations (AWS), of which only 6 are fully functional, and 1 sea level station. However, the absence of upper air stations results in non-compliance with GBON requirements. To address these gaps, SOFF investments will focus on improving observations, forecasting, and institutional capacity building for MHEWS. Key initiatives include upgrading one staffed surface station, establishing a new upper air station, installing new AWS and repairing existing ones, upgrading communications to cellular systems, and enhancing data transmission capabilities for sea level stations.

The MNRE as the Implementing Agency under PERPARE-Samoa, including for SOFF activities. The World Bank acts as the SOFF Implementing Entity with a role to provide implementation support for SOFF (and broader PREPARE-Samoa activities), with the Australian Bureau of Meteorology (BOM) serving as Peer Advisor for SOFF activities only. These efforts relate to PREPARE-Samoa Component 1 (Hazard Monitoring and Early Warning Systems) to strengthen MHEWS and GBON compliance.

The UN Early Warnings for All (EW4All) initiative has called for global investments totalling US$3.1 billion by the end of 2027 to help ensure that everyone on Earth is protected from extreme weather and climate events through more effective and integrated early warning systems. The SOFF initiative will also contribute to implementing EW4All.

Existing or planned development activities in Samoa that are relevant to this role include:

- GBON investments funded by SOFF.
- The Pacific Resilience Program (PREP, financed by the World Bank) funded an ICT upgrade to assist with data storage and sharing, with new systems to be procured for the Samoa Meteorological Division (SMD), the Water Resources Division, and Disaster Management Office (including at the new National Emergency Operations Centre). This project is underway and is expected to be completed by April 2024.

[1] According to the World Meteorological Organization, “end-to-end” MHEWS refers to a comprehensive, integrated approach that covers all stages of the early warning cycle. This includes hazard monitoring and prediction, disseminating warnings to communities, and ensuring communities are prepared to respond to the warnings.

- Climate and Oceans Support Program in the Pacific (COSPPac). This Australian government program is, among other activities, assisting Samoa to maintain its CliDE Climate Data Management System.
- Weather Ready Pacific. This is a broader proposed regional multi-donor initiative to comprehensively strengthen the full hydrometeorological system across the whole value chain in the Pacific region. Weather Ready Pacific can leverage the improved observations from PREPARE investment as part of its broader focus on hydrometeorological services. Weather Ready Pacific currently has seed funding and full funding is not assured.
- CREWS is working directly with countries to increase the availability of, and access to, early warning systems. As part of this project, National Strategic Plans for Meteorological Services are being developed for six Pacific SIDS, including Samoa. The project is due to be completed by December 2024.

PREPARE has five components, further details are available in Annex A:

- Component 1: Hazard Monitoring and Early Warning Systems
- Component 2: Emergency Preparedness and Response
- Component 3: Resilient Public Facilities
- Component 4: Program and Project Management
- Component 5: Contingent Emergency Response Component

Objective

The objective of this consultancy is to provide strategic, technical, day-to-day coordination and implementation support to the SMD under MNRE for activities under Component 1 of the PREPARE-Samoa Project and the associated SOFF Investment Phase Funding Proposal. The Systems Coordinator (SC) will support the timely delivery of activities to strengthen Samoa's MHEWS and achieve and sustain compliance with GBON standards, including through improved early warning services, observation and communication systems, institutional and staff capacity, stakeholder coordination, and effective monitoring and reporting of implementation progress, risks, results, and follow-up actions.

Component 1 activities under PREPARE-Samoa is investing in both regional and country-level decision support systems, instrumentation, and capacity and institutional strengthening for MHEWS, focusing on climate-related and geophysical hazards.

Component 1 includes the following key elements:

1.1. Early warning delivery systems

1.2 Monitoring and communication equipment

1.3 Institutional strengthening and capacity building

Scope of services and description of tasks

The Systems Coordinator (SC) will be required to coordinate, manage, implement, monitor and report on the activities of component 1 of PREPARE under MNRE, with a focus on overseeing technical assistance, equipment procurement, installation, and commissioning of weather stations funded under SOFF, and their integration with Samoa's MHEWS system per the SOFF Investment Funding proposal (see Annex B). The SC will also work closely with the Project Management Division of MWTI. In addition, the SC will focus on the key components that MNRE is responsible for delivering under the PREPARE legal agreements. The scope of services for this assignment is presented below.

