



## FIRST PACIFIC MINISTERIAL MEETING ON METEOROLOGY

**Theme: "Sustainable Weather and Climate Services for a Resilient Pacific "**

24 of July 2015

*Fa'onehua Convention Centre, Nuku'alofa, Kingdom of Tonga*

### CONCEPT NOTE

#### INTRODUCTION

1. The Pacific Ministerial Meeting on Meteorology (PMMM) is the first gathering of Ministers responsible for meteorology. The meeting is being held back to back with the Third Meeting of the Pacific Meteorological Council (PMC-3) hosted by the Government of the Kingdom of Tonga on 24 July, 2015 at the Fa'onehua Convention Centre in Nuku'alofa.
2. The First Pacific Ministerial Meeting on Meteorology (PMMM-1) provides the opportunity for Ministers to be briefed on, and have discussions on the role of National Meteorological and Hydrological Services (NMHSs) and their contributions to both national and regional sustainable development.
3. While NMHSs have benefited from considerable investment in the Pacific region over the years by national governments, development partners, collaborating organisations and institutions and Council of Regional Organisations in the Pacific to build capacity and train meteorologists, develop infrastructure, and improve services; the demand for continuous monitoring and reliable service require continuous investment and support.
4. There is also increasing requirements for NMHSs to support disaster risk reduction and climate change services. The PMMM will also address the NMHSs necessary contributions to the implementation of regional and international frameworks such as the Strategy for Climate and Disaster Resilient Development in the Pacific (SDRP); the Sendai Framework on Disaster Reduction 2015-2030; and the United Nations Framework on Climate Change.
5. The recent World Conference on Disaster Risk Reduction in Sendai, Japan, and the 3rd International Conference on Small Islands Developing States in Samoa, developed important global frameworks for strengthening the resilience of countries, especially vulnerable island nations, to the impacts of natural disasters, particularly those of meteorological (weather and climate) and oceanographic origin. National governments, through their NMHSs have a critical role to play in implementing integrated early warning systems that build community resilience,



strengthen monitoring and prevention, reduce vulnerability, raise awareness and increase preparedness to respond to and recover from such disasters.

## OBJECTIVES

6. The main objectives of the PMMM-1 are as follows:
  - a. Engagement of Ministers in the development of meteorological (weather and climate) and hydrological services in the Pacific;
  - b. Discuss gaps and opportunities for strengthening the operations and provision of services by the NMHSs, and their role in contributing to resilient development; and
  - c. To provide political support and direction for the development of the NMHSs.

## DURATION AND FORMAT

7. The meeting will commence with an official opening ceremony, presentations/statements from Ministers, presentations from development partners. . Each of the statements/presentations will to be followed by comments and discussions.
8. Refer to **Annex 1** to the provisional agenda.

## THE RISK ISSUES THAT IMPEDE RESILIENT DEVELOPMENT IN THE PACIFIC ISLAND COUNTRIES AN TERRITORIES

9. Pacific Island Countries and Territories (PICTs) are highly vulnerable to the risks of climate variability, extremes and climate change and extremes. Pacific Leaders consider climate change to be the greatest threat to the livelihoods, security and well-being of the peoples of the Pacific. They highlight the need to respond urgently and adequately to the social, economic and security impacts of climate change, to ensure the survival and viability of all Pacific Small Island Developing States.
10. Climate change is likely to increase the risk of weather related disasters in the Pacific, due to sea-level rise and associated flood and storm surge hazard, projected increase of cyclonic wind intensity, coastal erosion, saltwater intrusion into coastal aquifers and potentially worsening water scarcity and drought. Overall, the projected changes to the region's climate over the course of this century are likely to increase the likelihood of hydro-meteorological disasters, which already account for over 75% of all reported 'natural' disaster events in the Pacific.
11. The exposure of most PICTs to meteorological and geological hazards is extremely high. It has been estimated that since 1950, extreme events have affected approximately 9.2 million people in the Pacific, with 9,811 reported deaths and damage of USD 3.2 billion. Over the last decade, some Pacific Island Countries and Territories have experienced natural disaster losses that in any single year have approached and in some cases even exceeded their Gross Domestic Product. Examples include 2004 Cyclone Heta on Niue, where immediate losses amounted to over five times the 2003 Gross Domestic Product, the recent 2015 Cyclone Pam in Vanuatu and the 2014 Cyclone Ian that devastated the Hapai'i Islands of Tonga,

12. Eight of the 20 countries with the highest average annual disaster losses scaled by gross domestic product are from the Pacific Islands Region. Of the 284 recorded disasters that occurred in the Pacific Islands Region between 1950 and 2013, the vast majority were caused by weather related events, especially severe storms. Both individually and collectively, these disasters had enormous social, economic and environmental consequences.
13. In many PICTs the accumulated impacts of small and medium-sized events such as local flooding, high waves and localized droughts generate losses that are equivalent to, or exceed, those of single large disasters. The consequences of these small and medium-sized events are far more amenable to being reduced through investments in improved early warning services including prevention, preparedness and building back better, after a disaster. Therefore, investment in weather and climate services saves lives and property and, minimizes economic losses and sustains the natural environment.
14. In this context the World Meteorological Organization (WMO) Strategic Plan 2016-2019 and the Pacific Islands Meteorological Strategy (PIMS) 2012 – 2021 are both focused on ensuring that National Meteorological and Hydrological Services are able to provide relevant weather and climate services to their people to make informed decisions for their safety, socio-economic well-being, prosperity and sustainable livelihoods (Figure 1) and to ensure they can continue to perform their basic functions as outlined in the WMO Convention<sup>1</sup>:
  - ✓ protection of life and property;
  - ✓ safeguarding the environment;
  - ✓ contributing to sustainable development;
  - ✓ promoting long-term observation and collection of meteorological, hydrological, and climatological data, including related environmental data;
  - ✓ promotion of endogenous capacity-building;
  - ✓ meeting international commitments; and
  - ✓ contributing to international cooperation.

