



SOFF Investment Phase Funding Request

Version 2.0

17 May 2024

Systematic Observations
Financing Facility

**Weather
and climate
data for
resilience**



SOFF Investment Phase Funding Request

The funding request should be prepared by the SOFF beneficiary country in collaboration with the SOFF implementing entity and supported by the SOFF peer advisor. The funding request reflects and is based on the National Contribution Plan. In case of questions on how to complete this template, please contact the SOFF Secretariat at: soffsecretariat@wmo.int.




The SOFF Investment Funding Request template includes the following sections:

- 1. Basic Information**
- 2. Programming Criteria**
- 3. Readiness and Country Context**
- 4. Investment Phase Outputs and Budget**
- 5. Investment Phase Implementation Arrangements**
- 6. Investment Phase Monitoring, Reporting, and Verification**
- 7. Investment Phase Risk Management Framework**

The **GBON Gap Analysis**, the **GBON National Contribution Plan** and **Country Hydromet Diagnostic** are included in **Annex 1, 2, 3**.

The **Terms of References** of the advisory services provided by the **SOFF peer advisor** are provided in **Annex 4**.

1. Basic Information

SOFF Beneficiary Country and Focal Point	Nauru Mr Graymea Ika, Director, Nauru Meteorological and Hydrological Service, graymeaika1510@gmail.com			
Country classification	<input type="checkbox"/> LDC	<input checked="" type="checkbox"/> SIDS	<input type="checkbox"/> FCS	<input checked="" type="checkbox"/> ODA-recipient
SOFF Implementing Entity and Focal Point	United Nations Environment Programme (UNEP) Mr Jochem Zoetelief, Head, Climate Early Warning and Capacity Building Unit, Early Warning and Assessment Division Email: jochem.zoetelief@un.org			
SOFF Peer Advisor and Focal Point	Australian Government - Bureau of Meteorology Dr Andrew Jones, General Manager International Development, Bureau of Meteorology, andrew.Jones@bom.gov.au			
Total Budget (USD)	Total: 6,176,153.53 First tranche: 5,322,288.18 (90%) Second tranche: 591,365.35 (10%)			
Delivery timeframe	60 months (5 years)			
Date of Steering Committee Approval				
<p>Signatures</p> <p> Mr Graymea Ika, Director, Nauru Meteorological and Hydrological Service, Nauru</p> <p> 17.05.2024 Mr Jochem Zoetelief, Head, Climate Early Warning and Capacity Building Unit, Early Warning and Assessment Division, United Nations Environment Programme (UNEP)</p> <p> Dr Andrew Jones, General Manager International Development, Bureau of Meteorology, Australia</p>				

2. SOFF Programming Criteria (2 pages)

Alignment with the SOFF Programming Criteria

Close the most significant data gaps

Based on the WMO Global Gap Analysis, the GBON standard density requirement for Nauru is 2 surface stations and 1 upper-air station.

Currently Nauru’s National Meteorological and Hydrological Service (NMHS) maintains only one staffed manual weather station at the international airport; there are no Automatic Weather Stations (AWSs) and no upper-air sounding stations (UAs). The staffed station operates 24 hours a day with a target of hourly observations, however, due to maintenance challenges, equipment and communication issues observations are not always accurate and less frequent than the target.

Maintaining AWS at unstaffed sites has historically been less successful in terms of data quality and reliability in Nauru, as well as in other Small Island Developing States (SIDS) of similar resources. Staffed stations have historically proven to be significantly more reliable, higher quality and more resilient. Therefore, to ensure GBON compliance it is recommended to:

- Improve the existing staffed station at the international airport to send hourly reports internationally;
- Install one new AWS in Topside (potentially at the to be constructed NMHS Head office site) and co-locate a new manual upper air station.

Type of station	Baseline (Results of the GBON National Gap Analysis)				GBON National Contribution Target	
	Target (# of stations) ¹	GBON-compliant stations (#)	Gap		To improve	New
			New	To improve		
Surface	2	0	1	1	1	1
Upper-air	1	0	1	0	0	1
Marine	*when applicable					

Table1. GBON National Contribution Target

¹ For SIDS, for the WMO GBON Global Gap Analysis in June 2023, the EEZ area has been added to the total surface area which is the basis for the target number of stations. The standard density requirements for SIDS have been calculated with 500 km for surface stations and 1000 km for upper-air stations.

