

Progress on the Outcomes of Second Pacific Meteorological Services (PMC-2)

(Updated September 2013)

OUTCOMES OF THE PMC-2	STATUS/PROGRESS
WMO POLICIES ON WEATHER, CLIMATE AND WA	
The meeting encouraged members to submit project proposals to the GFCS Office	The technical meeting on Climate and Agriculture held in Samoa in March 2015 organised by SPREP, FAO, SPC, NIWA and WMO resulted in a proposal submitted by FAO on behalf of the partners to the GFCS Board in May targeting Tonga, Samoa, Solomon Islands and Vanuatu.
 The Meeting stressed the need to strengthen the linkages between the PIMS and the WMO RA V Strategic Operating Plan, noting the need for closer synergy between the two strategies at the operational and activities level 	
 The meeting recommended the establishment of a Panel comprising of PMC members to advise the PMC members on the GFCS developments. 	This is established as the Pacific Islands Climate Services (PICS) Panel. The Special Session of the PMC in April 2014 (Cook Islands) endorsed its ToR and designated its members. The first meeting was held in August 2014 in Fiji funded by FINPAC and the meeting developed an Action Plan for climate services. The second meeting was held in May 2015.
 The meeting urged Members that need advice on the GFCS updates and related information to contact Mr. Waqaicelua. 	
ACTIONS TAKEN ON MATTERS ARISING FROM F (PMC-2)	IRST PACIFIC METEOROLOGICAL COUNCIL
 USA NOAA also proposes to re-establish the Pacific International (Meteorological) Training Desk Programme at RSMC Honolulu in Hawaii, which would include training on communication systems. 	This is re-established in late 2013 and courses offered in early 2014 with the first intakes from Tuvalu and Samoa. More information under Agenda 11.2
SUMMARY OF COUNTRY REPORTS	
American Samoa	
 A proposal was made to include disaster managers communication service providers and SPREP at the next Samoa and American Samoa Tsunam 	American Samoa from 2013, 2014 and 2015

Coordination Meeting to be held in Apia in August,	
2013.	
Cook Islands	
Consumables for the upper Air program	This is now supported by SPREP through coorperation with the UKMO and MetService NZ
Spare Instruments	FINPAC made an assessment in the state of the instrumentations. The actual roll out is in 2016 to address deficits in stations.
Maintenance and Calibration	FINPAC supported a maintenance trip for one Met Service technician to Aitutaki Island in April 2014.
Federated States of Micronesia (FSM)	
FSM should be given the opportunity to be part of future WMO sponsored and funded programs in other universities	FSM supported to a training at PAGASA in the Philippines.
Fiji	
Framework and guideline for Cost Recovery of Met Services	Update in Agenda 4.4
Saw the need for the region to establish a Regional Centre for Climate Applications	The PICS Panel now working towards the discussion on the RCC. Update under Agenda 6.4
Saw the need for denser monitoring network in the region for Lightning, Radars and Upper Air Observations	Lightning location data usage workshop held in Samoa in October 2014 as part of the FINPAC Project.
French Polynesia	
Lightning Detection Network	Update under Agenda 4.5
French Polynesia requested for future PMC Meetings to provide French interpretation.	Considered in the Rules of Procedures and prior consultations held before the PMC-3 with French Polynesia and New Caledonia
Kiribati	
Kiribati noted that while training and weather forecasting tools have been provided by MetService and others, there is still a need to build the confidence of staff in using these forecasting tools.	WMO and BoM developed a KMS Met. Strategy SPREP assisted to develop a strategy to improve their forecasting services
Advance training on Observation	COSPPac held an Observations training with the Fiji Met Service in 2014
Rehabilitation of Observations Stations	Update under Agenda 4.6
Marshall Islands	
Request for Staff Development and Training	Update under Agenda 4.7
New Caledonia and Wallis & Futuna	
Improvement of marine observations (buoys)	Update under Agenda 4.9 and Agenda 7.1
Improvement of EWS for floods	
Niue	
Further assistance with training and general support to the Niue Met Service is required	FINPAC assistance with the Media training in 2014
Palau	
Palau requested for grant writing support and public education.	PacMetDesk requested the Global Climate Change Alliance: Pacific Small Island States

