

EIGHTH MEETING OF THE PACIFIC METEOROLOGICAL COUNCIL

PMC-8

Nuku'alofa, Tonga • 10, 11, 14 September 2026

Eighth Meeting of the Pacific Meteorological Council (PMC-8)

Weather Ready for a Secured and Sustainable Pacific

10, 11, 14 September 2026 | Nuku'alofa, Tonga

Agenda Item 24.5: Emerging Opportunities through the Systematic Observations Financing Facility (SOFF)

Purpose:

1. To present opportunities for Pacific countries to strengthen and sustain mandatory Global Basic Observing Network (GBON) observations with SOFF support, building on progress to date and ongoing efforts to advance a regional approach.
2. To seek the Meeting's guidance and support on (i) accelerating remaining SOFF investments, (ii) strengthening Pacific advocacy for the resources needed to complete them, (iii) advancing Pacific leadership on GBON surface marine observations, and (iv) exploring innovative financing approaches to mobilize additional resources for the region.

Objectives:

1. Accelerate the progression of the remaining SOFF-eligible Pacific countries from Readiness to Investment and advance a regional approach to sustaining GBON observations over the long term.
2. Advance Pacific leadership in the proposed expansion of SOFF to GBON surface marine observations, with the Pacific as the global frontrunner region.
3. Mobilise additional public, private and philanthropic finance for systematic observations in the Pacific, including through potential Pacific-focused Systematic Observation Impact Bonds.

Background:

1. Pacific countries are at a pivotal moment in advancing systematic weather and climate observations. Three emerging opportunities are coming together through SOFF: accelerating a region-wide effort to close surface-based GBON gaps across the Pacific and sustain compliance over the long term; shaping a potential expansion to GBON surface marine observations under Pacific leadership; and mobilizing additional resources through innovative finance, including potential Pacific-focused Systematic Observation Impact Bonds.

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Context: SOFF in the Pacific

2. Basic weather and climate observations are a global public good, underpinning forecasts, early warnings and climate action worldwide. Through the Global Basic Observing Network (GBON), WMO Members have committed to generate and internationally exchange a minimum set of essential surface-based and upper-air observations. Yet major gaps remain across Least Developed Countries and Small Island Developing States, including in the Pacific. Closing these gaps could reduce forecast uncertainty in the Pacific by up to 20% and enable Pacific countries to make a major contribution to the global observing system.

3. The Systematic Observations Financing Facility (SOFF) was created by WMO, UNEP and UNDP at the request of all 193 WMO Members to close the basic weather and climate data gap by supporting countries to achieve and sustain compliance with GBON. SOFF combines long-term, results-based, grant-only funding with peer-to-peer technical support.

4. SOFF operates through three phases: Readiness, to assess GBON gaps and investment needs with support from a Peer Advisor; Investment, to finance infrastructure and capacity through an Implementing Entity; and Compliance, to provide long-term, results-based support to sustain GBON compliance. WMO serves as SOFF's Technical Authority, providing technical guidance, quality assurance and independent verification.

5. Pacific countries, through WMO Regional Association V (RA V), have consistently called for support for SOFF and for its expansion in the region. In 2021, RA V urged Members to advocate and mobilize resources for the creation of SOFF, support its further development and prompt implementation, and actively engage in its delivery (Decision 9 (RA V-18), 2021). In October 2022, following a SOFF Regional Workshop in Fiji, the RA V President requested support for a "SOFF Pacific SIDS regional program", reflecting the priorities and recommendations agreed during the workshop. In 2025, RA V called for urgent resource mobilization to support Members moving from Readiness to Investment and recommended consideration of expanding SOFF to surface marine GBON observations and to currently ineligible Middle-Income Members, as resources permit (Decision 4.3/1 (RA V-19(I)), 2025).

6. In the Pacific, SOFF implementation is led by national Meteorological and Hydrological Services, working with Australia and New Zealand as Peer Advisors, and with UNDP, UNEP or the World Bank as Implementing Entities. The full SOFF Pacific portfolio, including operational partners and implementation status, is presented in Annex 1.

Opportunity to accelerate a region-wide effort to close the Pacific GBON gap and sustain compliance

7. The Pacific is now at a critical point in moving from planning to investment. The SOFF Steering Committee has approved so far USD 33.4 million for 14 Pacific Island countries, including USD 31.8 million for four countries already in the Investment Phase. An estimated USD 80 million is still needed for the remaining ten countries to complete the identified surface-based GBON investments. Advancing these investments as a region-wide effort would accelerate the closure of the Pacific's basic observing network gaps and lay the groundwork for a regional approach to sustaining compliance over the long term.

8. SOFF and Weather Ready Pacific (WRP) are complementary mechanisms supporting Pacific countries across the meteorological value chain. The Seventh Meeting of the Pacific Meteorological Council (PMC-7, Agenda Item 8.5) in September 2024 recognized the need for close collaboration between

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SOFF and WRP and the importance of a coordinated approach to their implementation and recommended the development of a Memorandum of Understanding.