<p>Target easy fixes</p>	<p>The main easy fix will be to upgrade the current staffed manual station to submit hourly data 24 hours a day and report internationally. It will include improving the site, replacing meteorological instruments, constructing supplementary facilities, ensuring reliable power and water supply, as well as providing backup communication.</p> <p>Another potential easy fix could be to partially use the existing OTT-Hydromet AWS procured under the UNDP Disaster Resilience for Pacific Small Island Development States (RESPAC) program for the new AWS in Topside. It is currently in storage pending resources for installation. While an attempt will be made to utilize this equipment to the extent possible, the peer advisor has not asserted with certainty that this station is fully serviceable and suitable for the site in Topside, therefore SOFF funding is requested to replace some or all the parts if necessary. As recommended in the GBON National Contribution Plan, building on the work of the peer advisor, the equipment in storage will undergo thorough technical assessment at the beginning of the investment phase to determine its suitability and serviceability.</p>
<p>Create leverage</p>	<p>SOFF investments will complement many of the previous and ongoing operations in Nauru. For example, in case the OTT-Hydromet AWS is found to be suitable and functional for the AWS site in Topside and is installed under the SOFF-funded project, SOFF investments will directly contribute to implementation of the UNDP Disaster Resilience for Pacific Small Island Development States (RESPAC) program under which this equipment was procured but never installed. SOFF investments will also complement the Australia-funded Climate and Ocean Support Program in the Pacific (COSPPac) project. While COSPPac is expected to install Climate Data for the Environment (CiDE) Climate Data Management System server in Nauru, the WIS2.0 component will not be accommodated in CiDE, therefore SOFF support will be required to enable data transmission to WIS2.0. The project will pursue synergies with the new Weather Ready Pacific programme through regional forums. Furthermore, the project will complement outcomes of the Climate Risk and Early Warning Systems (CREWS) Pacific SIDS projects in Nauru through further support for building institutional capacity and strengthening regional coordination mechanisms, strengthening Nauru’s technical capacity for data transmission to WIS2.0, as well as providing further trainings and capacity building support.</p> <p>Finally, Nauru is a beneficiary in 2 Greed Climate Fund (GCF) projects, one project of the Adaptation Fund and a number of Global Environment Facility (GEF) projects, however, those are related to resilient fisheries, renewable energy, climate-resilient infrastructure and energy efficiency and are therefore of less relevance to GBON.</p>

<p>Maximize delivery capacity</p>	<p>UNEP is already implementing projects related to weather and climate data collection in developing countries and Pacific 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 programme “Enhancing Climate Information and Knowledge Services for resilience in 5 island countries of the Pacific Ocean” where strengthening observational capacity is one of the key components. The Programme Management Unit (PMU) of the latter is co-located with the Secretariat of the Pacific Regional Environment Programme (SPREP) and the Pacific Climate Change Centre (PCCC) in Samoa. The PCCC is supporting capacity building within national meteorological services through delivery of the training module of the WMO Pacific Regional Climate Centre. Even though this PMU will not manage the SOFF-funded projects implemented by UNEP in the Pacific and will not receive any SOFF funding, implementation of SOFF-funded projects will build on the lessons learnt.</p> <p>The peer advisor Australian Bureau of Meteorology (BoM) has worked extensively in partnership with Nauru over many years on aspects of meteorological and climatological work including support for infrastructure and training. In recent years this has primarily been through Climate and Oceans Support Program in the Pacific (COSPPac) funded by the Australian Government. The Bureau has a large number of senior technical experts in all aspects of GBON compliance whose expertise can be deployed in this program.</p>
<p>Sub-regional gains</p>	<p>The proposed stations will contribute to a broader well-distributed multi-country network across a critical region for Numerical Weather Prediction (NWP) encompassing other SOFF-funded stations in nearby countries including Kiribati, Tuvalu, Solomon Islands and Papua New Guinea.</p> <p>With SOFF support, the project could also accommodate future regional coordination initiatives such as regionally focused equipment calibration services, training, procurement of common equipment types, and maintenance services. These can be pursued through several forums in which NMHS is active participant:</p> <ul style="list-style-type: none"> • Regional SOFF coordination workshops • WMO RA V committee • Pacific Meteorological Council and its committees • South Pacific Regional Environmental Programme, particularly the Weather Ready Pacific plan. • Climate and Ocean Support Program in the Pacific (COSPPac)

