

Agenda 4.0: Actions Taken on Matters Arising from PMC-1

### Annex 1: Progress on the Outcomes and Recommendations from the 14 RMSD/PMC-1

- i) Outcomes of the 14th RMSD and the PMC-1
- *ii) Recommendation from the fourteenth (14) Regional Meteorological Services Directors Meeting (RMSD)*
- *iii)* Recommendation from the first Pacific Meteorological Council (PMC)
- *iv)* Report on the Outcomes of the Pacific Regional Meteorological Services Directors Workshop in Support of Climate Adaptation Planning in the Pacific Islands
- v) RANET Workshop recommendations

#### (i) Outcome of the 14<sup>th</sup> RMSD and 1<sup>st</sup> PMC meeting in RMI 2011

Outcomes of the 14RMSD/PMC1	Status/ Progress
Organizational Matters and Reporting	
Agreed that the future host country for the PMC would no longer be automatically tied to the country from which the Vice-Chair is elected as consideration is being made for convening the next meeting back to back or in parallel with other relevant regional forums such as the PCCR & PPDRM;	<ul> <li>PMC-2 will be convened back-to-back with the PCCR &amp; PPDRM, in Nadi, Fiji, 1-5 July 2013.</li> <li>This is noted andPMC-2 Working Papers(WP2.1&amp;WP17 )on PMC Rules of Procedures will be developed by the Secretariat and presented at the PMC-2 to guide the PMC on conducting its meetings.</li> </ul>
Noted that certain issues raised in country presentations required further discussion during the meeting, and these included <u>ICAO requirements</u> for nuclear dispersion products and baseline measurements to support their development, space based information such as WIS and WIGOS, and its application in the region. A number of announcements of planned training	<ul> <li>ICAO requirementsfor nuclear dispersion and other requirements are very important and urgent issues to address, and further discussions on these under PMC-2 Working Paper (WP13.2).</li> <li>A Finland-Pacific Project funded workshop on the competency requirements for</li> </ul>

opportunities were made in the presentations;	aviation meteorology personnel and consequences for the QMS, Apia, Samoa, 22-26
	July 2013.
	AusAid-BoM PSLP funded phase 2 quality management internal auditors from
	Pacific Island Countries doing real-time auditing alongside BoM experts at various
	BoM Offices, February – August 2013.
	3 representatives from PICTs NMSs (Samoa, Solomon Islands, and Tonga)
	weresupported by WMO, and the Commonwealth Secretariat through SPREPto
	participate in the 17 <sup>th</sup> meeting of meteorology sub-group (MET SG/17) of
	APANPIRG, Bangkok, Thailand, 13-16 May 2013.
	AusAid-BoM PSLP funded phase 1 quality management internal auditor workshop
	for Pacific Island Countries, Port Vila, Vanuatu, 26-30 November 2012.
	WMO and New Caledonia Meteorological Services support through fnanancial and
	expert services to assist Solomon Islands with QMS for aviation weather services,
	Honiara, Solomon Islands, 2-6 July 2012.
	• WMO and New Caledonia Meteorological Service support through finanancial and
	expert services to assist Vanuatu with QMS for aviation weather services, Port Vila,
	Vanuatu, 21-27 July 2012.
	• WMO and New Caledonia Meteorological Service support through financial and
	expert services to assist Samoa Meteorology Division with QMS for aviation weather
	services, Apia, Samoa, 24-28 September, 2012.
	Collaboration between Kiribati Meteorological Service, Air Pacific and WMO to have
	METAR and SPECI from Casidy international aerodrome regular transmitted to Fiji
	Meteorological Service.
	•
Agreed that the key developments presented by the NMSs' Directors are encouraging steps in	<ul> <li>2011 WMO fellowships awarded to Mr Tom Natick (Vanuatu), Mr UenetaToorua</li> </ul>
the right direction, but noted that there are still many challenges. In particular, <u>capacity and</u>	(Kiribati), Mr MaccariosAuvae (Samoa) for the meteorologist training course at
funding issues remain keyto the further development and enhancement of NMSs in the region.	PAGASA, Manila, Philippines, November 2011 – October 2012; to Mr Rajneel
There were valuable lessons learned from the presentations by the NMSs' Directors such as	Prasad (Fiji) for the meteorologists postgraduate diploma training course at BMTC,
the experience of those who have been able to engage with other sectors in order to secure	Melbourne, Australia, February - December 2011; and to Ms Katrina Mariner
more resources, such as with adaptation projects in the water and climate change sectors, and	(Samoa) for a master degree in water resources management at Leibniz Unversity,
encouraged others to do the same;	in Germany, January 2011 – September 2013.
	UNDP (South-south Cooperation) and WMO 2011 fellowships awarded to Mr
	Williams BaeWorwor (Vanuatu), Mr KonnyNato (Papua New Guinea), Mr Wilson Saega (Solomon Islands), and Mr Wilson Vaaua (Samoa) for the meteorology
	technician training course at the CIMH, Barbados, September 2011 – April 2012.
	<ul> <li>2012 WMO fellowships awarded to Mr LuteruTauvale (Samoa) and Mr</li> </ul>
	1 - 2012 with tenowships awarded to with Eulerunauvale (Samua) and with

