



SEVENTH MEETING OF THE PACIFIC METEOROLOGICAL COUNCIL (PMC-7)

## Agenda Item 17: Review of PMC and PMDP

# Review of PMC Preliminary findings and discussion

*Presenter: Dr Andrew Tupper, Natural Hazards Consulting*



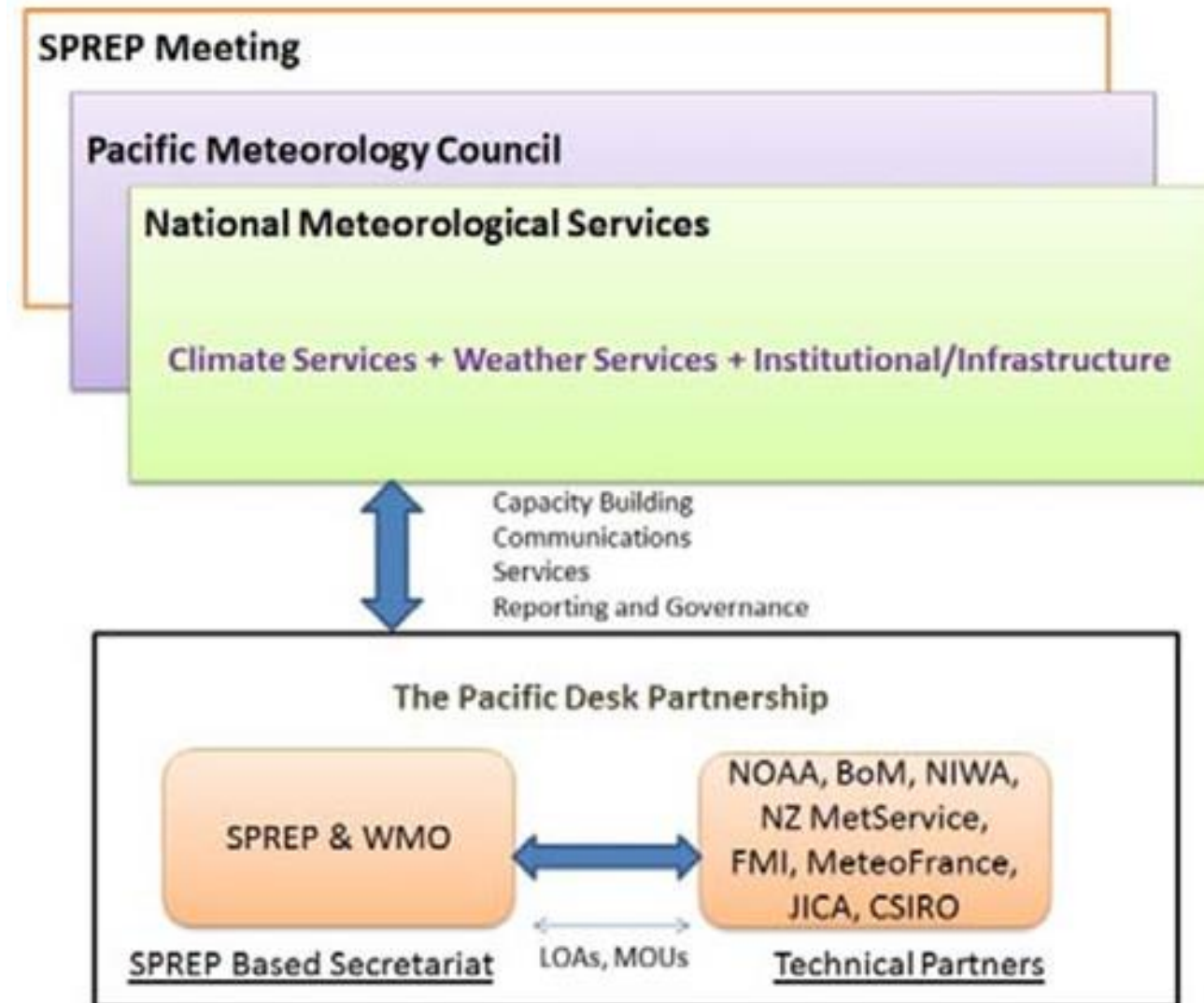
# Purpose of the Paper

1. To update the Meeting on the progress of the Review of the Pacific Meteorological Council and Pacific Meteorological Desk Partnership.
2. To raise issues for discussion and input to the Review.



# Background

- PMC established in 2010, as a body of SPREP. Support provided by SPREP Secretariat, in partnership with WMO and technical partners.
- Dedicated resource is essentially one full-time program position, assisted by project staff and SPREP core staff.
- This Review is funded by WMO/CREWS, following PMC discussions / decisions since 2019.
- First Review since 2011.