	<ul style="list-style-type: none"> • Pacific Community. <p>During the Investment Phase, NMHS, UNEP and BoM will also pursue opportunities for regional synergies for maintenance services that can be implemented during the Compliance Phase, such as coordinated procurement of spare parts and calibration services.</p> <p>It is proposed that over the course of the investment phase a Pacific regional solution should be explored for (i) maintenance and repair, (ii) instrument calibration and (iii) train-the-trainer services to be implemented later on during the compliance phase. Due to the small number of staff at most Pacific Island NMHS, regionally based teams that can support multiple Pacific Island Countries may be both effective and sustainable as a complement to national services.</p>
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3. Readiness and Country context (1 page)

SOFF Beneficiary Country Capacity Assessment

The Nauru Meteorological and Hydrological Service (NMHS) established in 2015 under the Department and the Ministry of National Emergency Services is the primary organisation of relevance to the operation and maintenance of GBON in Nauru. There is no Meteorological Act in Nauru, but legislation in the form of the Natural Disaster Risk Management Act provides a mandate for the NMHS to provide national public weather, marine and climate data.

The only other organisation looking to operate a compliant weather station in Nauru is the Civil Aviation Authority of Nauru. It is mandated by the Civil Aviation Act 2011 to provide public weather forecasting and meteorological warning services for aviation in a timely and efficient manner. The Act provides some authority and responsibility for NMHS to establish and operate the GBON stations and share the data internationally.

There are some non-GBON compliant AWS systems on Nauru operated by Geoscience Australia and the Nauru Power Authority and evidence of several AWS systems installed previously which have been removed or are unserviceable. There are no private actors who have a base nor significant presence in Nauru. However, actors such as New Zealand’s National Institute of Water and Atmospheric Research (NIWA), Vaisala and OTT operate in the Pacific region and may be ongoing maintenance partners for GBON.

According to the Country Hydromet Diagnostic (Annex 3), the overall level of NMHS matureness is between 1 and 2, which is quite low. NMHS’s annual core budget is estimated at approximately AUD \$226,500, including staff cost, which is very low by world standards. The existing budget does not allow NMHS to cover equipment and maintenance costs, support staff training or fund operational requirements. For example, in the budget for financial year 2022-23 no budget was allocated for instruments, consumables, building maintenance, motor vehicles, personal protective equipment or other costs associated with running an observations network, and a very small amount was allocated for plant repairs/maintenance and for stores, with. Sourcing of parts and

materials is also a major challenge. With no local supplier, all parts must be procured from overseas with lengthy delivery times and costly freight. These issues combined with budgetary constraints within NMHS mean that NMHS rarely has a sufficient stock of spare parts, and often is unable to make repairs to or replace unserviceable equipment.

NMHS is headquartered in the Department of National Emergency Services and shares a small and inadequate space with the Departmental Headquarters and Rescue and Fire Services. Plans for a new headquarters building for the Department, including for the NMHS, have been prepared, and land has been set aside through extensive negotiations with landholders, but funding has not yet been obtained for construction. The need for the new building is acute and has been identified in many strategic documents, including Nauru Meteorological Service Country Report (2019). Construction of this headquarters would be of great benefit for emergency management, and weather and climate forecasting in Nauru. Furthermore, it would be cost effective and beneficial to incorporate elements of the proposed upper air station into this building to remove duplication of facilities and capability. The design of the building is made in a way that would allow for the building to be constructed in phases. Given that the first phase (ground floor) is supposed to provide a head office for NMHS, SOFF funding is requested to support its construction.

