

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 22.2: A Pacific-centred Approach: Strengthening Environmental and Social Safeguards in Pacific National Meteorological and Hydrological Services (NMHSs)

Purpose:

The purpose of the information paper is twofold:

1. To present to the Council the importance and rationale for integrating ESS into meteorological investments, including during planning, implementation and operation.
2. To seek support for strengthening Environmental and Social Sustainability (ESS) across National Meteorological and Hydrological Services (NMHSs) programmes and projects in the Pacific region.

Objectives:

1. To inform the meeting of the current state of ESS integration in the Pacific NMHS projects.
2. Present some of the environmental and social risks associated with meteorological infrastructure investments and programmatic activities;
3. Seek support for regional coordination and capacity-building measures to strengthen ESS across Pacific NMHSs.

Background

Transformation of the Pacific Met Sector

1. The Pacific meteorological and hydrological sector has undergone significant transformation over the past decade.
2. Programmes and projects such as ClimSA, Weather Ready Pacific (WRP), the Vanuatu Klaemet Infomesen blong Redy, Adapt mo Protekt (VankIRAP), and a range of World Meteorological Organisation (WMO)-supported projects have and continue to expand the infrastructure and operational capacity of NMHSs across our region.
3. These investments include weather radars, automatic weather stations, upper-air observing systems, hydrological networks, ICT and data infrastructure, and the rehabilitation of meteorological offices, delivering substantial public benefits such as better forecasts, earlier warnings, safer communities, and more resilient economies.

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4. At the same time, these are physical infrastructure and service-delivery projects that interact directly with land, communities, ecosystems, and people. The siting and operation of weather radars, automatic weather stations, upper-air observing systems, hydrological networks, solar power systems, and met office facilities frequently raise issues around biodiversity and ecosystem impact, land acquisition, occupational health and safety, radiation and electromagnetic field (EMF) exposure, electronic waste, disability and social inclusion (GEDSI).
5. SPREP experience has shown that environment and social safeguard considerations are often never addressed or identified much later in the project cycle, after sites have been identified, equipment has been procured, or community expectations have been established. This can lead to delays, redesign, reputational risk, community concern, avoidable implementation, and other financial costs.

What is Environmental and Social Safeguard (ESS) and Why It Matters to NMHS Projects.

6. Environmental and Social Safeguards (ESS) refer to policies and operational procedures to identify and then try to avoid, mitigate and minimise environmental and social impacts that may arise from the implementation of development projects or programmes (**refer to Annex A**).
7. The environmental and social issues from NMHS Projects, when not properly identified and managed at the conceptual stage, may delay, contest, or, in the worst case, fail to deliver their intended public benefit. This process protects the NMHSs, SPREP and Development Partners.
8. NMHSs, who are often implementing/executing agencies and recipients of Met projects at the national level, play important roles in ensuring ESS principles and requirements are adequately implemented. However, there is often limited awareness and coordination between the Met Department and approval authorities, such as environmental agencies, regarding the institutionalisation and implementation of ESS requirements in meteorological projects, products, and services.
9. While SPREP has delivered and coordinated national and regional ESS, SEA- and EIA-related capacity-building and awareness programmes, it has not integrated meteorological agencies into ESS capacity-building programmes.

Application of ESS in NMHS Projects

10. Environmental and Social Safeguards (ESS) are now a mandatory requirement of the major development partners operating in the Pacific region. These include the Green Climate Fund (GCF) and the Australian Department of Foreign Affairs and Trade (DFAT).
11. The VANKIRAP Weather Radar component in Vanuatu underwent the ESS due diligence process under SPREP's ESMS policy. (**refer to Annex B**)
12. The WRP Programme also recognised environmental and social risks (E&S) associated with its activities, and the importance of applying ESS safeguards. WRP was screened for E&S and is classified as a Category B (Medium Risk) programme under SPREP's Environmental and Social Management System (ESMS).
13. The WRP Operations Manual commits the programme to applying robust environmental and social standards throughout implementation, in alignment with the SPREP, donor partner ESS Policies and relevant national legal and regulatory requirements. (**refer to Annex C**)
14. The WRP also recognises the important role of NMHS in helping to ensure that programme activities are delivered in a sustainable, inclusive, and socially responsible manner.

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15. However, for NMHS to effectively fulfil these responsibilities, targeted and continuous capacity building in ESS is required.

Way forward

16. To support the strengthening of Environmental and Social Sustainability (ESS) across NMHS programmes and projects in the Pacific region, the following approaches are proposed.
 - i. Allocating adequate financial and human resources for ESS activities, supporting tailored ESS capacity-building initiatives for NMHSs, and enabling the active engagement and participation of national meteorological service staff in relevant regional and international ESS capacity-building opportunities.
 - ii. A coordinated national, regional and international approach to be strengthened to ensure that meteorological investments are environmentally responsible, socially inclusive, and better aligned with community needs and donor requirements

Recommendations:

The Meeting is invited to:

1. **Note** the importance of Environmental and Social Safeguards (ESS) for the sustainable, inclusive and effective implementation of meteorological investments across the region.
2. **Acknowledge** the support of the Weather Ready Pacific Program in ensuring that ESS is integrated into the work of the NMHSs in the Pacific Region.
3. **Support** the strengthening of Environmental and Social Sustainability (ESS) across National Meteorological and Hydrological Services (NMHSs) programmes and projects in the Pacific region.

Annexes

Annex A: Introduction to Environmental and Social Safeguards

Annex B - Case Study: Developing an Environmental and Social Management Plan for the C-Band Weather Radar, Vanuatu.

Annex C: Case study on ESS Coordination for the WRP Samoa Weather Radar Project.