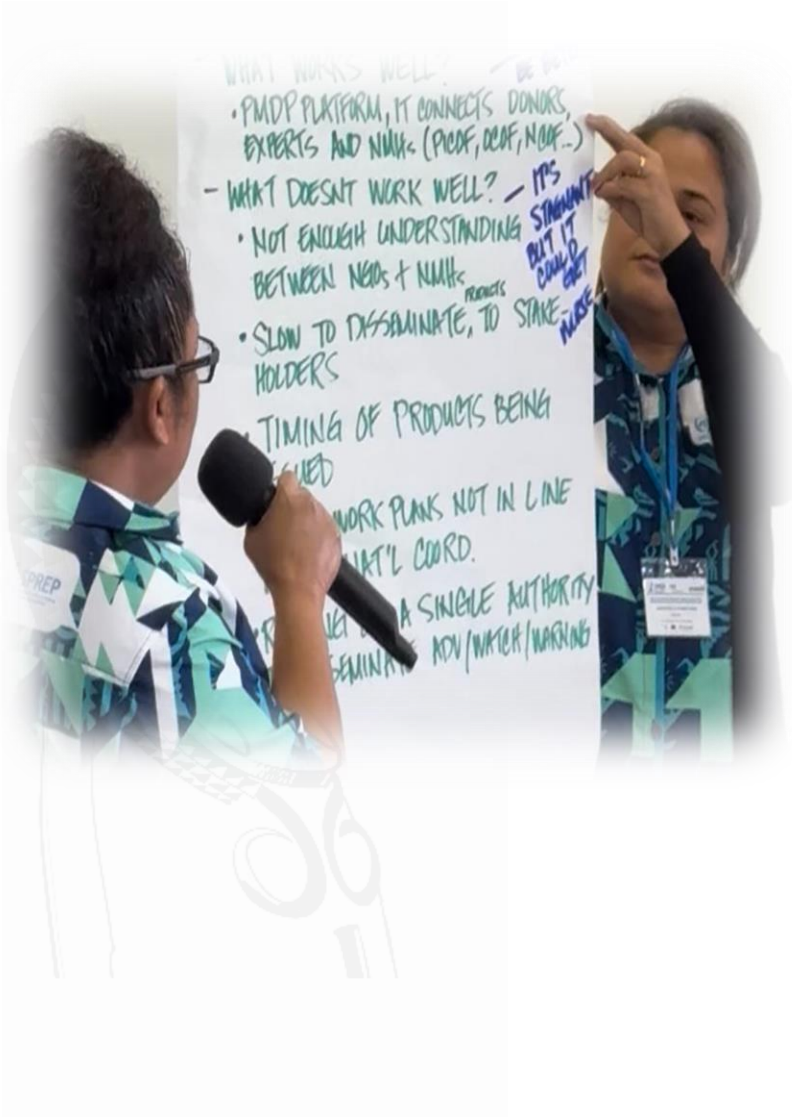


# Review Objectives

1. Review and develop governance/organizational structure, roles, functions and operation of the PMC and its Panels, the Pacific Ministerial Meeting on Meteorology (PMMM), and provide clear list of prioritized costed options and recommendations including budget and human resources as well as identifying resources requirements for its sustainable implementation.
2. Review and develop governance/organizational structure, roles, functions, and operation of the PMDP and provide clear prioritized costed options and recommendations, including identifying resourcing requirements for its sustainable implementation. The review should also consider the organisational structure established under the Weather Ready Pacific - Decadal Programme of Investment (WRP-DPI) including the Pacific Partnership Coordination Mechanism (PPCM).
3. Identify synergies and opportunities to align to the WMO restructure.



# Consultation schedule

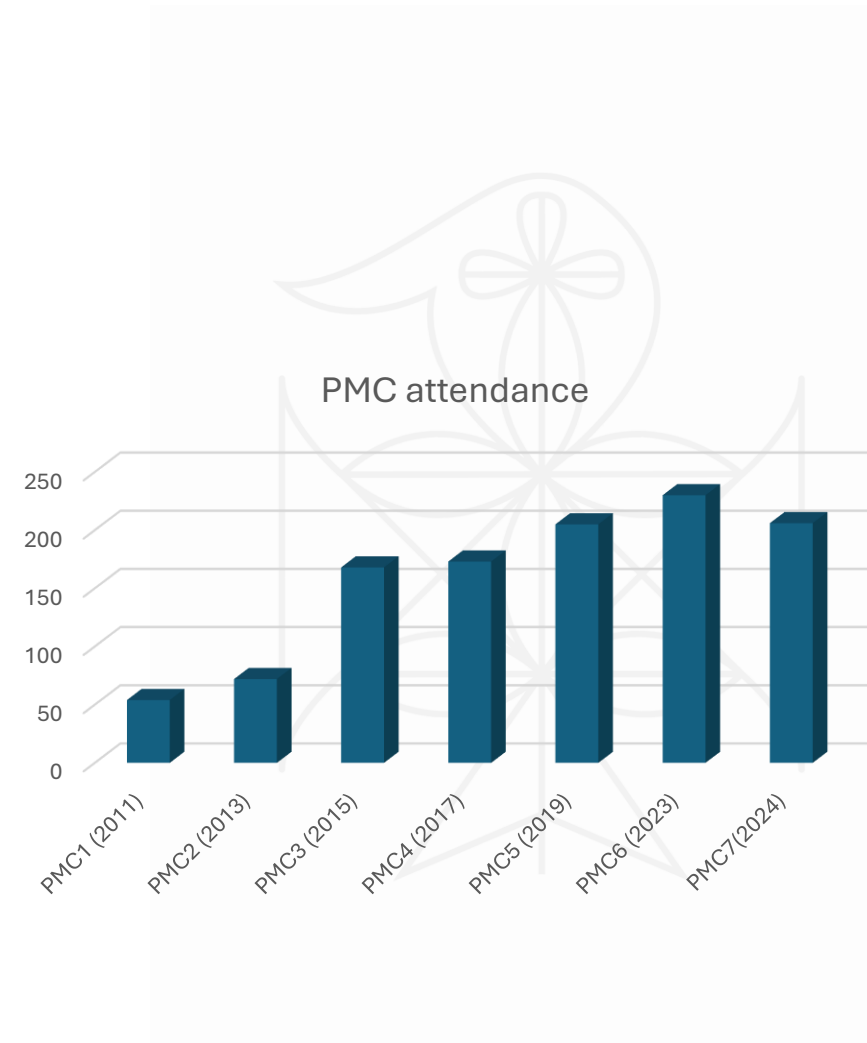


- Port Vila, Vanuatu, 28-31 May, consultation workshop with Pacific NMHS representatives
- Apia, Samoa, 2-4 July, consultation with SPREP Secretariat, WMO Sub-Regional Office, Samoan Government
- Wellington, New Zealand, 26 July, NZ Govt agencies
- Suva and Nadi, Fiji, 12-15 August, CROP agencies, Suva-based development partners, Suva offices of UN agencies, Fiji Met Service
- Canberra, Australia, 30 August, DFAT, BOM
- Singapore, 3 September, WMO Regional Office
- Geneva, 5-6 September, WMO (various programs)
- **Vanuatu, 17-19 September, PMC**
- Virtual consultations and report development, September-October
- Final Reports and presentation to PMC (out of session), October-November



## Positives

- a. increased collaboration and coordination in general;
- b. a positive culture of collaboration, respect and mutual support within the PMDP staff in Apia, and between technical partners;
- c. development of the Pacific Islands Meteorological Strategy (PIMS);
- d. advocacy for the needs of the Pacific in hydrometeorology, and improved visibility of these needs nationally, regionally, and internationally
- e. improved project coordination, particularly for projects that SPREP is engaged with
- f. Pacific-led initiatives, particularly Weather Ready Pacific
- g. the creation of a point of physical coalescence for external parties
- h. progress made on priority issues through the PMC Panels
- i. positive impacts of the Ministerial Meetings on Meteorology, first held in 2015, in improving awareness, understanding, and commitment to hydrometeorology at Ministerial level.