Nauru Meteorological and Hydrological Service has 14 staff including 8 observers and 1 ICT expert. Only 2 staff have BIP-MT training, and none of the observers have training in upper-air observations. Furthermore, there is no technical staff able to maintain the future AWS and UA stations. To strengthen capacity of staff, there is a need to provide comprehensive trainings on observations, basic maintenance of the equipment, BIP-MT, upper-air observations, etc. to all observers, train some of the observers on OSCAR/Surface and WIGOS Data Quality Monitoring System (WDQMS), train the ICT expert on network, database and communications technology critical to WIS2.0, meteorological data management system (MDMS) and climate data management system (CDMS) as well as on satellite and cellular communication and router configuration. For maintenance of the equipment, it is recommended to have a long-term "supply and support" contract with the equipment manufacturer. It is not envisaged that additional staffing will be required to operate the modernised infrastructure at this point.

Overall, having been established only in 2015 Nauru Meteorological and Hydrological Service has made significant progress in providing basic weather and climate observations. However, its capacity remains quite low, and there are multiple gaps and needs. Therefore, there is a substantial opportunity for SOFF to support strengthening technical, institutional, and human capacity of Nauru Meteorological and Hydrological Service.

Investment Phase Alignment with the GBON National Contribution Plan

No differences between the proposed Investment Phase targets and the requirements of the approved GBON National Contribution Plan have been identified.

4. Investment Phase Outputs and Budget

The GBON National Contribution Plan provides detailed information on the Investment Phase Outputs (please see Annex 1).

Output 1. GBON institutional and human capacity developed	Main activities	Budget (USD)
1.1 National consultations including with CSOs, and other relevant stakeholders conducted	<ul style="list-style-type: none"> • Inception workshop with subsequent stakeholder engagement workshops • Consultations with civil society organisations (CSOs) focused on women's empowerment • Development of a Gender Gap Analysis and Gender Action Plan to guide the mainstreaming of gender and social inclusion initiatives into SOFF investments 	289,000
1.2 NMHS institutional capacity required to operate the GBON network developed	<ul style="list-style-type: none"> • Engagement in regional fora to pursue opportunities for regional coordination in Investment Phase and Compliance Phase elements such as calibration, training, common equipment types, maintenance and repair, Training of Trainers, etc. • Construction of the ground floor of the National Emergency Service (NES) headquarters building • Scanning of planned development activities related to GBON to identify opportunities to leverage and to ensure works are complementary 	1,285,579
1.3 NMHS human capacity required to operate the GBON network developed	<ul style="list-style-type: none"> • Manual synoptic observations training to NMHS staff • Training in basic automatic and manual weather station verification and maintenance • Training in cellular and satellite communications and router configuration during the Investment Phase to NMHS ITC manager • Training leading to BIP-MT qualifications to all NMHS observing personnel 	1,253,500

	<ul style="list-style-type: none"> • Training in OSCAR/Surface and WDQMS operation to selected members of the Observations ITC teams • Training to the ICT manager, in network, database and communications technology critical to data management and WIS2.0 • Training to at least 8 observing staff in upper air operations to support the new upper air station • Training in finance, staff management and strategic planning for the NMHS senior management team • Project management costs 	
Output 2. GBON infrastructure in place	Main activities	Budget (USD)
2.1 New land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	<ul style="list-style-type: none"> • Development of a procurement plan that allows for procurement of equipment to include private sector ongoing support (e.g. maintenance, training, advice, spare parts, etc.) for the life of the equipment • Technical assessment of previous AWS equipment issues to identify technical and communication faults and lessons learnt • Technical assessment of the existing OTT-Hydromet AWS equipment in storage to determine serviceability and suitability for the Topside site • Site preparation for the new AWS at the Topside location • Procurement of necessary equipment for the new AWS, based on the audit, to ensure it communicates reliably in real-time to GBON standards • Procurement of 1 field calibration kit • Expert data management consultancy to design a simple Meteorological Data Management System (MDMS) and WIS2.0 implementation suitable to Nauru conditions • Procurement, installation and commissioning of a suitable data management system compatible with CliDE 	447,000