Recognized that organizational restructuring in some countries has resulted in greater general capacity which has enabled those NMS to be more effective in providing services and working across other sectors, in particular in disaster risk reduction.	<ul> <li>JeremaihMalaibe (Papua New Guinea) for master degree in applied meteorology and management, at Reading Universty, UK, October 2012 – November 2013.</li> <li>2012 BoM fellowship awarded to Mr Silipa Art Mulitalo (Samoa) for the meteorologists postgraduate diploma training course at BMTC, Melbourne, Australia, February – December 2012.</li> <li>A hydrologists training course will be held at PAGASA, Manila, Philippines, July 2013 – June 2014.</li> <li>Marshall Islands, Tuvalu, Niue and Cook Islands were supported to develop their national climate change policies and JNAPs which were based on national priorities and consistent with the PIFACC. The process included relevant capacity building in planning and mainstreaming which strengthened national capacities.NMSs are an active partner in the development of the JNAPS.</li> <li>WMO provided financial assistance to the Government of Niue to draft a policy and meteorology legislation for Vanuatu, with the assistance of SPREP.</li> <li>WMO provided financial assistance to the Government of Tonga to draft a meteorology legislation for Tonga.</li> <li>BoM and WMO assisted the Government of Kiribati to develop a meteorological strategy and implementation plan for Kiribati.</li> <li>WMO provided expert services to Vanuatu to develop a meteorological strategy and implementation plan for Kiribati.</li> </ul>
Also recognized that a number of countries have been affected by recent tsunami events and as a result numerous NMSs are reconsidering their mandates to tackle this, including capacity needs. In this regard, NMSs articulated the need for assistance with these efforts including policy and technical support.	<ul> <li>NMSs are an active partner in the development of the JNAPS for Marshall Islands, Tuvalu, Niue and Cook Islands.</li> <li>Draft meteorology legislation for Vanuatu and draft strategy and implementation plan for VMDG address additional mandates for NMSs.</li> <li>Several capacity building initiatives have been conducted in the region to address this need</li> <li>Some countries have received technical support for the NMS (assistance) through bi- lateral agreements</li> <li>Revised tsunami warning messages developed by the PTWC</li> <li>Test of these revised messages during the PacWave 13 Exercise in April.</li> </ul>
Outcomes of the 16 <sup>th</sup> WMO Congress	
Welcomed the outcomes of the 16th WMO Congress (Cg-XVI), in particular, the new WMO	WMO RA V (Southwest Pacific) working group on climate services (RA V WG/CLS)