	(GCCA: PSIS) Project who are running a series of Workshops on Project Proposal Development Using the Logical Framework Approach to include the Palau Met. Service in their list of invited participants when the workshop was held in Palau and informed the Director. This workshop was held in Palau in early 2014. Under the similar program, PacMetDesk coordinated with the GCCA:PSIS and invited directors from Vanuatu, PNG, Fiji and Solomon Islands, countries that are not part of the PSIS Project to attend the proposal writing workshop held in Tonga, Feb. 2014
Papua New Guinea (PNG)	
Instrument Installation and Calibration Capability Lightning Detector Network Automatic Weather Network and Atmospheric Chemistry	Update under Agenda 4.12 Support was provided for two staff members to attend the regional Lightning Location workshop by the FINPAC project in October 2014. Update under Agenda 4.12
Observations Pades Naturals	Lindata undar Aranda 4.10
Radar Network Samoa	Update under Agenda 4.12
Lack of knowledge experience and understanding on interpretations of meteorological system Solomon Islands	FINPAC organized a training workshop with the Media and the Lefagaoali'l Village in Savai'i
Require Trainings for	2 Engineers sent to be trained with NIWA
meteorologist/climatologist/engineers	 WMO training on Public weather forecasting and tropical cyclone held in Fiji Climate training by COSPPac Update under Agenda 4.14
Upgrading/maintaining infrastructures	Update under Agenda 4.14
Funds to continue with Upper air operations	Update under Agenda 4.14
Tokelau	
Tokelau requested assistance for the installation of their Automatic Weather Station (AWS) and training of their Meteorological Officers.	Update under Agenda 4.15
Tonga	
Enhance media weather products (esp. TV, internet, mobile services)	Media training held in Tonga in May 2015 and PACMAS also conducting a training later this year or next year. Smartmet already installed at the TMS and a SmartAlert will be installed next year.
Tuvalu	
Tuvalu proposed the development of a national strategy and implementation plan for the met service	Request submitted to WMO
Tuvalu requested assistance to develop a legislation for the NMS.	Request submitted to WMO
Tuvalu requested assistance to develop and implement	 Invited to attend a QMS and competency
QMS.	training in July 2013 by the FINPAC Training

Delivery of Products/services to rural areas/remote	The FINPAC community Climate and Disaster
communities	Resilience Planning workshop planned for Epau
	Village in March 2015 was cancelled due to TC
	Pam. This work is now deferred to a suitable time
	later in the year.
More effective public weather presentations	The Media Training planned for Vanuatu in March
	2015 has been cancelled due to TC Pam. Work
	now rescheduled to a more suitable time.
	Update under Agenda 11.3
Improvement of infrastructure/communication	Update under Agenda 4.18
Australia	
New Zealand	
United States of America	
3rdJOINT MEETING OF THE NATIONAL METEOROL	OGICAL SERVICES (NMSs) AND THE
NATIONAL DISASTER MANAGEMENT OFFICE (NDI	
Severe Weather Systems Other Than Tropical Cyclones	
Cyclones] Events and Products – Vanuatu	Land Earge Waves not Associated With Tropical
The meeting noted that SPREP is collaborating with WMO	Update under Agenda 9.2
to secure funding and other support for the continuation	Space and right a size
and sustainability of the SWFDDP project.	
Regional Initiatives: Key Implementation Challenge	s Issues and Opportunities to Enhance
Collaboration	5, 1330C3 and Opportunities to Enhance
Pacific Tsunamis Warning Center (PTWC) New and Enh	anond Draduate for the Booific Toursmi Warning
System (PTWS)	anced Floducts for the Facilic Isunanii Warning
1. The Meeting:	Workshop held in August 2013 in NZ to discuss
1. The Meeting.	issues relating to the new warning products
> requested for SPREP to collaborate with	issues relating to the new warning products
IOC-UNESCO and the SPC to undertake	Undata undar Aganda 9.4
a needs assessment of the NMS's	Update under Agenda 8.4
capacities to use the new and enhance	
PTWC's warning products before the	
PTWC ceasing dissemination of its	
existing warning products.	
WMO Regional Association V (South-West Pacific)Sever	re Weather Forecasting and Disaster risk reduction
Demonstration Project (SWFDDP)	Trouble Torodasting and Disaster Holt reduction
- Committee of the Comm	
The meeting reinforced its recommendation under the	
agenda 6.3.5 that SPREP and other relevant CROP	Update under Agenda 9.2
agencies work closely with WMO to secure financial	opadio dildoi rigorida o.z
resources from relevant development partners in	
supporting the SWFDDP, in particular, funding to sustain	
the MetConnect Pacific.	
South-South Cooperation–Disaster Risk Reduction (DRI	<u> </u>
The meeting suggested to encourage donor agencies and	A project concept has been developed by UNDP,
development partners to provide critical funding support to	
Dhoon 2 of the project and that a Concept Nata for	SPREP, IOC and 5C's. A joint wide event was
Phase 2 of the project, and that a Concept Note for continuation and cooperation with the Caribbean	organised during the SIDS conference in Apia which saw the launch of the strategic plan.