Systems Coordination Support

- **Multi-Hazard Early Warning Systems**: The hydrometeorological warning service in Samoa has evolved to include impact-based warnings. Under PREPARE, the SC is responsible, in collaboration with other technical experts, to support the further development of MHEWS warnings and products, following good practice already established in the impact-based warning service.
- **Institutional Strengthening**: The SC shall support institutional strengthening of the legal and regulatory framework, observation infrastructure, data management systems, forecasting and warning systems, and enhancement of MHEWS delivery systems.
- **Capacity Building**: Building the capacity of staff and providing training is essential. The SC shall develop a comprehensive capacity-building and training plan that addresses the various components of a MHEWS, ensuring the integration of SOFF equipment and hazard monitoring capabilities within Samoa's broader MHEWS.
- **Collaboration and Coordination**: The SC shall facilitate collaboration and coordination among different stakeholders, including national MHEWS agencies and stakeholders, and regional and global support mechanisms, for the delivery of agreed activities funded by SOFF and the broader PREPARE objectives and activities under Component 1.

Lead and Manage

- Provide expertise and strategic guidance to Component 1 activities and provide support to counterparts in the coordination of the implementation of planned activities
- Manage the day-to-day activities of Component 1 to ensure achievement of set outputs and the timelines articulated in the Work Plan
- Administer and manage activities that MNRE is responsible for under Component 1 including providing the necessary implementation support to MNRE (through key divisions involved in the implementation of the relevant sub-components under Component 1)
- Collaborate with MNRE, MOF, MWTI's Project Management Division (PMD) BOM, World Bank team and other project stakeholders as and when necessary, on the development, updating and revision of project documents including the work program and budget, Procurement Plan, and POM
- Ensure good communications and information flow with and between relevant Government agencies, World Bank team, and other stakeholders on project related matters

Deliverables and reporting obligations

The Systems Coordinator will report to the Chief Executive Officer, MNRE through the Assistant Chief Executive Officer (ACEO) of SMD.

The SC will be required to provide support that may be required by the host divisions within MNRE (namely ACEO Samoa Meteorology Division, ACEO Water Resource Division) that are responsible in delivering outputs under the Samoa PREPARE. The SC will coordinate closely with the MWTI Project Management Division, which is responsible for the day-to-day project management, procurement, contract management, safeguards, financial management, and monitoring and evaluation responsibilities.

The Consultant's reporting obligations and deliverables are listed in the table below:

Scope of Consultancy	**Deliverables**	**Timeline**
1. PREPARE/SOFF work planning and coordination. Review the approved project documents, budget, implementation schedule, key milestones, dependencies, and institutional responsibilities; consult SMD, MNRE, PMD, MOF, the World Bank, BOM, and other relevant stakeholders; and prepare and periodically update an integrated work plan for Component 1 and SOFF activities.	Updated PREPARE/SOFF Work Plan, including implementation schedule, milestones, responsibilities, dependencies, risks, and follow-up actions, submitted electronically.	Initial work plan within 30 calendar days of commencement; updated every six months and submitted within 15 working days after each six-month period.
2. Technical and capacity-building deliverables. Coordinate the preparation of technical outputs required under the approved work plan, including a staff capacity-building and training plan covering MHEWS operations, observation networks, data management, forecasting, warning services, communications, and GBON compliance, and provide implementation support as agreed with SMD.	Staff Capacity-Building and Training Plan and other agreed technical deliverables, including supporting materials and implementation updates.	In accordance with the approved work plan and implementation schedule, or as otherwise agreed with SMD.
3. Monthly implementation monitoring and reporting. Monitor progress against the approved work plan; document activities, achievements, issues, risks, procurement and coordination matters, decisions required, and recommended follow-up actions; and maintain an up-to-date record of implementation status.	Monthly Progress and Activity Report, including progress against milestones, activities completed, key achievements, issues and risks, stakeholder coordination, and recommended actions.	Within 10 working days after the end of each month.

4. Management briefings and technical updates. Prepare and deliver concise briefings and technical updates for the CEO MNRE through the ACEO SMD, and for WRD, DMO, PMD, MOF, the World Bank, BOM, and other relevant stakeholders, as required. Record key decisions and agreed actions and follow up on their implementation.	Briefing notes, presentations, technical updates, meeting records, and action trackers, as applicable.	Throughout the contract period, as required or as agreed with SMD.
5. Assignment completion and handover. Consolidate the results of the assignment, assess implementation progress and outstanding actions, document lessons learned and recommendations, and organize and transfer relevant records and materials to SMD.	Project Completion Report covering implementation progress, key achievements, outputs delivered, challenges, lessons learned, outstanding issues, recommendations, and handover of supporting records.	Draft submitted at least 15 working days before the end of the contract term; final report submitted after incorporation of SMD comments.