Strategic Plan, 2012-2015 and the WMO Regional Association V (RA V) Strategic Operational Plan, 2012-2015, and took note of progress so far in the implementation of those decisions. WMO requested inputs from Meteorological Service Directors for the regional operationalization of the Strategic Plans. The meeting endorsed the priority areas for WMO and RA V, as agreed to under both Plans, namely; Global Framework for Climate Services (GFCS), Sustainable aviation services, Capacity Building for developing and Least Developed Countries (LDCs), Implementation of the WMO Integrated Global Observing System (WIGOS) and WMO Information system (WIS), and Disaster Risk Reduction (DRR).	<ul> <li>questionaire on climate services for agriculture in RA V, in April 2013</li> <li>WMO RA V WG/CLSquestionaire on capabilities on needs for a RCC in RA V, in early 2013.</li> <li>Many representatives from PICTs' NMSs participated in the USA NOAA funded Pacific Islands Climate Services Forum, Suva, Fiji, 21-25 January 2013.</li> <li>The GFC and its implementation plan approved at the extraordinary session of the World Meteorological Congress in October 2012</li> <li>Representatives from Samoa and Vanuatu participated the WMO regional workshop on climate services at the national level for LDCs in Asia, Bangkok, Thailand, 8-10 October 2012.</li> </ul>
Reiterated the need to have representation from the National Meteorological Service on national delegations to key global conferences that will consider the sustainability of Meteorological Services, such as the UNFCCC Conference of the Parties at its 2011 and 2012 sessions and Rio+20. It was also noted that such participation should be considered in the regional preparatory processes for these meetings. National Meteorological Service Directors also agreed to make such representation requests through their own national decision making processes;	<ul> <li>Increasing number of PICTs' NMSs personnel representingand/or members of their respective national delegations to the UNFCCC process.</li> <li>With the focus of responses to climate change focused on adaptation the role of NMS's in the UNFCCC process is greater now than ever.</li> <li>There is a need to discuss a participation fund for NMS in the UNFCCC process</li> </ul>
Noted the importance of highlighting the linkages between the global and the regional strategies for enhancing meteorological services;	The PIMS priorities and PKOs are drawnfrom the WMO RA V SOP 2012-2015, a very clear linkages in meteorological services between global and regional strategies and this has been sought enshrined in the roadmap process
Pacific Meteorological Strategic plan	
Agreed that there was general agreement that the strategic plan needed to be simplified to clearly articulate scope, audience, objectives and application.	This is now completed and the PIMS launched in 2012.
Noted that there was general agreement to ensure that the plan is generic to be used by non- meteorological professionals, policy makers and the wider community.	<ul> <li>This is now completed and the PIMS launched in 2012</li> <li>PIMS is -aimed not only at NMS's but also other sectors of the public domain including community groups and civil society organizations.</li> </ul>
Noted also that there was general agreement that the plan should be country driven and reflect national NMS priorities.	<ul> <li>14 PKO's and actions required from both national services and regional support/coordination are clearly outlined in the PIMS.</li> </ul>
Acknowledged the links to other regional strategies and frameworks	Clear linkages in meteorological services between global and regionalstrategies. An illustration of this is presented in Figure 1 on page 6 of the PIMS.
Agreed on the need for a strong governance structure.	Guided by PMC, PMDP is supported by SPREP to assist the PICTS' NMSs. An illustration of this is presented in Figure 2 on page 7 of PIMS.
Noted the proposal to task the Secretariat to commission a Technical expert to further	A Technical expert commissioned in 2011 and the PIMS is completed and launched
consultations and prepare a re-draft of the strategic plan for consideration by early 2012.	in 2012.
Noted the need for specific references to national priorities on drought	Refer to the PIMS's PKO6.
Road map towards an integrated regional strategy for DRM and CCA and Mitigation by 2015.	

Confirmed their support for a joint meeting of the PCCR, DRM communities and the Regional Meteorological Services Directors in 2013;	<ul> <li>PMC-2 is now aligned and held in parallel to PCCR and PMDRM, and back-to-back to the roadmap meeting, which will bring together PCCR and PPDRM.</li> </ul>
Agreed on the need to ensure input from the meteorological community into the CCA/CCM &	A joint meeting between NMSs and NDMOs scheduled during the PMC-2.
DRM Technical Working Group.	<ul> <li>An opportunity for PMC members/NMSs to contribute to PCCR technical working</li> </ul>
	groups, and the roadmap meeting.
Endorsed in principle the roadmap.	PMC members will participate in the the roadmap meeting and discussions.
Climate Services Workshop (See attached matrix for details)	
A presentation was made regarding the workshop on Climate Services held on Monday 8th	See below
August 2011. A number of recommendations were put forward for consideration by PMC.	
These have been attached as Annex 1 and were adopted by the PMC.	
Pacific-Finland Project	
Acknowledged the successes to date of the project and commended the FMI and the	A new draft has been circulated to countries for comments.
Government of Finland for their excellent efforts in working with the Pacific Island Countries	
and SPREP on this project. They support the continuation of this partnership and agreed that	
the next phase SPREP-Finland (through its MFA) Project Document be circulated for review	
and comments to the Met Directors	
Noted that, since 2002, the U.S. has funded the PI-GCOS position at SPREP; however,	The PMDP is now set up to address this deficiency.
instead of being dedicated to coordinating and moving forward with the PI-GCOS program, the	The MCA the MCO now recruited by the SPREP.
PI-GCOS role has been used primarily to fulfill the duties of the long-dormant, but clearly	The SPREP is also raising funds to support the reinstallation of the PI-GCOS Officer
required, SPREP Meteorology and Climatology Officer (MCO). An example of this is the	post in the PMDP
ongoing use of the PI-GCOS Officer to administer the RMSD (and now PMC) process. Use of	
the PI-GCOS position in this way will continue to be an obstacle to the effective and	
sustainable advancement of meteorological and climate services in the region.	
Emphasized the importance of building in the costs of on-going maintenance to ensure the	Maintenance of current equipment continued to be issues and concerns.
sustainability of any new equipment purchased by projects.	FINPAC project will address some of these issues.
Noted the opportunity for this projectto build upon the existing RANET work.	FINPAC project to upgrade 21 silent RBCN stations in PICTs.
Agreed on the need to take a multi donor approach to this project, and invited additional	<ul> <li>A steering committee for the project is now established to guide the project.</li> </ul>
partners to provide support.	
Emphasized that the project should take into account other projects happening in the region,	A steering committee for the project is now established tp guide the project.
the smallness of NMHS and their capacity constraints, and take a holistic regional approach.	The PMDP and the steering committee are monitoring this aspect.
Noted the role of the Pacific Meteorological Desk Partnership (PMDP) as an important tool for	The PMDP is now established and is monitoring this aspect, for example by linking
coordinating with donors to assist in the leverage of additional partnership support and ensure	FINPAC with a renewable energy project on Solar PV Powered Rural
the sustainability of projects.	Telecommunication Systems in Solomon Islands.
Pacific Tsunami Warning Centre	
Presentations were made by NOAA and a number of issues raised were noted by the	Pacific Wave 2011 was carried out with the participation of most NMSs in the region
participants as requiring further consideration, such as guidance products, Pacific Wave 2011,	See Above, re PTWC new products and PacWave 13.
etc.	· · · · · · · · · · · · · · · · · · ·
RANET (See attached matrix for details)	