# Challenges (1)

- Resourcing has revolved around one full-time officer, assisted by in-kind and ad-hoc support from project officers and PMDP partners. As the PMC activities *and* the need for Pacific coordination in hydromet in general have grown the workload has become unsustainable, resulting in missed opportunities, slower than desirable progress on priority issues, limited support for Panels, and some frustrations for members, associates and technical partners. The situation poses health risks for staff and reputational risks for SPREP and PMC (*widespread consensus on these points*)
- PMDP feels isolated from projects that do not have the direct involvement of SPREP and has little resource to assist in harmonising them with other work being undertaken, resulting in increased risk of poor coordination, lower effectiveness and increased overheads for all parties;
- Panels are useful but could be much more effective with more consistent institutional support, with some Panels stronger than others in this regard. Where a Panel is closely aligned with project or programme support, it is much more effective (*strong examples given by stakeholders*);



## Challenges (2)

- Global environment is becoming more crowded and challenging, including around positive initiatives:
  - Improving multi-disciplinary, multi-hazard warning systems, including for hydrological and geohazards, in the context of the Sendai Framework, the Early Warnings for All Initiative, and the 2050 Strategy for the Blue Pacific.
  - Crowded project landscape, including bilateral, multilateral, global
  - Strategic imperatives and expectations put on CROP agencies (see later discussion)
- In some cases, PMC attendees feel excluded from the meeting process. The wider the breadth of PMC deliberations, the more challenging it is to focus a truly *representative* and multi-disciplinary process through the NMHS Directors if there is not a stronger and more frequent consultation process leading to decision-making. The broader the practical scope and Terms of Reference of the PMC, the more difficult it is to operate under the current model. The low Secretariat resources exacerbate this issue because frequent consultation is more difficult.



## Challenges (3)

- Some concerns about managing conflict of interests between desires of SPREP to maintain project staffing and funding and needs of Pacific for a wide range of activities (that may not always involve SPREP).
- Essential to maintain harmonious and productive partnerships between CROP agencies and also with national, international partners.

← Not just a 'nice statement' – efforts such as multi-hazard early warning systems, impact-based forecasts, etc etc, cannot be achieved without a broad-based partnership approach

# Vanuatu workshop input – What’s working in international coordination?

## Works well (getting better / worse)

- Regional coordination to connect donors, experts, NMHSs
- PMC expert panels & structures
- Priority driven activities (country upwards) – when donors align to our voice
- External and internal active participation
- Working in the Pacific Way
- Sustained, maintained effort
- When projects understand dynamics and agency responsibilities before coming to country
- Donor & NGO Engagement
- Ability to negotiate with donors
- Availability of \$\$
- Awareness/promotion of donor presence
- Regular meetings / coordination
- Loyal regional experts – those who understand

## Works poorly (getting better / worse)

- Not enough understanding between NGOs / NMHSs
- Slow to disseminate products to stakeholders / get product timing right
- National work plans not aligned to international coordination
- International coordination
- Politically driven projects
- Relying on a single authority to disseminate advice/warnings
- Time to get things done
- Short-term projects / Sustainability
- Too many donors in a crowded space
- Donor \$\$\$ being returned to donor (complex processes)
- Fragmented Implementation at Regional level
- Diversity in hardware (incompatibility)
- Lengthy processes, sometimes not filtering through agencies/sectors
- Initial donor engagement
- Communication of funding opportunities
- Communication between UN bodies