Qualification and experience requirements

The Systems Coordinator will be an experienced manager with a proven record in the implementation of disaster risk management projects.

- A postgraduate degree in a discipline related to disaster risk management or equivalent, or a bachelor's degree with 5 years of relevant working experience in disaster risk management, is preferable
- Minimum 8 years of experience in organizations such as public sector, NGOs, development partners organizations or the private sector at management level or with management responsibilities
- Demonstrated high-level project implementation/management experience and an understanding of project- cycle principles, log-frames, monitoring and evaluation in line with the requirements of development partners
- Relevant practical experience in procurement and financial management skills of large and complex program budgets funded by development partners
- Excellent communication skills, including good oral and written English, report writing, and the ability to write for and to a variety of stakeholder hierarchies
- Demonstrated skills in leadership, coordination and the mentoring of staff
- Demonstrated ability to work effectively within diverse cultural and multi-disciplinary background

Duration of Assignment

The Consultant will be required to provide support to SMD throughout the SOFF Investment Phase and is expected to support the Compliance Phase. The assignment is expected to commence during the Investment Phase and continue throughout the Compliance Phase to support the effective integration, operation, sustainability and ongoing compliance of the systems and equipment. In line with SOFF Investment funding request, the anticipated duration of the assignment is five (5) years, with the continuation of support during the Compliance Phase subject to the availability and approval of relevant SOFF Funding.

The SC will be engaged on a full-time basis based in Apia, Samoa for the initial period of 24 months, with a possible extension subject to performance. A time-based contract will be signed in which both parties will agree on deliverables to be achieved. The Consultant is expected to provide continuous technical, coordination and implementation support to SMD in accordance with the approved workplan and the requirement of SOFF project. The full-time engagement will ensure consistent support to SMD throughout the Investment and Compliance Phases, including coordination with relevant stakeholders, monitoring of implementation progress, reporting, capacity building and follow up on SOFF requirement.

Reimbursable expenses

The SOFF grant under the PREPARE-Samoa Project will cover reasonable and necessary expenses incurred by the Consultant for official travel outside the normal duty station when such travel is directly related to the assignment and has been authorized in writing in advance by the ACEO SMD and the Project Management Division. Eligible expenses may include inter-island ferry or air transport, ground transport at the destination, fuel or vehicle hire where a project vehicle is not available, accommodation, subsistence or per diem, and other necessary travel-related costs for approved field visits to Savai'i, outer rural communities of Upolu, other islands, or overseas locations. Reimbursement shall be based on actual eligible costs supported by original receipts, tickets, boarding passes, approved travel authorization, and any other documentation required by the Government of Samoa and PREPARE financial-management procedures. Subsistence, accommodation, and related allowances shall not exceed applicable Government of Samoa travel rates and shall be paid only for the approved travel period.

Daily commuting between the Consultant's residence and normal duty station, personal travel, housing or relocation costs, travel upgrades, alcoholic beverages, fines, penalties, and expenses not directly attributable to the assignment are not reimbursable. No reimbursement will be made for expenditure incurred without prior written authorization, except in a documented emergency subsequently accepted by the Client. Reimbursable costs shall be invoiced separately from remuneration and submitted promptly with the Consultant's monthly invoice and supporting documentation. All claims remain subject to verification, availability of an approved Annual Work Plan and Budget allocation, applicable Government of Samoa requirements, and acceptance and approval by the Client. The Consultant shall avoid double claiming and shall disclose any cost paid or provided by another source.

Information and facilities to be provided by the Government of Samoa under the PREPARE:

MNRE will provide the office space, including office furniture, access to the internet and IT equipment (except laptop), and communications (phone and fax) as needed by the Consultant. The MNRE will provide to the Consultant the relevant project documents such as

the SOFF Investment Funding Proposal, SOFF Work Plan, PREPARE Project Appraisal Document (PAD), Financing Agreements, WB Guidelines, Project Operations Manual and all the existing reports and materials related to SOFF and PREPARE that may be required.

To be provided by the Consultant:

The Consultant shall pay all applicable taxes (including withholding taxes, VAGST, income tax etc), duties, insurance and any other fees applicable to doing business in Samoa and should conduct research to fully understand these requirements.