	<ul style="list-style-type: none"> • Development of a webpage to provide real-time and historical weather data products to stakeholders and the public 	
2.2 Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	<ul style="list-style-type: none"> • Audit of existing equipment and facilities at Nauru Airport to identify all items that require procurement • Development of an environmental management plan for investment activities prior to site works • Procurement of 1 x uplifted manual observing equipment, including site works, structures, facilities and communications infrastructure • Procurement of PCs, workstations and servers (as required) as well as mobile telephony for out of hours contact with operational staff • Construction of a climate-controlled computer/server room, preferably incorporated into the future NES building 	160,000
2.3 New upper-air stations and related equipment, ICT systems, data management systems and standard operating practices in place	<ul style="list-style-type: none"> • Procurement of 1 manual upper-air station, including site works and all ancillary infrastructure 	1,300,000
2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place	-	
Outcome: Sustained compliance with GBON	Main activities	Budget (USD)
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	<ul style="list-style-type: none"> • Procurement of additional sensors and spare parts • Maintenance and calibration of the surface stations by the supplier on a yearly basis • Field calibration of surface station by NMHS staff 2 times per year and recalibration of the calibration kits once in 2 years • A vehicle to transport staff and consumables between NMHS staffed locations 	191,700

3.2 GBON upper air stations' commissioning period completed , country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority	<ul style="list-style-type: none"> Yearly maintenance of the upper-air sounding station, including consumables 	600,000
Total for all Outputs		5,526,779
Implementing Entity Fee²		386,874.53
SOFF peer advisory services	Please see Annex 4	262,500
Total funding request		6,176,153.53

Budget breakdown by UNDG category (Excluding SOFF peer advisory services)³	USD
Staff and personnel costs	843,500
Supplies, Commodities and Materials	0
Equipment, Vehicles, Furniture and Depreciation	0
Contractual Services Expenses	0
Travel	338,000
Transfers and Grants	4,345,279
General Operating Costs	

² The implementation fee cannot exceed 7% of the total Investment Phase funding request.

³ The total budget (excluding the budget for the SOFF peer advisory services) is expected to be disaggregated by UNDG category. It includes direct and indirect costs of the Implementing Entity and beneficiary countries to establish a fully operational observation network, collecting and internationally exchanging data according to GBON requirements. Eligible expenditures are any type of expenditure required to implement the GBON National Contribution Plan, including the requirements of the beneficiary country to manage and administer the day-to-day activities of the Investment Phase. It also includes the budget required for the operation and maintenance of the observing network.

5. Investment Phase Implementation Arrangements

<p>Execution model and implementation arrangements</p>	<p>United Nations Environment Programme (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.⁴</p> <p>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 partnership with United Nations Office for Project Services (UNOPS), UNEP is able to operate at the country level without necessarily having a national office. The UNEP-UNOPS Agreement typically 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 Nauru will contribute to effectiveness, coordination, and sustainability of outcomes.</p> <p>The Nauru Meteorological and Hydrological Service (NMHS) will serve as the national Executing Entity (EE). The NMHS 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 NMHS 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.</p>
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⁴ <https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/pm.pdf>