***A high functioning PMC / PMDP reduces pressure on Pacific NMHS staff and supports good outcomes***

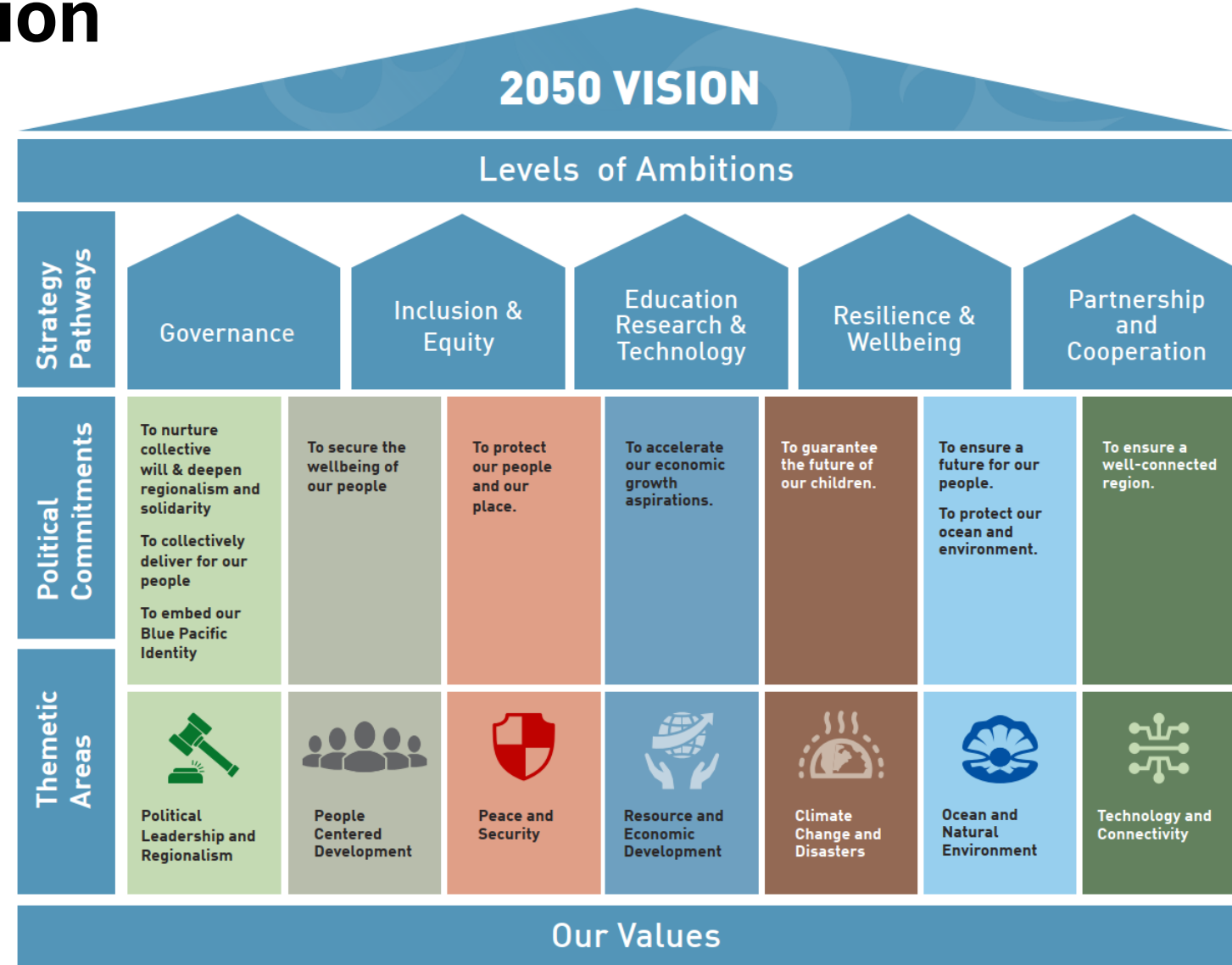


# Discussion – Strategic Considerations

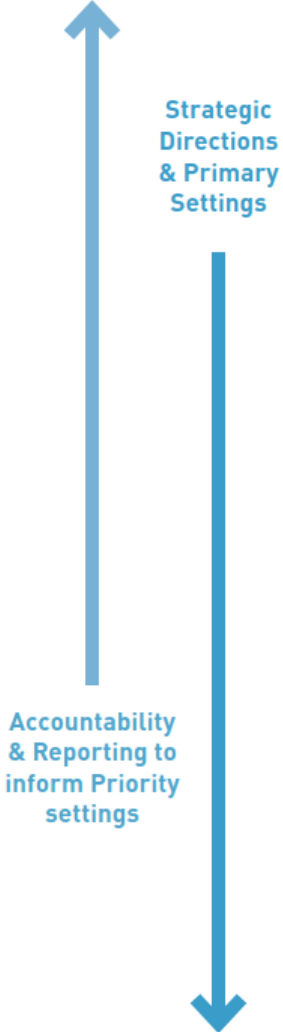


## 2050 Blue Pacific Vision

- 2050 Strategy for the Blue Pacific Continent introduced 2022 and agreed by Pacific Islands Leaders Forum
- Implementation Plan developed 2023
- Strong language supporting Vision implementation at Pacific Islands Forum Meeting Vava’u, Tonga, 26-30 August 2024.



# Implementation relationships





# Aug 2024 Communiqué extracts (1)

- Leaders reaffirmed the 2050 Strategy for the Blue Pacific Continent as the region's collective commitment to a resilient Pacific... reaffirmed the value of working together to ensure that the region's interest and priorities are progressed. Leaders emphasised the importance of the integration of Smaller Island States priorities....

*(note also – establishment of thematic advisory groups chaired by relevant CROP agencies, update of CROP Charter to reflect governance of 2050 Strategy, reporting upwards on progress against themes, and including collaboration with others)*

- Leaders discussed the progress on the Review of the Regional Architecture (RRA) and emphasised the importance of the RRA work in the implementation of the 2050 Strategy. Leaders highlighted the need for continued strengthened CROP collaboration to support effective delivery for Members and a more strategic and rationalised partnership mechanism as well as the importance of giving due consideration to the issue of sovereignty...

*(note also – continued work to progress CROP Harmonisation, third phase of the Review of the Regional Architecture to consider and provide recommendations on a rationalised Regional Architecture inclusive of CROP and Non-CROP agencies and regional convening platforms. )*





## Aug 2024 Communiqué extracts (2)

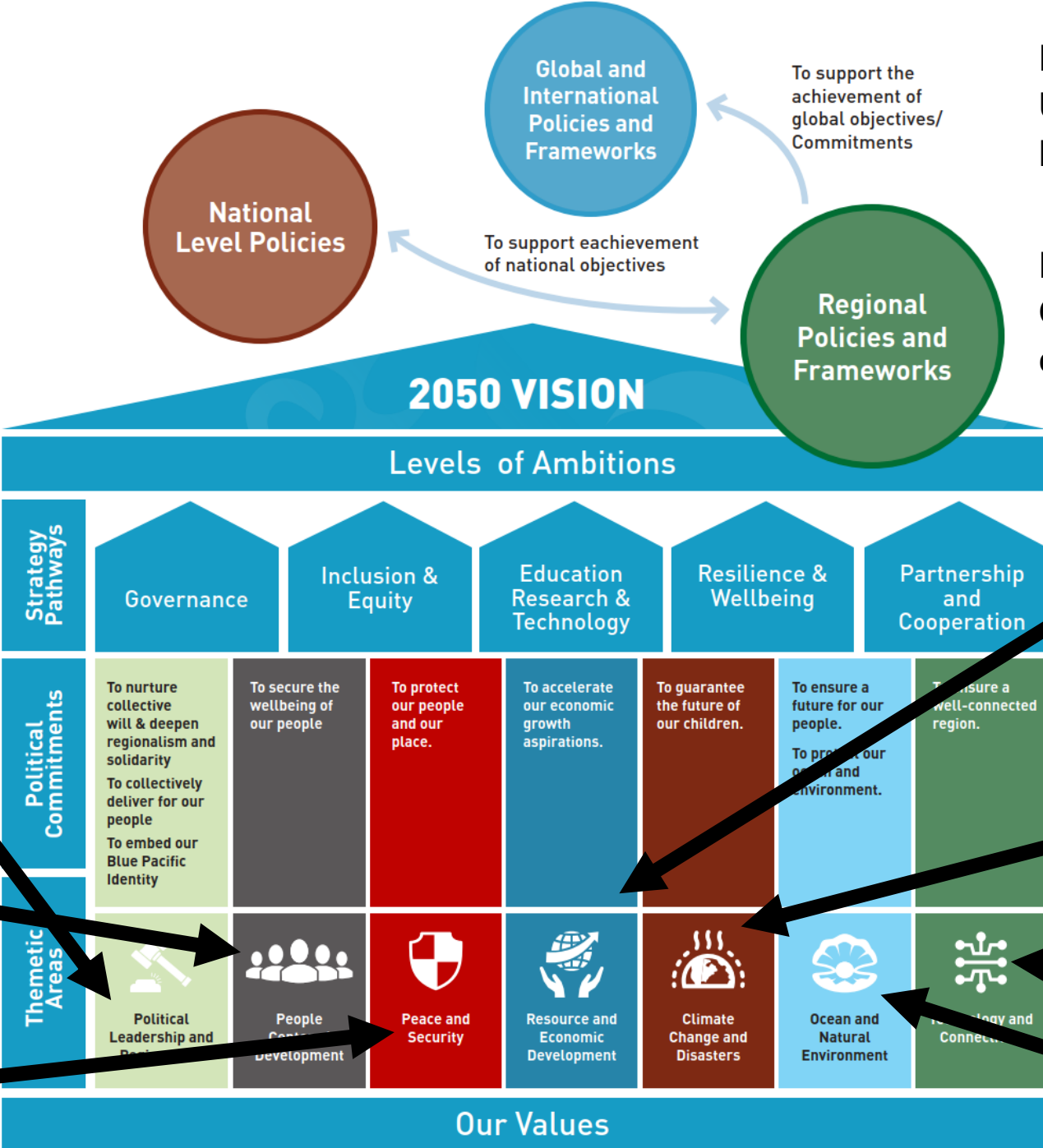
- Climate Change continues to be a matter of priority to the Pacific region and relatedly, the issue of resilient development. Leaders reaffirmed the Framework for Resilient Development in the Pacific (FRDP) as their commitment to inclusive and innovative approaches and solutions to the enhancement of resilience in well-being...
- Leaders strongly urged the Pacific Regional Organisations to target assistance within their work programmes to support Smaller Island States collective and unique priorities. Leaders further invited development partners and international agencies to also support the SIS priorities...
- ...it is important that dialogue agendas and priorities are aligned to the 2050 Strategy. Based on this, the Forum Secretariat will set out an annual reporting process, with clear timeframes, milestones, reporting templates and other requirements.



