

# Pacific Meteorological Council

## Pacific Islands Communications Infrastructure Panel

### Draft Terms of Reference

(Version: 5 August 2019)

#### 1. Introduction

- 1.1 The Pacific Island Communications Infrastructure (PICI) Panel is established to serve in the capacity of an advisory committee to the Pacific Meteorological Council (PMC) on matters concerning the infrastructure, observations and instrumentation supporting communications and dissemination of national and regional hydro-meteorological and oceanographic/tsunami (seismic and sea level) observations, forecasts, and warnings in the Pacific region. The PICI previously existed as the Radio and Internet for the Communications of Hydro-Meteorological and Climate Related Information (RANET) ad-hoc working group on communications that was set up in 2003 at the Regional Meteorological Directors Meeting (RMSD) in Va'vau, Tonga.

#### 2. Purpose

- 2.1. With a view towards strengthening national and regional multi-hazard early warning and prediction for high impact severe weather, tropical cyclone, marine (storm surges), and tsunami events, the purpose of the PICI Panel is to provide technical advice and coordinate the implementation of activities recommended by the PMC and related to: (1) infrastructure supporting communications and dissemination of national and regional hydro-meteorological and oceanographic/tsunami (seismic and sea level) observations, forecasts, and warnings, (2) identifying priorities and coordinate work related to planning and implementation of communications facilities and equipment. The PICI Panel will identify priorities, gaps and challenges and promote the importance of the timely delivery of warnings and alerts for the successful operations of Multi-Hazard Early Warning Systems (MHEWSs) and Multi-Hazard Information Systems (MHISs), as prescribed in the Pacific Islands Meteorological Strategy (PIMS) and other international and regional frameworks (e.g. such as the Sendai Framework for Disaster Risk Reduction and the S.A.M.O.A Pathway).
- 2.2. The PICI Panel may advise relevant agencies and entities, as recommended by PMC, at the national and regional level that are providers of national telecommunications, Internet, radio networks VHF, HF, FM, and satellite communications systems, as well as regional and national telecommunications regulators, regarding issues such as licensing, improving communication infrastructure, supporting national meteorological and hydrological services and others with multi-hazard early warning and prediction responsibilities (e.g. NDMO, Port Authorities, Fisheries,

**Commented [SL1]:** ED: Take on board the PIMS review- with the new definition from PIMS and Roadmap, and PICI now has the observation portfolio under PIMS Chair\_ move forward- shelf for the time being- continue with Teleconf facility to discuss these things mentioned- - some details to what has been discussed this week

**Commented [SL2R1]:**

Geological and other national services, including those focusing on vulnerable groups and people with disabilities in communities). Engage with the WMO RAV Working Group on infrastructure to ensure that the WIGOS and WIS workplan are coordinated and aligned.

### 3. Role and Responsibilities of the PICI Panel

3.1. The PICI Panel will provide technical advice to the PMC on communications infrastructure for the following topics:

- a) Establish linkages and coordinate with international and regional organizations and networks such as WMO, UNESCO-IOC, JCOMM, World Food Programme (WFP), Pacific Tsunami Warning Center (PTWC), Oceania Regional Seismic Network (ORSNET), Pacific Islands Telecommunications Association (PITA), the Pacific Disability Forum, Fisheries Forum Agency (FFA), Pacific Islands Forum Secretariat (PIFS), SPREP, USP, the University of Hawaii, and the SPC, and other relevant partners that focus on telecommunications services for MHEWS and MHISs, and last mile service product providers;
- b) Strengthen the coordination, continuity and integration of current and future land-based, wireless, satellite communications and dissemination of data and information which facilitate one-way and two-way receipt of hydro-meteorological and tsunami advisories, forecasts and warnings to the last mile/kilometre at the community, national and regional levels;
- c) Facilitate processes for seeking support to strengthen the basic and core functions, capabilities and sustainability of Pacific Islands National Meteorological and Hydrological Services (NMHSs) including maintenance for robust and sustained data and information accessibility, collection, management, analysis, production and dissemination of products and services;
- d) Explore avenues and deploy modes of multi-way communications and feedback between provider(s) of hydro-meteorological, marine, oceanographic, and geological data and services and including users of these services to enhance the education and outreach to communities and individuals;
- e) [Coordinate with the PIMOS Panel to support improvement of the infrastructure used for national and regional tsunami monitoring, early warning systems, and standard operating procedures, and develop relevant awareness programs, including support for and coordination with the UNESCO/IOC PTWS Regional Working Group and ORSNET on Tsunami Warning and Mitigation in the Southwest Pacific; ]
- f) Explore options to improve coordination between national, regional and international communications providers, regulators, and regulatory frameworks, to ensure adequate telecommunication policies, and administrative controls are developed and in place to meet the requirements of NMHS for MHEWS and MHIS before, during, and after significant national hazard events, and in particular as they impact the dissemination of information to vulnerable communities;
- g) Work with national and regional telecommunications regulators, companies and providers to ensure frequencies are allocated and prioritized for use by NMHSs and other relevant response agencies;