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<sup>1</sup>[http://moe.gov.ge/files/PDF%20%20Eng/konvenciebi%20%20eng/Convention\\_of\\_the\\_World\\_Meteorological\\_Organization\\_\(WMO\).pdf](http://moe.gov.ge/files/PDF%20%20Eng/konvenciebi%20%20eng/Convention_of_the_World_Meteorological_Organization_(WMO).pdf)

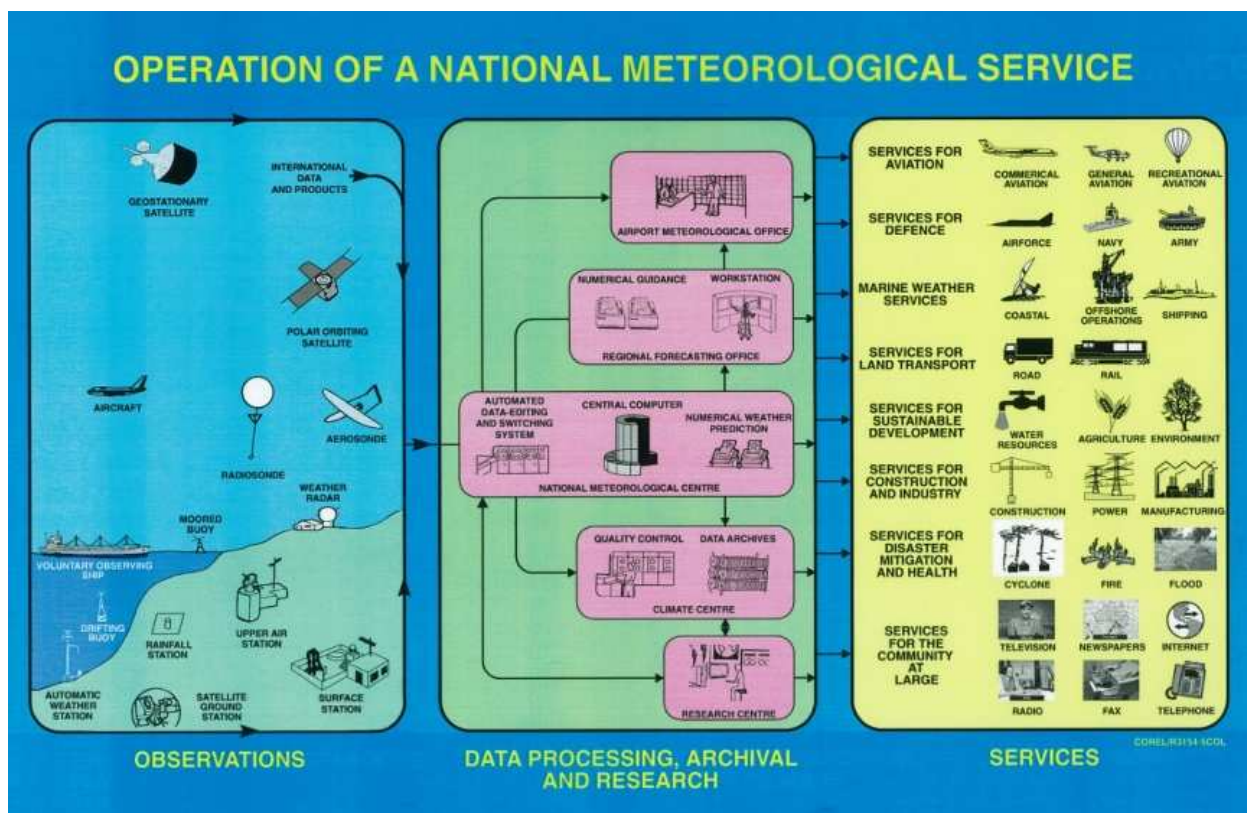


Figure 1: Operation of a National Meteorological Service(Source: Zillman, J W, 1999. The National Meteorological Service. WMO Bulletin, 48, 2, pp129-159)

Due to the important contributions meteorological services can make to decision makers in a changing climate to help economic development and sustain environmental integrity in a society with increasing competition for resources, there is a growing recognition of the need to have further discussions and support for these critical National Meteorological and Hydrological Services from the highest decision making level.

## ADDITIONAL INFORMATION

15. The follow documents attached as Annexes provide additional information for the PMMM-1.

- [PIMS 2012-2021](#); and
- WMO Strategic Plan 2016-2019.

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