Websites and contact numbers for the local appropriate authorities to contact directly regarding taxes, duties and any other applicable fees that the Consultant is required to pay in Samoa are provided here:

Ministry of Revenue, website: www.revenue.gov.ws or contact number +685-20414.

Ministry of Commerce, Industry and Labour, website: www.mcil.gov.ws or contact number +685 20441.

Samoa Chamber of Commerce and Industry (which is an incorporated association of businesses and private sector organization in Samoa) can also be contacted (website: www.samoachamber.ws) for further information.

Annex A: Pacific Region Preparedness, Adaptation and Resilience (PREPARE) – Samoa Project

Component 1: Hazard Monitoring and Early Warning Systems

Activities under Component 1 will invest in global, regional, and country-level decision support systems, instrumentation, and capacity and institutional strengthening for MHEWS, supporting both climate-related and geophysical hazards. This includes strengthening the "upstream" end of effective MHEWS through investments in observations and forecasting, including for the Global Basic Observation Network (GBON).[2]

Component 2: Emergency Preparedness and Response

Activities under Component 2 will enhance national- and community level response capacities to better prepare for, and respond to, future disasters. This will be achieved through supporting the "downstream" end of effective MHEWS, particularly infrastructure designed to national climate-resilient building design standards, investments in dissemination and communication, and EP&R at the country and community levels.

Component 3: Resilient Infrastructure

Activities under Component 3 will invest in national and local activities to reduce the exposure and vulnerability of priority assets to climate and natural-related hazards. This will be achieved through the risk-informed town planning, strengthening of critical public facilities, including to current energy/water efficiency and natural hazard resilience standards, physical climate adaptation measures, and institutional strengthening related to infrastructure resilience.

This Terms of Reference relates to activities supported under this component.

Component 4 – Project Management

Activities under Component 4 will support project management and implementation support, including: (i) recruitment of consultants to provide support on project engineering, environmental and social management, procurement, financial management, and monitoring and evaluation and contract management; (ii) monitoring, review, and evaluation of the project; and (iii) capacity building and training including for operations and maintenance. Technical specialists, such as the Urban Planning Specialist, would be funded under other components.

Component 5 - Contingent Emergency Response Component (CERC)

The CERC will provide a mechanism: (i) for quick disbursements to meet the immediate liquidity needs of the Recipient following an eligible disaster event in order to finance critical imports; or (ii) to finance pilot adaptive social protection measures, emergency response, recovery and reconstruction works and associated services.

Project Implementation Arrangements

The Implementing Agencies for the project are MNRE and MWTI. The Project Management Division (PMD) within the MWTI is supporting the project to manage and implement key project-related tasks including project planning, coordination, technical, financial management, procurement and contract management, environmental and social risk management, and

[2] GBON is a fundamental element of global weather forecasting systems based on the international exchange of observational data, which underpin all weather, climate, and water services and products. SOFF is facilitating implementation of GBON in the Least Development Countries and Small Island Developing States, including Samoa, to generate and internationally exchange the required GBON station data.

monitoring and reporting throughout the project implementation period. Figure 1 provides a diagram of project implementation arrangements.