Community Climate Change Centre (CCCCC), and the Indian Ocean Commission, and should find opportunities to showcase this inter-regional collaboration at the Small Island Development States (SIDS) 2014 Conference in Apia, Samoa.	
Pacific Climate Change Portal	
Palau requested SPREP that the NMSs be included in future trainings and meetings to ensure better coordination and sharing of information at the national level.	Portal now works closely with Fiji, Vanuatu and Tonga who have national portals to pilot information sharing with the regional portal Training on the Portal was conducted in FSM and 2 participants from Palau attended Ms. Gwendalyn Sisior and Ms. Madelsar Ngiraing as attended for Palau.
The meeting encouraged SPREP to ensure more regular updating of the Portal by proactively seeking for inputs from the NMSs	Under the PICS Panel, they are also reviewing the different portals and the possibility of merging NOAA PACIS and the PCCP projects database. SPREP to work closely with MetDesk to involve the PICT Meteorological offices in contributing content to the PCCP.
HYDROLOGICAL SERVICES	
Noted the importance of a joint session between hydrology and meteorology at the next PMC in 2015 and invites SPC-SOPAC and SPREP to facilitate this.	A joint meeting is planned for October under the Pacific Islands Climate Outlook Forum (PICOF) to be held in Fiji
Encouraged the PMC members to consider in detail how meteorological and hydrological services could most efficiently and effectively collaborate in the future keeping in mind the commonalities they both share as regards data and services to users and	Hydrology working group under RA-V was held in Christchurch in November 2013 to discuss future collaboration.
Requested SPREP, in collaboration with SPC, WMO and other partners to investigate specific regional and national actions and activities designed to improve the capacity of Pacific Island Hydrological and Meteorological Services to provide improved and coordinated services to their respective governments, especially in the area of flood and drought management and warning.	PICOF held in October 2015 will focus on the water sector. The workshop will look at seasonal forecasting and drought management and warnings.
OCEAN ISSUES	
Improving Pacific Islands' Participation in IOC-UNE	
Requested the PMC members who are not IOC members (Nauru, Vanuatu, Federated States of Micronesia, Marshall Islands and Palau), to encourage their governments to join the organisation.	Vanuatu is now a member of the IOC since 2 September 2013. Palau also joined IOC on 24 March 2014
Encouraged the PMC members to increase PIC representation on the IOC Executive Committee and involvement in its working group such as the tsunami warning and mitigation).	Ms Filomena Nelson (DMO, Samoa) is the Chairperson of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS).
	Tommy (PI-GOOS) on the TPOS-2020 resource forum, and Sophie Cravatte (Centre IRD de