# Implications of 2050 Blue Pacific implementation

- It is *essential* that the Pacific Meteorological Strategy, PMC and PMDP arrangements are implemented in support of the 2050 Strategy and that this is *visible*
- It is also essential that partnership and project processes are *visibly* harmonized and consistent with the strongly expressed desire of Pacific Island Leaders for close cooperation, including between CROP agencies and with international agencies
- These two points are also critical for improving sustainable funding arrangements for PMDP Secretariat
- PMC has a good track-record and it is not conceptually difficult to support Pacific Island Leaders in implementation. The challenge is execution.

# Alignment with Blue Pacific 2050



PMC to work with WMO, UNDRR, UNESCO, others to help achieve Pacific aims

PMC to connect seamlessly to CROP agencies and help coordinate national actions

Regional public good approach in services and inclusion

Regional training centre for technical needs

Defence support

Support for sustainable fisheries, agriculture, resources industries, tourism

Climate & weather services, multi-hazard early warning systems, search & rescue support

Essential support for land, sea, air transport

Ocean / environmental modelling

## Current situation – stressed

Global / Multi-  
region  
initiatives

Pacific Islands Meteorological Strategy

Bilateral  
projects

SPREP-based projects

National Projects

Non-SPREP based  
projects

Multilateral  
projects

# PMDP as coordinator, not controller

Global / Multi-  
region  
initiatives

SPREP-based  
projects

Bilateral projects

National Projects

Pacific Islands Meteorological Strategy  
(in support of Pacific 2050)

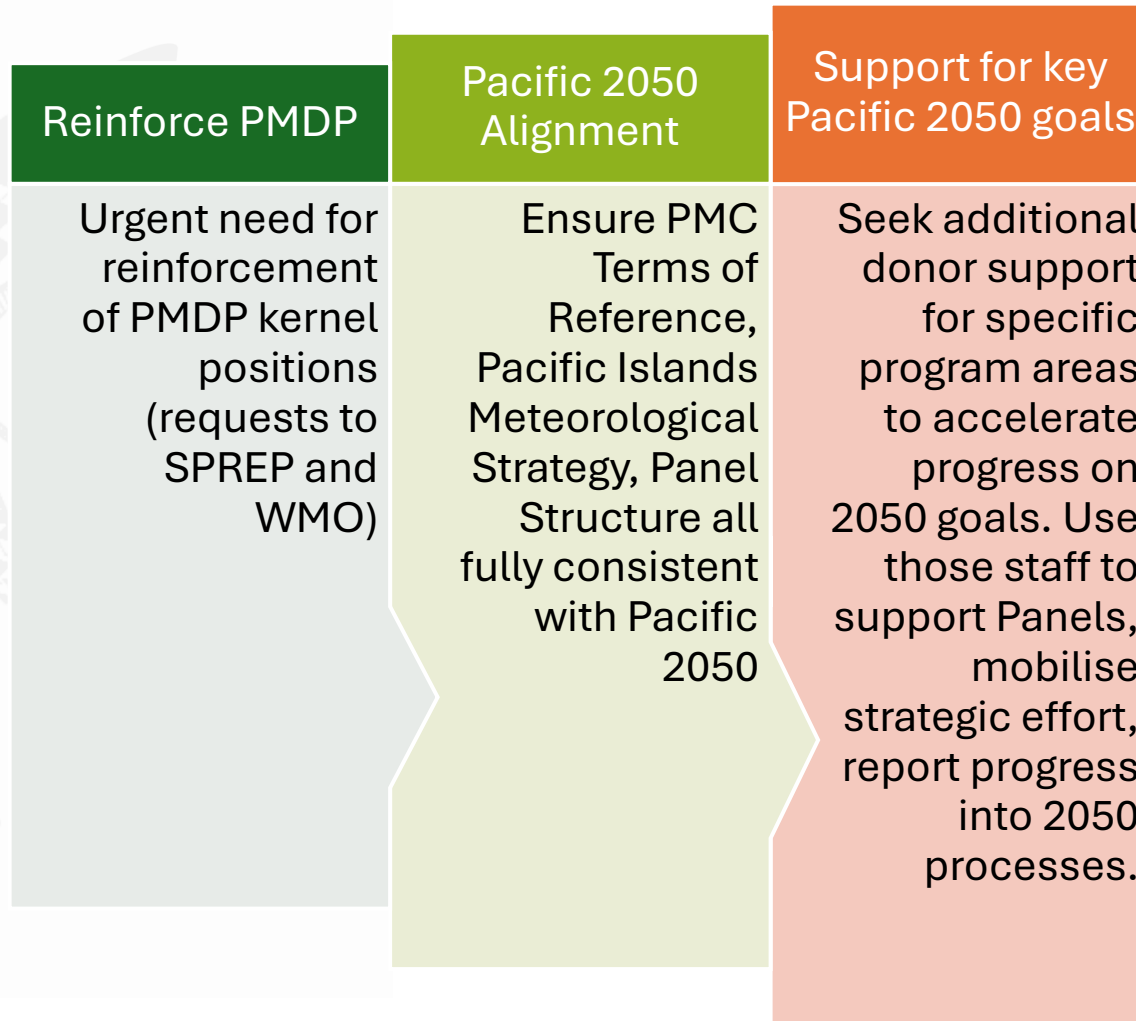
Non-SPREP based  
projects

Multilateral  
projects

**Requires sufficient program-based staff**



# Funding PMDP to support work of PMC



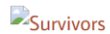
- Important to articulate and seek specific funding to support each panel to achieve aims aligned with Pacific 2050, eg:
  - Marine safety
  - Aviation safety
  - Defence support
  - Establishment of Regional Training and Instrument Centres
  - Multi-hazard early warning systems (joint multi-hazard approach including geohazards, working closely with WRP)
  - Climate change

# Ensuring work programme is relevant and accessible to Pacific leaders

25 March 2020

## Cry me a river – The Rabaul Queen disaster

BERNARD CORDEN



*Rabaul Queen survivors await rescue - 246 were picked up; as many as 500 died*

Extract from 'You'll Never Work Again – The Great Safety Charade' by Bernard

Paul Corden, self published, 2019, 1058 pp. A thorough examination from

global sources of how corporate barons – large and small – so often place their employees and the public at unconscionable risk.