**Commented [u3]:** There was a floating notion of including National Regulatory offices

**Commented [u4]:** MHIS

**Commented [SL5]:** Process for allocating funding s

**Commented [SL6]:** Discuss with PIMOS. Clarification on linkages, TOR and workplan (international meetings).

- h) Explore options to improve and expand early alert and dissemination messages for hydro-meteorological and tsunami warnings via mobile phone carriers using Short Messaging Systems (SMS), Cell Broadcast, Phone Application (Apps) and VHF line-of-site communications, especially in remote areas where gaps in infrastructure are prevalent;
- i) Assess, evaluate, and coordinate with national and regional disability agencies, forums, and advocacy groups to improve dissemination of hydro-meteorological and tsunami alerts and warnings to people with disabilities and most vulnerable populations;
- j) Support efforts of projects such as RANET Project and others who contribute to the ability of NMHSs to receive terrestrial and satellite data and observations, and multi-hazard dissemination of hydro-meteorological and tsunami products and warning messages.
- k) Coordinate with the appropriate WMO RA-V working bodies, particularly the RA-V Working Group on Infrastructure and its Task Teams, engage the RA-V Task Team on Satellite Utilization, to ensure Pacific Island NMHSs needs are being taken into consideration to the operators of Geostationary and Polar Orbiting Meteorological Satellites that cover the Pacific Region ;
- l) Coordinate with other appropriate data providers to the PMC Members area such as Satellite operators like the Japanese Meteorological administration (JMA) and NOAA to improve data and information availability and address PMC Members' needs;
- m) Assist PMC Members' with deployment and implementation of new or updated technologies and capabilities such as the Common Alerting Protocol (CAP) and others;
- n) Conduct and maintain a current/up-to-date inventory of communication systems, where they are operational, and the standards they meet;
- o) Design, develop and maintain current/up-to-date catalogue of PMC Members' information (data and Products) requirements as well as what that produce;
- p) Develop and maintain an information plan that addresses PMC Members' requirements, systems and arrangements to meet the issues contained in this ToR.

**Commented [SL7]:** Explore NIWA catalogue as a sample  
(A.Porteus)

### 3.2 The PICI organizational arrangements shall include:

- a) The PICI Panel shall meet as required, taking advantage of opportunities that arise and connecting remotely when no related meetings or funds are available;
- b) The regular reporting to the PMC members on the progress of the PICI Panel;
- c) PICI Panel to draft and update its Implementation (Action) Plan; and
- d) PICI Panel will operate in line with WMO Weather Information System, and the World Weather Watch Programme and other Partners

#### 4. Membership

- 4.1. The PICI Panel core membership is comprised of Fiji, Federated States of Micronesia, Tonga, Samoa, Cook Islands, Solomon Islands, Vanuatu, Papua New Guinea, Niue, Tuvalu, USA, WMO RAV Working Group on Infrastructure Task Team on Satellite Utilization, SPREP, NIWA, UNESCO-IOC and related UN agencies, BoM, SPC, University of Hawaii, the USP, and the World Food Programme.
- 4.2. The PICI Panel will start its work with Samoa as its Chair, as recommended at the inaugural Panel meeting in Honiara, on August 24, 2016, with Vice Chairs from the Solomon Islands.

4.3. [The PICI Panel will appoint its Chair and Vice-chair(s) **as necessary**].

**Commented [SL8]:** Align the Chair term with PMC

- 4.4. The PICI Panel may invite experts either from its PMC members, partners, or national telecommunications organizations, mobile phone carriers, and others to its meetings, discussions and Panel activities including Task Teams.
- 4.5. The PICI Panel may establish Task Team(s) to carry out specific time bound task(s) for limited time periods.
- 4.6. Meetings of the PICI Panel shall be coordinated and convened by its Chair, with the support of SPREP/WMO/Pacific Meteorological Desk Partnership (PMDP).

#### 5. Review and Approval of Terms of Reference

- 5.1. The PICI Panel may develop recommendations to the PMC to revise the Panel's TOR.
- 5.2. The PMC will be invited to consider and approve the PICI Panel TOR and related amendments.

#### 5.3. Annex 1: PICI Panel Core Members

##### PMC-3 Decision

PMC Working Group	PICI Panel
Members:	Fiji, Federated States of Micronesia, Tonga, Samoa, Cook Islands, Solomon Islands, Vanuatu, Papua New Guinea, Niue, Tuvalu, USA, WMO, SPREP, RA-V, UNESCO-IOC and related UN agencies, SPC, BoM, the University of Hawaii, the World Food Programme, and the USP
Chair:	Samoa
Vice Chairs	Solomon Islands
Secretariat	SPREP/WMO/PMDP

First Draft 19 September 2016 by Ed Young, UCAR/USA  
Comments 15 October 2016 by Salesa, SPREP

Comments 03 November by the PICI conference call

Comments 07 March 2017 by Ginger, University of Hawaii

Comments 08March 2017, Fred Branski, US NWS Office of International Affairs , WMO CBS  
Coordinator for DRR

Comments 10March\_ Austetalia Titimaea, Samoa Met, PICI Chair

Comments 24 March \_Ausetalia Titimaea, Samoa Met, PICI Panel Chair

Updated 12 August 2017 PICI panel

Reviewed January 2019 PICI panel

Updated 5<sup>th</sup> August 2019 PICI panel