	Noumea) is the Co-Chair of the TPOS-2020
	Backbone Task Team.
	Ofa (Tonga, TMS) is the Chair of the Working Group
	on Tsunamis in the SW Pacific
The status of the ENSO early warning system, TAO	-TRITON
	Update under Agenda 7.1
EDUCATION, TRAINING AND RESEARCH (ETR)	
Encouraged the development of career pathways for	Update under Agenda 4.0 from country reports
NMSs staff and as a result send appropriate staff to	
trainings that support that development and	The Pacific Climate Change Centre being proposed
Occupation of the contract of	to be built at SPREP has been advocated to have
Encouraged training providers to consider flexible	component on research, mentoring and
prerequisites for high level trainings.	attachments.
F. 2. 2 4	
Noted previous and current opportunities for collaborative	Further updates under Agenda 11
research, mentoring and attachments with developed	general section of the section of th
country institutions and requested for these arrangements	
to continue and increase	
Requested that Cook Islands, Marshal islands and	Facilitated first meeting with USP in September
Federated States of Micronesia form a Working Group on	2013
Education and Training, and the PMDP secretariat would	2010
facilitate the activities of the Working Group.	Facilitated discussion in Cook Islands in April 2014
dominate the detivition of the Working Group.	on Education and Capacity building.
	on Education and Supusity Sunaing.
	WMO facilitated a meeting with FMS, USP, BoM,
	NOAA and other partners to progress this ETR
US NOAA referred to the USA Country Report regarding	Update under Agenda 11.2
the Pacific International Training Desk Programme at	- CPaulo andon i genaa i na
RSM-Honolulu, Hawai'i, and recommended the	
establishment of a Working Group to review training	
courses offered in the region and assess whether these	
would meet the PICTs NMSs requirements.	
SUMMARY OF PROGRESS IN IMPLEMENTING THE	PACIFIC ISLANDS METEOROLOGICAL
STRATEGY (PIMS) 2012-2021	
The Secretariat also recommended that coordination	The M&E framework will be updated in the
between the PMDP and the Partners continues to be	Reviewed PIMS
strengthened to allow information (data) collection to assist	Nevieweu Filvio
` ,	
the Monitoring and Evaluation (M&E) framework	DK FOD THE DIMS 2012 2021
MONITORING AND EVALUATION (M&E) FRAMEWO	
The meeting emphasized that the PIMS M&E activities	PMDP worked with WMO to include all the Pacific
must link with WMO standards and the WMO Strategic	priorities into the RA-V strategic Plan
Operating Plan. The meeting agreed to move to	The DIMO wid was residented in a set of the different
performance measures from quality and quantity.	The PIMS mid-year review will be scheduled for
	2016 and will include the new M&E Framework
PROGRAMMES, PROJECTS AND OTHER INITIATIV	ES TO SUPPORT NMS CAPACITY