Download 'The Great Safety Charade'

**BRISBANE** - On 2nd February 2012 the MV Rabaul Queen ferry capsized and sank with the loss of approximately 150 passengers in treacherous waters off the northern coast of Papua New Guinea.

Despite holding a current but somewhat superficial seaworthiness certificate, the congested, overloaded, listing and dilapidated rust bucket departed from Kimbe in West New Britain the previous day.

In a foolhardy and reckless overnight voyage with an indifference to anticipated inclement



PACIFIC / SOLOMON ISLANDS

## Four drown in Solomons after boat sinks

7:16 pm on 16 August 2018

Share this     

Four people are dead in Solomon Islands after a boat they were travelling on sank in rough seas.



## Police charge captain of MV Taimareho 1 with 27 counts of manslaughter

Officers of the Royal Solomon Islands Police Force (RSIPF) at the National Investigation Department (NCID) have charged the captain of MV Taimareho 1 with 27 counts of Manslaughter on 13 July 2022.

Supervising Director National Criminal Investigation Department (NCID) Superintendent Michael Bole says, "The charge of the captain of MV Taimareho 1 related to the tragic incident that involved death of 27 people washed away by waves from the MV Taemareho due to overloading of the vessel on 3 April 2020."

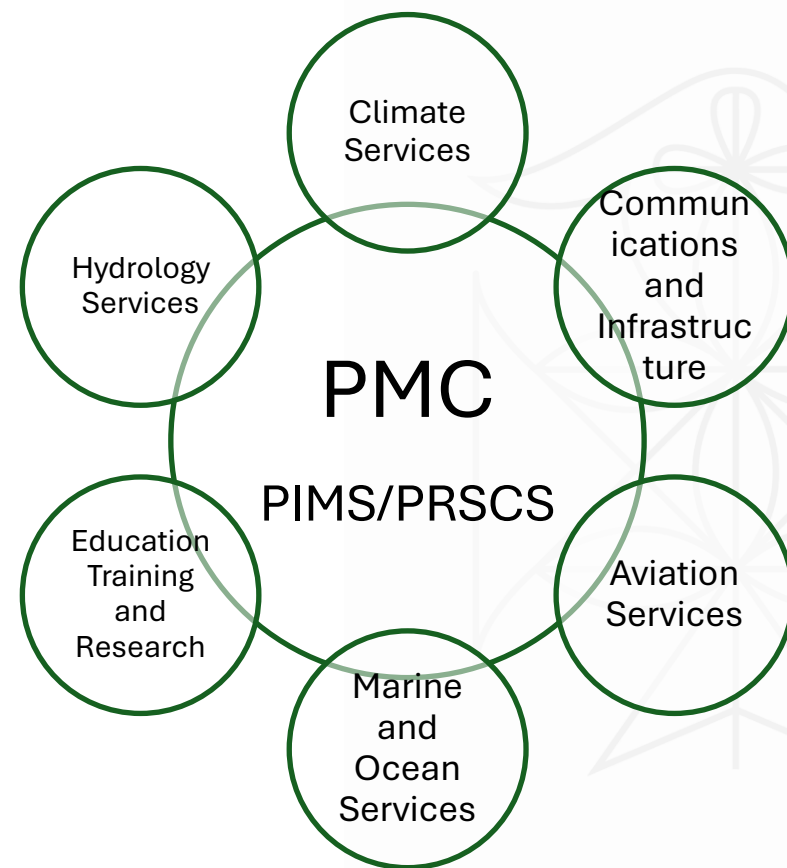
Superintendent Bole says, "The vessel departed from Honiara on 2 April 2020 for ward 24 in West Are'are in Malaita Province. During the course of the voyage, the ship encountered bad weather between Guadalcanal and Malaita Province."

Mr Bole says, "Three huge waves struck the ship during the night. As a result 27 people were washed overboard. The ship managed to make its way to Su'u Harbour around 7am on 3 April 2020."

