

SIXTH MEETING OF THE PACIFIC METEOROLOGICAL COUNCIL (PMC-6) THIRD PACIFIC MINISTERIAL MEETING ON METEOROLOGY (PMMM-3) 🛛 🖕 HTTPS://WWW

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Sixth Meeting of the Pacific Meteorological Council (PMC-6)

Sustaining Weather, Climate, Water and Ocean Services for a Resilient Blue Pacific

14-16 August 2023, Sofitel Fiji Resort and Spa, Denarau, Nadi, Fiji

Agenda item 8.3.1: Weather Ready Pacific, its Governance Structure and aligning with global initiatives

Purpose of the paper:

To introduce an Open Letter (appended to this paper) to the PMC from the Chairpersons of: the WMO RA V Tropical Cyclone Committee (TCC) for the South Pacific and South-East Indian Ocean; and the Regional Sub-programme Management Team (RSMT) for the WMO Severe Weather Forecasting Programme for the South Pacific (SWFP-SP).

Background:

- 1. The TCC is a subsidiary body of WMO with a core purpose to promote and coordinate the planning and implementation of measures required to minimize loss of life, damage and economic losses caused by tropical cyclones and their related hazards in the South Pacific and South-East Indian Oceans.
- 2. The RSMT oversees the operation of the SWFP-SP, which aims to strengthen the capacity of the NMHSs in developing countries, including LDCs and SIDS, to deliver improved forecasts and warnings of severe weather (beyond tropical cyclones) to save lives and livelihoods, and protect property and infrastructure.
- 3. The TCC and RSMT met back-to-back in Tonga from 25-28 July 2023, with an agenda item on the UN Early Warnings for All (EW4ALL) initiative, noting the importance of the Weather Ready Pacific (WRP) initiative and its potential to deliver to the goals of EW4ALL.
- 4. Following a recommendation from the meetings in Tonga, the Chairpersons wrote an Open Letter on behalf of the TCC and RSMT membership urging the PMC to prioritise the identified regional needs and consider how they can be addressed within existing and/or emerging frameworks, programmes and initiatives (such as WRP).

Recommendations:

The Meeting is invited to:

- 1. **Note the Open Letter** (appended to this paper) from the Chairpersons of the WMO RA V Tropical Cyclone Committee and Regional Sub-programme Management Team for the WMO Severe Weather Forecasting Programme for the South Pacific.
- 2. **Support advancing the needs identified** in the Open Letter through initiatives such as Weather Ready Pacific.

Open letter to the Pacific Meteorological Council (PMC) from the WMO RA V Tropical Cyclone Committee (TCC) for the South Pacific and South-East Indian Ocean and the Regional Sub-programme Management Team (RSMT) for the WMO Severe Weather Forecasting Programme for the South Pacific (SWFP-SP)

9 August 2023

The Pacific is highly vulnerable to extreme weather-, water- and climate-related events. These include tropical storms and cyclones causing dangerous sea conditions, storm surges, coastal inundation, damaging winds and flooding rainfall. Additionally, regional heatwave and drought conditions not only impact fresh water supply, but also adversely affect agriculture, food security and livelihoods, while sea-level rise threatens entire communities with the potential for some islands to become uninhabitable.

Meteorological, hydrological and climatological services, in this context referred to jointly as "hydrometeorological services", play an important role in providing timely and actionable information to respond to these hazards. The provision of early warnings enables actions that can save lives, protect infrastructure and improve management across all sectors of the economy.

As a vast and sparsely populated oceanic region, the coordination of monitoring, forecasting and warning services is critically important within the Pacific. This is the core purpose of the **WMO RA V Tropical Cyclone Committee (TCC) for the South Pacific and South-East Indian Ocean**, which was established in 1985 to promote and coordinate the planning and implementation of measures required to minimize loss of life, damage and economic losses caused by tropical cyclones and their related hazards.

To further improve the provision of forecasts and warnings of severe weather beyond tropical cyclones, the **WMO Severe Weather Forecasting Programme (SWFP)** aims to strengthen the capacity of the National Meteorological and Hydrological Services in developing countries, including Least Developed Countries and Small Island Developing States. The SWFP addresses this by making use of a "cascading forecasting process" with products and services delivered from the global through the regional to the national level.

The Tropical Cyclone Committee held its 21st session back-to-back with the 8th meeting of the Management Team for the SWFP South Pacific in **Nuku'alofa**, **Tonga**, **from 25 to 28 July 2023**.

The meetings included a dedicated agenda item for the **United Nations Early Warnings for All Initiative (EW4ALL)**, with inputs from the lead agencies for the four key pillars of the initiative:

- **UNDRR** on disaster risk knowledge
- WMO on detection, observations, monitoring, analysis, and forecasting of hazards
- ITU on warning dissemination and communication
- **IFRC** on preparedness and response capabilities

The membership of the Committee and Management Team formally welcome the EW4ALL initiative, while acknowledging existing developments, regional structures and mechanisms (such as **Weather Ready Pacific** initiative) that should both contribute to and benefit from the initiative.

In the context of the meetings held in Tonga, that discussed the existing capability, gaps and needs, through the Member reports highlighting recent successes, challenges and lessons learned, the following items were identified as **urgent needs** within the region, framed here in line with the pillars of the EW4ALL initiative:

Disaster risk knowledge

- Enhance coordination between NMHSs and National Disaster Management Offices (NDMOs), with recognition and protection of the "Single Official and Authoritative Voice" for warnings
- Enable multi-agency approaches for the collection and sharing of risk and impact (loss and damage) data and their assessments
- Facilitate collection of and access to high quality Digital Elevation Model (DEM) data (both topography and bathymetry) and operationalise storm surge and coastal inundation models covering all nations in the region

Detection, observations, monitoring, analysis and forecasting of hazards

- Enhance and sustain observational networks in the marine, land, and upper air environments
- Improve access to high resolution Numerical Weather Prediction (NWP) data, including for wave, coastal and land hazards, via appropriate platforms
- Develop, implement, and enhance people-centred multi-hazard impact-based forecast and warning services (IBFWS)

Warning dissemination and communication

- Address the unique communication challenges within the region, especially for remote islands, by leveraging existing and emerging low cost technologies
- Enable platforms for routine dialogue between regional and national centres
- Support the implementation of the Common Alerting Protocol (CAP) and WMO Information System, WIS 2.0

Preparedness and response capabilities

- Develop and strengthen community-led and inclusive approaches to ensure warnings leverage local and traditional knowledge systems and translate into early action
- Promote and deliver training activities, including attachment training, that address technical and communication needs (such as NWP, satellite interpretation, IBFWS, and media training)
- Advance and expand regional initiatives that support capacity development to deliver to the goal of EW4ALL (such as **Weather Ready Pacific** and the existing **SWFP-SP**)

The **RA V Tropical Cyclone Committee** for the South Pacific and South-East Indian Ocean, and the **Regional Sub-programme Management Team** of the Severe Weather Forecasting Programme for the South Pacific, endorse the goal of the EW4ALL initiative, and **urge the Pacific Meteorological Council** to prioritise the aforementioned needs and consider how they can be addressed within existing and/or emerging frameworks, programmes and initiatives to further strengthen the capability and resilience of the region to adapt, prepare for, and respond to our changing climate.

Chris Noble

Chairperson For, and on behalf of, the: WMO RA V Tropical Cyclone Committee for the South Pacific and South-East Indian Ocean

Chairperson For, and on behalf of, the: Regional Sub-programme Management Team of the WMO Severe Weather Forecasting Programme for the South Pacific