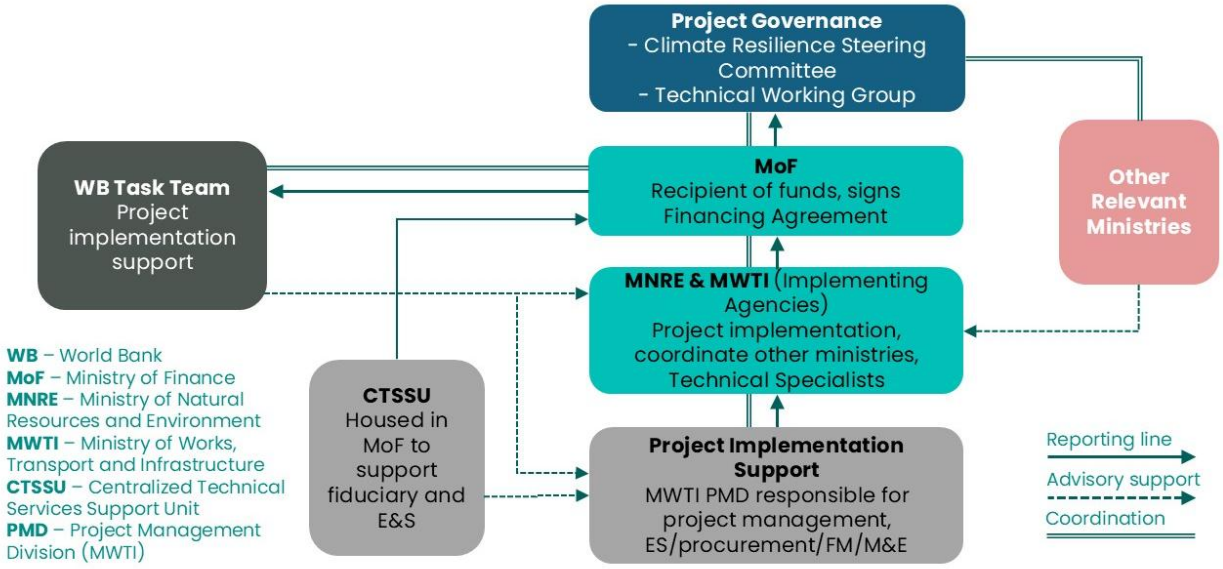


Figure 1: Project Implementation Arrangements

Annex B: Samoa SOFF Investment Phase

The SOFF Investment Phase for Samoa focuses on addressing critical gaps in the observation network to achieve compliance with GBON requirements. This includes institutional and human capacity development, infrastructure improvement and strengthening operations. The Scope of the SOFF Investment Phase and outputs are outlined below.

- Establish and upgrade GBON-compliant meteorological infrastructure, including surface and upper-air stations.
- Strengthen institutional and human capacity within the Samoa Meteorology Division (SMD) to operate and maintain the GBON network.
- Improve data transmission and integration systems, including the Meteorological Data Management System (MDMS) and Climate Data Management System (CDMS).
- Ensure sustained compliance with GBON standards, including international data sharing verified by WMO.
- Leverage and align with other regional and national initiatives, such as Pacific Resilience Program (PREP), Climate and Oceans Support Program in the Pacific (COSPPac), Climate Services and Related Applications Programme (ClimSA), and Weather Ready Pacific.
- Promote gender and social inclusion, stakeholder engagement, and civil society participation.
- Mitigate risks related to environmental, social, technical, and operational challenges.

SOFF Investment Phase Outputs

Output	Sub-output	Main Activities
Output 1: GBON Institutional and Human Capacity Developed	1.1 National consultations	1.1.1 Engagement with aviation stakeholders to develop plans for aviation cost recovery to support ongoing funding for SMD. 1.1.2 Inception workshops at the national and sub-national level targeting different stakeholders, including CSO and private sector. 1.1.3 Develop procurement plan that allows for the procurement of equipment to include private sector ongoing support (e.g. maintenance, training, advice, spare parts, etc.) for the life of the equipment through Investment and Compliance phases. 1.1.4 Confirm the status of the SMD Strategic Plan and undertake a comprehensive environment scan at start of Investment Phase of planned development activities related to GBON to identify opportunities for leverage and to ensure works are complementary. 1.1.5 Engage with the Ministry of Finance and other potential partners, to develop a robust plan for ongoing procurement of essential services, to support SME to operate and maintain the stations to a GBON standard during Investment and Compliance phases. 1.1.6 Develop an environmental and social management plan for investment activities prior to the commencement of site works.
	1.2 NMHS institutional capacity	1.2.1. Develop a Gender Gap Analysis and Gender Action Plan for mainstreaming of Gender ad social inclusion initiatives into SOFF initiatives. 1.2.2 Organise stakeholder engagement consultations with civil society organisations (CSOs) focused on women's empowerment. 1.2.3 Develop a sustainability plan to ensure longer-term sustainability of GBON investments, including under the SOFF Compliance funding.