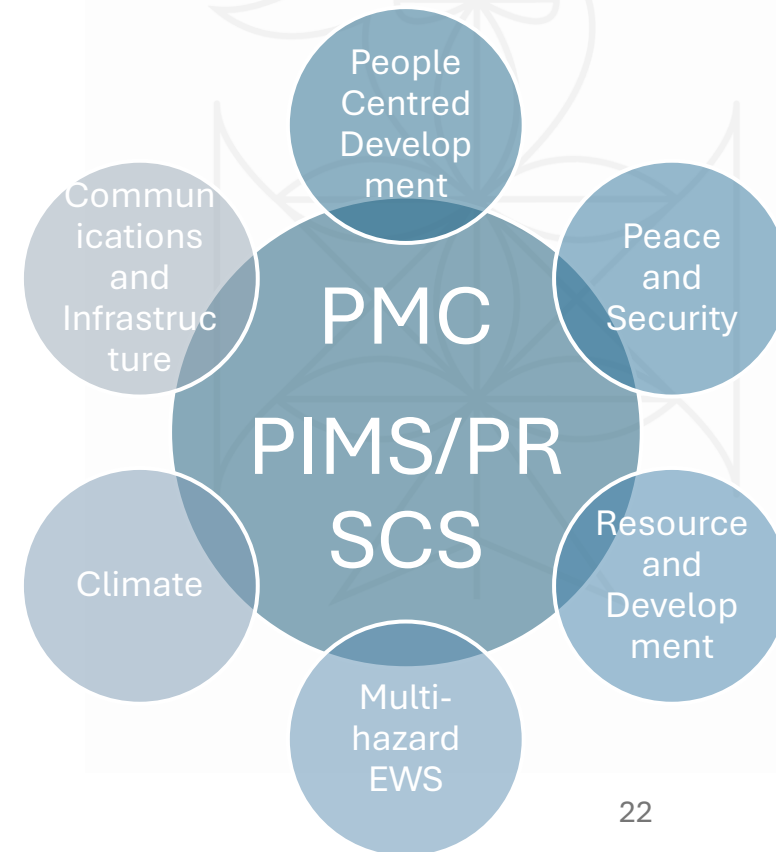
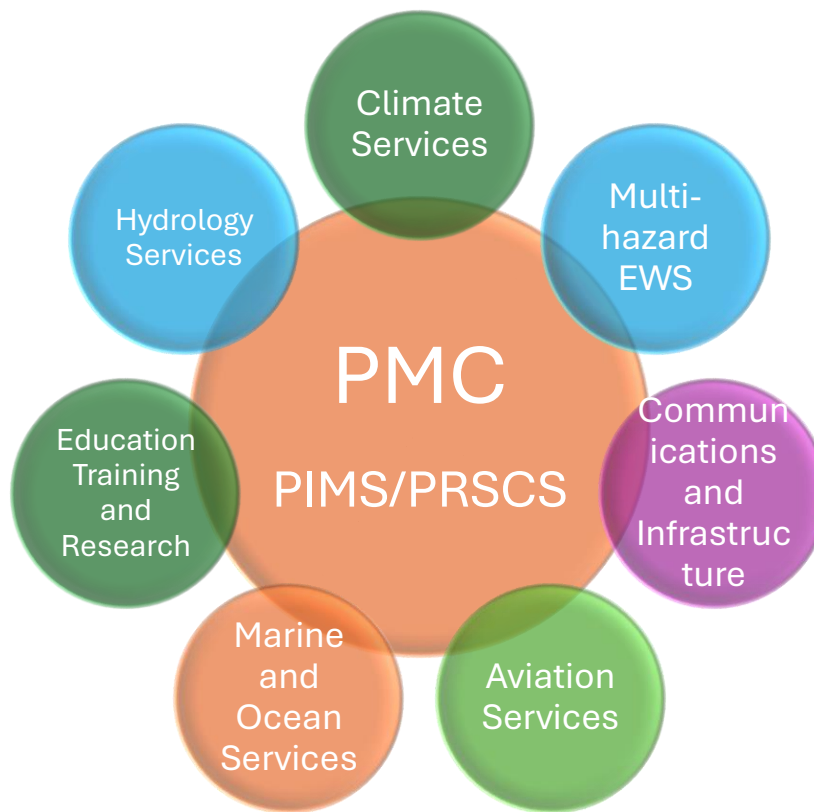
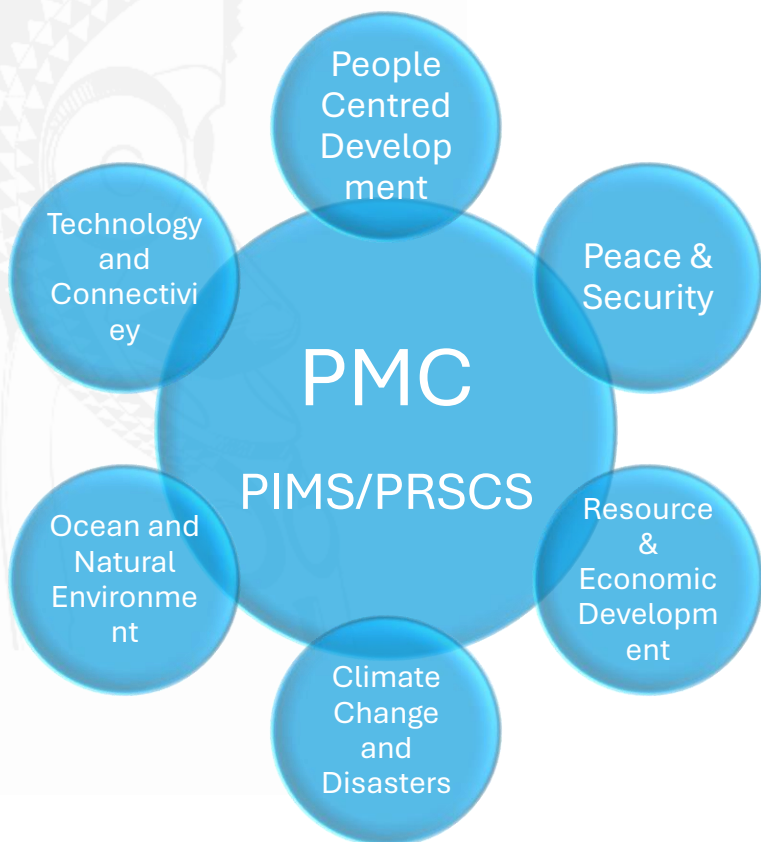
For example... are we good at planning and explaining how *our* work will reduce the death toll from small boat and ferry incidents?

## Panel structures

- The ideal panel structure would support Pacific 2050 Vision through prioritising regional objectives *and* connecting strongly to international partners to enable that to happen.
- The PMC Secretariat *urgently* needs strengthening (current situation carries strong risks). Potential to seek additional program funding through alignment of Secretariat jobs with defined panel support for specific Pacific 2050 outcomes.
- Most obvious ‘missing panel’ is for multi-hazard early warning systems, but that will not be the only solution.



# Panel structures







# PMC ambition, working with WMO and others

- Terms of reference: “oversee progress in the implementation of strategies to support the advancement of meteorological and related services in the Pacific”.
- Track progress using global standards (eg Country Hydromet Diagnostic)
  - Are our current approaches effective?
  - Does a country / region need additional support to address the need for better community outcomes?
  - Do we need to adjust the mixture of national, regional and global activities to improve outcomes, and if so, how?
  - Are we sufficiently critical of capacity development projects? Are there any approaches that are proven to be ineffective in the Pacific and where we should advise Members accordingly?







## Some comments on multi-hazards....

- Multi-hazard warning systems have been mentioned frequently in consultations so far, including at the Vanuatu workshop (noting that Vanuatu has integrated meteorology-geohazard operations). There is strong desire in the Pacific to accelerate progress (see also discussion of Weather Ready Pacific role).
- Approach needs to link to Pacific Resilience Partnership and Framework for Resilient Development in the Pacific (FRDP) 2017-2030, and be well aligned with Sendai goals (Target 'G' and others).
- Users expect consistent and appropriate warnings regardless of in-country agency arrangements – strategic governance of MHEWS must ultimately create unified approach across region.
- Appropriate to seek joint SPREP / SPC arrangements with real substance (eg in a joint panel). Much progress across the board is needed (eg volcanic monitoring, seismic / tsunami arrangements, flood warning). Link closely to Weather Ready Pacific governance but encourage broad landscape of action
- Many grounds for fertile inter-disciplinary cooperation – avoid meteorology being over-dominant.
- There are gaps in global international arrangements, and regional 'bottom up' approaches have a strong potential to help lead global thinking
- Project funding, including for climate change related initiatives, is often restricted to hydrometeorological matters only. This creates difficulties for countries trying to create an integrated multi-hazard approach (raised specifically as an issue during consultations for this Review). PMC could positively influence this situation at a global level.