The University of the South Pacific (USP) - Capacity and Water	/ Development Relating to Weather, Climate	
The Meeting requested the PMDP Secretariat to report on these gaps and work with education institutes in the region to address them.	Update under Agenda 11.1	
The World Meteorological Organisation (WMO) - Regional Components of WMO Programmes and Regional Programme for Region V, Including Policies		
The Meeting:		
 Noted the information on WMO assistance provided to its WMO Members in the Pacific region and the WMO activities for the period 2013-2015; Encouraged SPREP to work closely with the WMO through the PMDP and the 	Number of trainings from FINPAC/SPREP and WMO. Update under Agenda 5.0 FINPAC supported a total of 19 trainings and workshops. • 6 regional • 10 national	
PMC to assist PICT's NMSs of the Pacific Islands to further improve capacity development and delivery of meteorological services in the Pacific.	3 community	
Climate and Oceans Support Programme in the Pac	cific (COSPPac)	
The Meeting requested that BoM work closely with the SPREP in relation to the implementation of COSPPac.	SPREP has been an active member of the Steering Committee. Update under Agenda 6.3	
Samoa requested COSPPac to reconsider moving its Communications Officer from the SPC-SOPAC to SPREP to align itself with the PMDP, as a similar request has been made at the COSPPac's Steering Committee in April 2013.	This is considered under the mid-term review of the project. Update under Agenda 6.3	
The Meeting agreed that an open source of SCOPIC would be advantageous.	SCOPIC and other web-based tools developed by COSPPac have been migrated to open source. Update under Agenda 6.3	
Pacific-Australia Climate Change Sciences and Ada	ptation Planning	
The Meeting noted the importance of the PACCSAP programme for climate science in the region, and strongly advocated for a next phase of the project.	This was followed up in April 2014 in the Cook Islands during the special session of the PMC meeting. Update under Agenda 16.2	
Finland-Pacific (FINPAC) Project		
The Meeting advised that all projects (e.g. FINPAC,	Coordination is taking place between the different	
COSPPac, PACCSAP, SWFDDP) need to coordinate	projects under the PICS Panel as well as the PMDP.	
Radio Internet (RANET) Communication 2. The Meeting:		
 agreed for each of the Members to Identify and submit national focal points and technical leads for the maptack.org initiative. 	Update under Agenda 10.1	
advocated for the establishment of a regional 'messaging fund' to support on-		

going message and service costs of systems and infrastructure, such as the Chatty Beetle and RAPIDCast, to avoid administrative costs of per country payments and to provide longer term service stability.

Pacific Islands Climate Information System (PACIS)

EMERGING AND ONGOING PRIORITIES

International Civil Aviation Organization (ICAO)Competency/Standards Including Forecasters and Training Requirements, Deficiencies in the MET Fields, Quality Management System (QMS) and Cost recovery for Aviation Weather Services

The Meeting:

- strongly recommended that Service agreements should be formalized between NMS where applicable.
- encouraged Members to use resources such as the Pacific Safety Office (PASO) when seeking certification.
- encouraged SPREP Member countries who are ICAO Members to become Members of the Asia Pacific Air Navigation Planning Implementation and Reporting Group (APANPIRG) and to attend the Annual MET Subgroup Meeting of APANPIRG.

requested SPREP to work more closely with WMO and other regional organizations to assist countries to meet their Aviation Meteorology requirements and the implementation of the Pacific Regional Priority Activities under PKO 1 of the PIMS

Update under Agenda 12

SPREP (FINPAC) worked with FMI, WMO and BoM in August 2013 to carry out a regional training on QMS and Competency Assessments. In August 2014, a regional roving internal QMS auditing team was established. A hands-on training with a mock audit of Fiji Met Service's QMS was supported by FINPAC. The team's first mission to provide hands on training to Niue Met Service was held in early September 2014.

Implementation of the Global Framework for Climate Services (GFCS) in the Pacific Islands region

- 3. The Meeting:
 - Noted considerable progress has been made on implementation of climate services in Pacific Islands since PMC-1:
 - Noted the outstanding support provided by SPREP and collaborating partners such as WMO

to date towards advancing the implementation of the GFCS in the Pacific Islands region;

- Reaffirmed the outcomes of the various meetings and workshops on the GFCS and related matters, in particular, the recommendation from the Majuro 2011 workshop to investigate organizational structures and functions to support robust and sustained climate services at the regional level and identification of Pacific CoA from the 2013 PICSF;
- Noted the critical need for a more strategic approach with greater alignment and coordination to support robust and sustained climate services' activities and investments in the Pacific Islands region;
- Endorsed in principle the establishment of a Pacific Islands Climate Services Panel (PICS Panel) to serve as the PMC's Advisory Committee on PICS matters,
- Requested a clear Terms of Reference for the PICS Panel, linking it to the GFCS and to existing mechanisms.