	1.3 NMHS human capacity	1.3.1. Provide training in basic automatic and manual weather station verification and maintenance at the start of the Investment Phase for all SMD observers, and nominated staff on Savai'i, with ongoing training through the Compliance Phase (funded with SOFF Compliance funding, not under this phase). The training should be specific to the equipment types that will be installed. This would ideally be included in a 'supply and support' contract as part of the equipment procurement. 1.3.2 SMD to be supported by SOFF to recruit one Technician Officer during the Investment Phase. This position will be responsible for completing and recording preventative and corrective maintenance at SMD sites. This role would manage a store of spare parts. 1.3.3 Provide comprehensive training in weather station maintenance and metadata collection for the new technical officer and one to three staff members to provide back up support, both at the start of Investment Phase and ongoing through Compliance Phase (to be financed by SOFF Compliance funding). This would ideally similarly be structured into 'supply and support' contract. 1.3.4 Provide training in cellular and satellite communications and router configuration during the Investment Phase to the new technical personnel and staff supporting this role. Similarly, this training could be included in a 'supply and support' contract as part of equipment procurement. 1.3.5 Offer training leading to BIP-MT qualifications to all of SMD's observing personnel not currently qualified. This could be organised through the Bureau of Meteorology, NZ Met Service or Fiji Met Service. 1.3.6 Provide training in OSCAR/Surface and WDQMS operation to selected members of the Observations and Technical teams. 1.3.7 SMD to be supported by SOFF to recruit one ICT professional, skilled in network, database and communications technology critical to WIS2.0, MDMS and CDMS. Support will be required both during Investment and Compliance phase (funded by Compliance funding). Training in WIS2.0, MDMS and CDMS may also be required. 1.3.8 SMD to be supported by SOFF to train an existing staff member as a back-up ICT officer to support the ICT professional employed through Activity 4.7. in the NCP. 1.3.9 Offshore technical training for several existing SMD staff (approximately 5 officers) in quality management systems, including field sensor verification, observations metadata management and maintaining quality records. 1.3.10 Recruitment of a SOFF-funded program/project manager to oversee equipment procurement, installation and commissioning during the Investment phase, with the position to ideally continue for the life of the equipment during the Compliance phase (funded with SOFF compliance funding).
Output 2: GBON Infrastructure in Place	2.2 Improved land-based stations	Upolu station 2.2.1. Determine optimal site to co-locate AWS with staffed station on Upolu by undertaking a site selection assessment of the relative merits of: the existing site at SMD office location in Mulinu'u; the possibility of co-locating at the National Emergency Operations Center; and the Faleolo International Airport site. Secure land at chosen location. 2.2.2 Undertake audit of existing site conditions, manual equipment and facilities at the the preferred Upolu site, to identify all items that require procurement. 2.2.3 As required, procure 1 x uplifted manual observing equipment, and 1 x new AWS for colocation at the Upolu station under 'build and

		support' contracts, including site works, structures, facilities, power and communications infrastructure. Savai'i station 2.2.4 Undertake site selection assessment for the Savai'i AWS and secure land access at the preferred AWS site. 2.2.5 Undertake audit of existing site conditions, equipment and facilities at the preferred Savai'i site, to identify all items that require procurement. 2.2.6 As required, procure 1 x new AWS for the Savai'i station under 'build and support' contract, including site works, structures, facilities, power and communications infrastructure. 2.2.7 Audit existing AWS, identify those that are serviceable or repairable and uplift their communications and IT systems to enable them to report internationally via the new MDMS 2.2.8 Upgrade the data management and storage system to have functionalities to be a WIS 2.0 node including: • Expert audit of power supply, ICT equipment and data flows to develop detailed architecture for the Meteorological Data Management System for WIS 2.0 implementation • Procurement, installation and commissioning a Meteorological Data Management System (including WIS 2.0 capability), including ongoing trainings and maintenance support. • Installation of the MDMS to include recommended upgrades to the SMD office to ensure optimal working environment for staff and equipment. • Procure, install and commission upgraded Climate Data • Management System (CDMS) components through a 'supply and support' contracting approach. • Support upgrades to existing SMD web presence to provide weather data products to stakeholders and the public.
	2.3 New upper-air station	2.3.1. Undertake site selection and feasibility analysis for the new upper air station on Upolu. Secure land access for upper air station at the preferred location. 2.3.2 Procure 1 x upper air station equipment under 'build and support' contract, including site works and all ancillary infrastructure (including building structure). 2.3.3 Develop SOPs and provide training for Upper Air stations
Outcome: Sustained GBON Compliance	3.1 Land-based station commissioning	3.1.1. Procurement of spare parts and supplementary materials to maintain consistent operation of land-based stations after commissioning. 3.1.2. Staff travel for routine and emergency maintenance of the equipment.
	3.2 Upper-air station commissioning	3.2.1. Procurement of spare parts and supplementary materials to maintain consistent operation of upper-air stations after commissioning. 3.2.2. Staff travel for routine and emergency maintenance of the equipment.
Total		

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