	<p>Upon further consultations with NMHS, UNEP in its executing role could engage relevant Technical Partner agencies to conduct activities such as trainings. These might include the New Zealand’s National Institute of Water and Atmospheric Research (NIWA), Fiji Meteorological Service and others. The peer advisor Australian Bureau of Meteorology (BoM) will also continue to be engaged. These partners are highly qualified, internationally recognised professional agencies with many years’ experience of partnership in the Asia-Pacific region.</p>
<p>Private sector involvement</p>	<p>The private and academic sectors in Nauru are limited, and there is little in the way of active private or academic partnerships. However, given the existing skill level in the NHMS, its limited legislated mandate, and the remoteness and lack of existing private sector operators in Nauru there might be opportunities to engage actors such as Vaisala, OTT or others for weather stations installation, ongoing maintenance, training and calibration. This will require structuring the procurement in a manner than the supplier relationship can continue over the life span of the equipment.</p>
<p>Civil society participation</p>	<p>NMHS has no website and limited communications channels. It has no social media presence to speak of, although it is currently seeking permission to run an official Facebook page (as opposed to sharing information through a more general government page) to communicate with users more directly. The office of the NMHS is small, and there is also no budget for education, or formal communications strategy. Engagement of women in climate services is limited, with gender balance in NMHS being about 86% male, 14% female.</p> <p>Civil society organizations (CSOs) can play an important role for raising awareness about the work of NMHS, engaging communities as well as increasing women participation. To enable this, it is recommended to organise stakeholder engagement consultations with civil society organisations (CSOs) including:</p> <ul style="list-style-type: none"> • Direct contact with government departments and NGOs working with women and girls in Nauru to promote employment opportunities in NMHS (e.g. Nauru Women's Affairs Department; Nauru National Women's Council; Nauru Young Women's National Council, • Presentations at Community meetings, • Presentations to school groups. <p>Furthermore, it is recommended to develop a Gender Gap Analysis and Gender Action Plan during the Investment Phase to guide the</p>

	<p>mainstreaming of gender and social inclusion initiatives into SOFF investments. The Gender Action plan could include the following:</p> <ul style="list-style-type: none"> • Targets for female participation in the role areas associated with SOFF Investment and Compliance phases in Nauru, • Inclusion of gender targets in procurement documents where human resources are part of the procurement, • Annual reporting of achievement of the above targets, • Development of ongoing campaign in schools and communities to promote female participation in roles linked to NMHS.
<p>Fiduciary systems</p>	<p>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.</p> <p>Through its Global Support Services Agreement and general partnership 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.</p> <p>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. Nauru Meteorological and Hydrological Service under the Department of National Emergency Services as the national EE follows the Government Nauru’s financial and procurement rules. Similarly, Technical Partners and the Peer Advisors supporting execution in Nauru (including e.g., NIWA, BoM and others), are subject to financial and procurement policies of their governments/ Member States.</p>

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)⁵ 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

⁵ UNEP Environmental and Social Sustainability Framework (2020); Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/32022/ESSFEN.pdf?sequence=1&isAllowed=y>

	<ul style="list-style-type: none"> • Safeguard Standard 5: Cultural Heritage • Safeguard Standard 6: Displacement and Involuntary Resettlement • Safeguard Standard 7: Indigenous Peoples • Safeguard Standard 8: Labour and Working Conditions <p>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.</p> <p>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.</p>
<p>Dispute resolution mechanism</p>	<p>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.</p>

⁶ UN Environment (2015). “Gender Equality and the Environment: Policy and Strategy”. https://wedocs.unep.org/bitstream/handle/20.500.11822/7655/Gender_equality_and_the_environment_Policy_and_strategy-2015Gender_equality_and_the_environment_policy_and_strategy.pdf.pdf?sequence=3&isAllowed=y

UNEP's Stakeholder Response Mechanism (SRM) is established through the Independent Office for Stakeholder Safeguard-related Response (IOSSR).⁷ 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:

⁷ UNEP's Environmental and Social Sustainability: Stakeholder Response Mechanism (2020), Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/32023/ESSFRM.pdf>

	<p>Independent Office for Stakeholder Safeguard-related Response (IOSSR) & Director of Corporate Service Division</p> <p>United Nations Environment Programme</p> <p>Nairobi, Kenya</p> <p>Email: unenvironment-IOSSR@un.org</p> <p>Details are available in the UNEP's SRM Operating Procedures.</p>
<p>Additional relevant policies and procedures</p>	<p>As part of the Secretariat, UNEP follows UN policies, rules and regulations.</p>

6. Investment Phase Monitoring and Reporting

The implementing entity, with the support of the peer advisor, is expected to monitor the implementation of the Investment Phase following an output-based approach. The Investment Phase outputs as well as respective indicators and targets are presented below.