> Requested SPREP:

- To make the necessary arrangements for the establishment of the Panel and to convene its first meeting as soon as possible after the designation of its members. In consultation with the Chair and Vice-Chair of the PMC, determine the date and place of the first Panel meeting. The Chairman of the PMC will preside over the first meeting until the Panel elects its [independent facilitator][Chair], who shall preside over the meeting;
- To provide support to the Panel and seek funding and other support for its work;
- To keep the PMC Members, SPREP Council, and as appropriate, relevant partners, informed of progress and developments on the Panel's work;
- To bring this matter to the attention of all concerned.

PICS Panel established at the special session of the PMC in Cook Islands in April 2014

A draft ToR was adopted and members elected to the PICS Panel include NOAA, BoM, USP, SPC, SPREP, NIWA and roving members from Vanuatu, Palau, Niue and PNG. Refer Agenda Item PMC-3 WP 6.4.

First meeting held in August in the Fiji Met Service hosted by the PMC Chair and director of FMS. An Action Plan was developed. Support for the first meeting came from SPREP (through FINPAC) and WMO. All PMC members are informed and the SPREP Council informed in their 2014 meeting in RMI.

The second meeting held in Apia Samoa supported by SPREP, BoM and WMO.

Report presented under Agenda 6.4

Implementation of the Regional Plan for the WMO Information System (WIS) and Table Driven Code Format (TDCF) in Region V. especially in each Pacific Island NMS and the region

Update under Agenda 10.2

Implementation of the Regional Plan of the WMO Integrated Observing System (WIGOS) for Region V, especially in each Pacific Island NMS and the region

·	Undata undar Aganda 12
PMC STATEMENT TO THE JOINT MEETING OF THE	Update under Agenda 13
	PCCR AND PPDRIM
 approved the PMC statement to the Roadmap PMC/PMDP WORK PLAN FOR JULY 2013 - JULY 20 	15
	15
The Meeting:	
agreed to the revised format for the work	
plan that was presented; and	
> agreed to provide information on	
activities and budget to SPREP to	
populate the template and circulate out of	
session for approval. PMC/DONORS AND PARTNERS ROUNDTABLE (5T)	□ IIII V 2012)
SPREP to arrange a donors and partners	H 30L1 2013)
roundtable at a later date and involve some PMC	
members, including the chair and vice chair.	
The meeting noted that the project concept	
document (annex WP_16.0.Att1) builds on a	
needs analysis from an analysis of gaps and	
needs from country reports and the PIMS, but	
that needs should be further prioritised to attract	
donors. A refined project concept document will	
 be developed for the donor roundtable. The meeting was informed that the only MoU for 	New MoU's with
the PMDP partnership is between SPREP and	Metservice and UKMO (GUAN of Kiribati,
WMO. The secretariat encouraged other partners	Tuvalu and Cook Islands)
to the Pacific Meteorological Desk Partnership to	IFRC (Community outreach)
develop similar MoUs.	PIFS and APCC (Climate Prediction Services)
	Gov. Of NZ (Ocean Acidification)
RULES OF PROCEDURE OF THE PACIFIC METEOR	OLOGICAL COUNCIL MEETING
The meeting:	
agreed to adopt formal language outlined	
in the SPREP publication "Taking the	
Floor, A Pacific Island Country Guide to	
Negotiating International Environmental	
Agreements".	
> adopted the SPREP Financial	
Regulations insofar as they are	
applicable as the interim Financial	
Regulations of the PMC, until such time	
as the PMC adopts its own Financial Regulations.	DeD adouted by the ODDED arms if you also also also contains and
> adopted the Rules of Procedure as	RoP adopted by the SPREP council meeting in 2013
amended, and requested SPREP to	
present them at the 24th SPREP meeting	
for endorsement.	
DATE AND VENUE OF THE THIRD MEETING OF TH	E PMC

 It was decided that the next PMC-3 meeting will be held 2015 in Tonga. Dates will be decided in consultation with the host country and PMC members.

PMC-3 held in Nuku'alofa, Tonga from 20-24 July 2015.