9. The SOFF-WRP Memorandum of Understanding, signed in November 2024, provides the basis for this collaboration. Under the MoU, SOFF supports Pacific beneficiary countries in achieving sustained GBON compliance by investing in GBON-related infrastructure and strengthening human and institutional capacity, while WRP supports observational networks beyond GBON and activities further along the meteorological value chain. The MoU also commits SOFF and WRP to promote regional efficiencies, enhance coordination and explore opportunities for shared initiatives.

10. Collaboration has since moved towards operationalization. In June 2026, SOFF participated as an observer in the Weather Ready Pacific Steering Committee, strengthening coordination between the two mechanisms and providing an opportunity to discuss how country-level SOFF investments could be better connected with regional arrangements for their long-term sustainability. The discussions highlighted opportunities to pursue regional synergies during the SOFF Investment Phase and reinforced the value of a “One Pacific” approach to addressing shared challenges, including the high cost and complexity of operating and maintaining observing infrastructure across geographically dispersed and capacity-constrained island countries.

11. The SOFF Compliance Phase Framework allows participating countries to pool Compliance support through a regional “window” for regional institutions or functions, while retaining country-level accountability and verified results. This provides a basis for considering WRP as regional partner for facilitating and coordinating SOFF Compliance Phase support in the Pacific. Integrating regional SOFF Compliance support into or as a parallel complementary stream the proposed Pacific Hydromet/Multi-Hazard Early Warning System (MHEWS) Sustainable Maintenance Facility, in accordance with the SOFF Compliance Phase Framework, could connect predictable, results-based SOFF financing with regional maintenance functions and economies of scale. This is considered under Agenda Item 9.

Opportunity to extend SOFF to GBON marine observations in the Pacific

12. Pacific countries have an opportunity to shape and lead a potential expansion of SOFF to GBON surface marine observations. Building on the proposal developed by WMO and the Pacific Community (SPC), this would address critical marine observation gaps through a regionally coordinated approach. The proposed expansion is considered in greater detail under Agenda Item 13.5.

Opportunity to mobilize additional finance for systematic observations in the Pacific

13. To mobilize the additional resources needed, SOFF is innovating finance for the delivery of a global public good. It is establishing a SOFF Financing Platform to mobilize complementary public, philanthropic and private capital for systematic observations. The Platform is being developed as financing infrastructure issuing Systematic Observation Impact Bonds, while preserving SOFF’s existing UN governance and implementation arrangements. Capital mobilized through the Platform will support eligible developing countries in achieving and sustaining GBON compliance and strengthen the Global Observing System.

14. The development of a Systematic Observation Impact Bond was announced at UNFCCC COP30 and included in the COP Action Agenda. This mechanism will allow to frontload investments by raising capital upfront from mission-aligned investors, while donor contributions are deployed over time to repay investors. Two potential Pacific-focused bonds are being explored: a Pacific Observation Impact

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Bond for the remaining surface-based GBON investments and a Pacific Ocean Observation Impact Bond linked to a potential expansion to GBON surface marine observations. Issuing these bonds will require engagement and financial commitments from public, private and philanthropic funders.

Recommendations

The Pacific Meteorological Council:

- Calls for accelerating SOFF investments in systematic observations in the remaining 10 Pacific countries eligible for SOFF support, enabling them to close the GBON weather and climate data gap and participate in a Pacific regional approach to the Compliance Phase.
- Calls for coordinated Pacific advocacy to mobilize the resources needed to complete the remaining SOFF surface-based investments, and urges public, private and philanthropic funders to provide these resources through SOFF, including by supporting potential Systematic Observation Impact Bonds tailored to the region.
- Recommends extending SOFF support to GBON surface marine observations and mobilizing the additional resources required, with the Pacific playing a leading role in shaping the envisioned expansion.
- Emphasizes the importance of pursuing regional synergies during the SOFF Investment Phase and advancing a Pacific regional approach for the Compliance Phase and recommends considering Weather Ready Pacific (WRP) as the regional partner for facilitating and coordinating SOFF Compliance Phase support, subject to participating countries' agreement and applicable SOFF arrangements.

Annex 1 SOFF Portfolio in the Pacific

Country	Peer Advisor	Implementing Entity	Implementation Status
Kiribati	Australia	UNEP	Investment ongoing
Solomon Islands	Australia	UNDP	Investment ongoing
Naoero	Australia	UNEP	Investment ongoing
Samoa	Australia	World Bank	Investment ongoing
Fiji	Australia	World Bank	Readiness completed
Papua New Guinea	Australia	UNDP	Readiness completed
Tuvalu	New Zealand	UNEP	Readiness completed
Palau	New Zealand	UNEP	Readiness completed
Vanuatu	New Zealand	World Bank	Readiness completed
Federated States of Micronesia	New Zealand	UNEP	Readiness completed
Tonga	New Zealand	World Bank	Readiness completed
Marshall Islands	New Zealand	UNEP	Readiness completed
Cook Islands	New Zealand	UNEP	Readiness ongoing
Niue	New Zealand	UNEP	Readiness ongoing

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