Output 1. GBON institutional and human capacity developed	Indicator	Target Y1	Target Y2	Target Y3	Target Y4	Target Y5
1.1 National consultations including with CSOs, and other relevant stakeholders conducted	Number of workshops and stakeholder consultations	2	2	2	2	2
	Gender Action Plan and Gender Gap Analysis developed		x			
1.2 NMHS institutional capacity required to operate the GBON network developed	Opportunities for regional coordination of calibration, trainings, maintenance and repair etc. identified			x		
	Ground floor for the NES HQ building constructed			x		
1.3 NMHS human capacity required to operate the GBON network developed	Number of trainings provided to NMHS staff	1	2	2	2	1
Output 2. GBON infrastructure in place	Indicator	Target Y1	Target Y2	Target Y3	Target Y4	Target Y5
2.1 New land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	# stations as per the GBON National Contribution Plan			1		
2.2 Improved land-based stations and related equipment, ICT systems, data management systems and standard operating practices in place	# stations as per the GBON National Contribution Plan		1			
2.3 New upper-air stations and related equipment, ICT systems, data management systems and standard operating practices in place	# stations as per the GBON National Contribution Plan			1		
2.4 Improved upper-air stations, related equipment, ICT systems, data management systems and standard operating practices in place	# stations as per the GBON National Contribution Plan					
Outcome: Sustained compliance with GBON	Indicator	Target Y1	Target Y2	Target Y3	Target Y4	Target Y5

3.1 GBON land-based stations' commissioning period ⁸ completed, country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority	# stations as per the GBON National Contribution Plan					2
3.2 GBON upper air stations' commissioning period completed, country-specific standard cost for operations and maintenance established, and data sharing verified by WMO Technical Authority	# stations as per the GBON National Contribution Plan					1

⁸ The commissioning period is the last year of the Investment Phase. The beneficiary country, supported by the Implementing Entity, must demonstrate the sustained operation of all the SOFF-supported stations according to the GBON compliance.

The implementing entity is expected to report on progress as described below.

- **Quarterly updates** to the SOFF Secretariat: A simple standardized form providing a progress update against the Investment Phase Outputs' indicators (and Outcome, where applicable⁹) and flagging major issues that are delaying implementation, if any.
- **Annual narrative and financial reports** according to the UNMPTF reporting requirements indicated in the legal agreements. The annual narrative report reports on progress on the delivery of the Investment Phase Outputs, measured by the Investment Phase Indicators. It includes also a review of the Investment Phase risks and an update on environmental and social safeguards, including gender.
- **Final narrative and financial reports** according to the UNMPTF reporting requirements indicated in the legal agreements. The final narrative report confirms the completion of all the activities and report on the number of stations that have completed the commissioning period (outcome). The WMO technical authority verifies GBON compliance of the indicated stations and provides a verification report to the SOFF Secretariat. Upon WMO verification, the Investment Phase can be considered completed. The Final Report should describe the Investment Phase results achieved and lessons learned; and it should also specify the long-term institutional arrangements to secure sustained GBON compliance with SOFF Compliance Phase support.

⁹ The quarterly reports should also include, when applicable, progress achieved in terms of new or rehabilitated stations that have become operational and are already sharing the data into the WIS 2.0 system as confirmed through the WIGOS Data Quality Monitoring System (WDQMS) web tool.

7. Investment Phase Risk Management Framework

The Investment Phase Risk Management Framework should be based on the [SOFF Risk Management Framework](#), incorporating relevant programmatic risks and including additional country-specific risks. Please follow the [methodology established by the Multi-Partner Trust Fund Office \(MPTFO\)](#) presented below.

		Impact				
		Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Likelihood	Very Likely (5)	Medium (5)	High (10)	High (15)	Very High (20)	Very High (25)
	Likely (4)	Medium (4)	Medium (8)	High (12)	High (16)	Very High (20)
	Possible (3)	Low (3)	Medium (6)	High (9)	High (12)	High (15)
	Unlikely (2)	Low (2)	Low (4)	Medium (6)	Medium (8)	High (10)
	Rare (1)	Low (1)	Low (2)	Medium (3)	Medium (4)	High (5)

Please complete the following table.