## Example – volcanic hazards

Needs/requirements:

ICAO: Countries should ensure that “active or potentially active volcanoes are instrumentally and visually monitored (e.g. by seismological means supplemented by other information available) by designated volcano observatories supported by appropriate authorities, resourcing and quality management systems” (ICAO Doc. 9766 – note that cost recovery is possible)

Marine: “Members should, in coordination with the NAVAREA Coordinator, ensure that information can be provided on... volcanic activity resulting in heavy ash or floating pumice.” (WMO No.558)

UNESCO – “All volcanoes mentioned in the Tsunamis Generated by Volcanoes report should be monitored and have processes in place to warn for tsunamis” (IOC Technical Series 183)

***What is our plan for achieving this consistently in the Pacific?***

# Some areas that could advance rapidly in multi-hazards

- a. technical training (for example, in maintenance of seismic instruments and in approaches for developing operational science professionals),
- b. data-sharing principles (for example, ensuring that the WMO Unified Data Policy is applied for exchange of all critical environmental data),
- c. media training and communications approaches,
- d. methods for respecting country sovereignty for warning decisions while applying collective regional and global resources towards a problem (illustrated by, for example, the WMO Severe Weather Forecasting Program for warning advice, SOFF for pooling of resources for network maintenance),
- e. approaches for bringing multi-disciplinary knowledge together to prepare user-centred warnings.

IAVCEI / WMO workshop on volcanic / meteorological cooperatin, Rotorua, Feb 2023





# Preliminary review recommendations (1a)

*Governance/organizational structure, roles, functions and operation of the PMC and its Panels, the Pacific Ministerial Meeting on Meteorology (PMMM)*

- **PMC Terms of Reference should be adjusted in the light of the Pacific 2050 Vision (a proposed edit will be part of the Review Report)**
- **Ensure that current PMC work programme is expressed largely in terms of contribution to Pacific 2050 Vision (both in terms of desired goals and specific initiatives). This does not mean ‘exclusively 2050 Vision’, since other activities are necessary, but the links must be clear.**
- **Ensure that Pacific Islands Meteorological Strategy update is likewise framed largely in Pacific 2050 terms, particularly in terms of maximising regional public goods in support of the 2050 Vision’s goals and Regional Collective Actions.**



## Preliminary review recommendations (1b)

*Governance/organizational structure, roles, functions and operation of the PMC and its Panels, the Pacific Ministerial Meeting on Meteorology (PMMM) (continued)*

- Consider articulating a clear statement of what levels of hydrometeorological service should be aspired to across the region, in consultation with users and the Pacific Islands Forum Secretariat, and noting the need to service vulnerable users including Smaller Island States.
- Establish processes for monitoring progress against the desired levels of service, preferably using internationally recognised peer-assessment methodologies such as the Country Hydromet Diagnostics.
- Establish a PMC management group for efficiency of process (noting that PMC has scope to refine its working arrangements under SPREP rules).
- Continue Pacific Ministerial Meeting on Meteorology (PMMM), noting that meteorology is a cross-cutting activity and high visibility / accountability across multiple portfolios is desirable.





## Preliminary review recommendations (2)

### *Governance/organizational structure, roles, functions, and operation of the PMDP*

- Urgently seek additional support from SPREP for PMDP Secretariat. Also raise with WMO the importance of support for the sub-regional office in Apia and Regional Office in Singapore.
- Once realignment of PMC operations with Pacific 2050 is undertaken, explore with partners and donors the potential for specific Secretariat support to run Panels and activities in support of Pacific 2050, noting that over-use of project-funded staff can be problematic. Explore a wider funding base, including contributions from new national, private and philanthropic partners. Use any additional support to strengthen activities and reporting on progress on Pacific 2050 goals and to more strongly engage international community.
- Ensure that regional and international partnerships are actively maintained as required by Pacific Leaders, building on the Pacific Partnership Coordination Mechanism and using more of a continuous engagement approach than large PMC meetings. A particular focus area should be SPREP/SPC practical arrangements in support of the Climate Change and Disasters thematic area of Pacific 2050 (and the Framework for Resilient Development in the Pacific). These arrangements should be agreed at the highest level, in consultation with the Pacific Islands Forum Secretariat.



## Preliminary review recommendations (3a)

### *Synergies and opportunities to align to the WMO restructure*

- Avoid duplication of Panel activities with international expert teams (eg WMO teams). Instead, scope Panel composition and function with intent to make local progress on key focus areas consistent with Pacific 2050, provide representation into international processes (eg to WMO, ICAO, IMO, UNESCO, UNDRR) and bring international benefits into region in order to support Pacific 2050. Prioritise such representation, using NMHS and other representatives (including SPREP Secretariat staff) as agreed.
- Consider establishment of joint Panel or Panels with SPC dealing with multi-hazard early warning systems, particularly noting the importance of hydrological and geohazard issues in the Pacific, and the need for seamless links to other aspects of disaster risk reduction beyond Sendai Target 'G'. Define link to WRP Governance.



# Preliminary review recommendations (3b)

## *Synergies and opportunities to align to the WMO restructure*

- Through work of Panels, articulate more strongly how Pacific and international standards, systems and processes will efficiently create regional public goods and help achieve Pacific 2050. Examples:
  - Support for Global Basic Observing Network using SOFF
  - Well-defined, complementary relationships between global and local initiatives (eg WRP, EW4All)
  - Use of Severe Weather Forecasting Program for coordinated, improved warning coordination
  - Negotiation with major partners for provision of high-resolution NWP under WMO Integrated Processing and Prediction System (WIPPS)
  - Support for establishment of Regional Training Centre through WMO processes
  - Work with ICAO, IMAS, WMO on safe aviation and maritime navigation, including progress on aviation cost recovery where possible (including for volcanic observatories) and particularly targeting marine safety
  - Implementation of WIS2.0 to include data sharing for all data types necessary for Pacific needs (potentially including seismic data etc)
  - Focused, improved support for early warning systems (meteorological, flood, seismic, volcanic, tsunami systems) as regional public goods (empowering warnings for vulnerable populations).



# Recommendations for this meeting

The Meeting is invited to:

- a. Note that in-person consultations for the Review have largely concluded, and that virtual consultations will continue into October as the Review moves towards finalization
- b. Note the preliminary findings given and views expressed, provide any additional input, and invite observers and other interested parties to give input.
- c. Endorse the planned framing of the Review recommendations around the 2050 Strategy for the Blue Pacific Continent and the essential supporting role of hydrometeorological agencies, working in partnership with local, regional and global organisations.
- d. Recommend that related strategic reviews (for example the Pacific Islands Meteorological Strategy update) also deeply consider the 2050 Strategy, for consistency of approach.
- e. Note that the finalised Review recommendations will be considered at an out of session meeting of the PMC, likely during the October/November timeframe.