Risk	Risk level	Likelihood	Impact	Risk Mitigation Measures
Non-compliance with fiduciary and procurement standards in some SOFF activities	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.

				<p>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.</p>
<p>SOFF-funded investments cause environmental or social impacts</p>	<p>Medium</p>	<p>Unlikely</p>	<p>Moderate</p>	<p>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</p>

				<p>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.</p>
NMHS staff depart after being trained	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.
Slow implementation and delays in procurement, installation and capacity building activities	Medium	Possible	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	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

				<p>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.</p>
<p>Destruction or theft of SOFF-financed equipment and infrastructure</p>	<p>Medium</p>	<p>Unlikely</p>	<p>Moderate</p>	<p>The Investment Phase will ensure that all the observation sites will be fenced and guarded to minimize the risk of theft. Where possible, civil society organizations (CSOs) will be engaged for awareness-raising activities, i.a. to prevent vandalism. However, given that Nauru is very vulnerable to the impacts of climate change and might</p>

				<p>be subject to climate-related disasters, there is a risk that the equipment will be destroyed by a natural hazard. 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. The budget for the GBON equipment procurement will also cover additional equipment needed to safeguard against the climate-related hazards to the extent possible.</p>
<p>Countries cannot make optimal use of data, including accessing or using improved forecasts products from the Global Producing Centers throughout the hydromet value chain</p>	<p>Medium</p>	<p>Unlikely</p>	<p>Moderate</p>	<p>To mitigate the risk, it is proposed that the Investment Phase includes extensive and comprehensive training for the NMHS staff from the peer advisor</p>

				<p>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.</p>
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Annex 1: National Gap Analysis

The National Gap Analysis for Nauru is available here: <https://www.un-soff.org/wp-content/uploads/2024/05/Nauru-GBON-National-Gap-Analysis.pdf>

Annex 2: National Contribution Plan

The National Contribution Plan for Nauru is available here: <https://www.un-soff.org/wp-content/uploads/2024/05/Nauru-GBON-National-Contribution-Plan.pdf>

Annex 3: Country Hydromet Diagnostics

The Country Hydromet Diagnostics for Nauru is available here: <https://www.un-soff.org/wp-content/uploads/2024/02/Nauru-CHD.pdf>

Annex 4: 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 Australian Bureau of Meteorology (BoM) to Nauru 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 tool¹⁰
- 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.

¹⁰ 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 Prediction (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, the Australian Bureau of Meteorology (Bureau), will provide the following advisory services to Nauru Meteorological and Hydrological Service (NMHS) during the SOFF Investment Phase:

- **Technical advice and support**– The Bureau will facilitate access to subject matter experts (SME) within its organisation to be available for on-call consultation, advice and support to NMHS via telephone or videoconference. This could include topics such as:
 - Station siting and exposure assessment
 - Equipment or communications issues
 - Quality management
 - WIS2.0 configuration and setup
 - WIGOS, OSCAR/Surface metadata setup and configuration
 - Suggestions for suppliers of equipment and services
 - Assistance with budgeting for operation and maintenance of stations during compliance phase

The fee in this Investment Proposal amount allows for up to 40 hours of Bureau SME consultation per year. Should further support be required, this would need to be requested as additional financing.

- **Regional engagement support** – The Bureau will assist NMHS to connect with other met services, regional bodies and other hydromet initiatives in the region. This could include activities such facilitating introductions and multi-party discussions.
- **Periodic peer reviews** – The Bureau will undertake annual in-country peer reviews of progress during the Investment Phase and contribute to reporting as relevant. Each review will include a short assessment report and recommendations for adjustments to the Investment Phase approach if required. The regular reviews will aim to identify and head off any emerging problems or issues to avoid waste or investment funds or delays to the investment program.

The peer advisor may also undertake or have some involvement in some of the activities listed under Outputs 1 and 2 above, particularly relating capacity-building (e.g. BIP-MT training). However, this would be done through a transparent procurement process and covered under the budget allowed for these Outputs by the Implementing Entity.