A presentation was made regarding the workshop on RANET held on Saturday 6 <sup>th</sup> August 2011. A number of recommendations were put forward for consideration by RMSD. These have been attached as Annex 2 and were adopted by the PMC.	See below
Severe Weather Forecasting and Disaster Risk Reduction Demonstration Project	
Noted that there was a request to extend the scope of this project to include tsunamis, but as this is currently outside the scope of this initial phase of the protect it will not be considered at this time. Furthermore, <u>some concern was expressed about the effectiveness of the DRR</u> <u>aspect of the project</u> and that more attention needed to be given to engaging with, and meeting the needs, of the DRR community.	<ul> <li>To extend the scope of the projecr to include tsunami need further discussion, if required</li> </ul>
Climate-Ocean Support Program for the Pacific (COSPPac)	
Welcomed the proposal to include two representatives of Meteorological Directors into the Steering Committee of the COSPPac initiative to be nominated by the PMC, and recommended that the representative of the Pacific Desk Partnership also be included as a member of the Steering Committee.	<ul> <li>10 PMC members and the PMDP are now active members of the COSPPac steering committee</li> </ul>
requested that a copy of the draft design for the COSPPac Initiative be shared with Meteorological Directors, regional partners and relevant stakeholders, before it is finalised.	<ul> <li>The draft copies were sent around and some PMC members were invited to participate in the review discussion</li> </ul>
noted the need to include national and regional organisationsas partners in the delivery of training initiatives in the region, and to ensure the sustainability of such skill transfer beyond the life cycle of projects/initiatives.	<ul> <li>COSPPAC steering committee has been apprised of this issue by PMDP. COSPPac is delivered through partnership with National Meteorological Services and SPC/SOPAC.</li> </ul>
Pacific Australia Climate Change Science and Adaptation Programme (PACCSAP).	
Noted the need for climate initiatives to engage with the Pacific Desk Partnership and coordinate with other partners to be taken into account in the development of the PACCSAP.	<ul> <li>PACCSAP holds regular consultations with SPREP Climate Change Division including the PMDP</li> <li>Plans are in place to increase the collaboration.</li> </ul>

# (ii) Recommendation from the Fourteenth Regional Meteorological Services Directors Meeting (14RMSD)

No	RECOMMENDATIONS of the 14RMSD	Status/Progress
A	That the Secretariat and partners be requested to further enhance their support w more targeted efforts in relation to outcomes and decisions of meetings of the RM	
В	That a regularly updated events calendar be created and disseminated by the Secretariat in cooperation with partner organizations, particularly WMO, and that t announced new applications and technologies by several partners should be mad available by email distribution and websites.	
С	That NMSs' Directors should become engaged in other national climate change initiatives, in particular for adaptation in the water and food security sectors as wel for mitigation resource analysis, in order to contribute expertise and to benefit from these new funding opportunities.	
D	The Secretariat be requested to provide regular updates on developments relating	All PMC members are updated on the developments of the PMDP staffing.

	staffing support for the PMDP, and to enhance the visibility of its partnerships with SPC (in particular its SOPAC Division).	• SPC is updated on a regular basis on the development of the PMDP particularly with arrangements of the PMC-2
E	The Secretariat be requested to synthesize the specific needs identified by NMSs' Directors in their presentations and country papers and to regularly update these for information and dissemination.	A synthesis report is provided in the Final PMC-1 Meeting Report.
F	That the WMO Secretariat prepare an information paper outlining its key achievements in the region in the past 10 years and highlight the benefits that have accrued to the region as a result. It was noted that WMO visibility has not been high enough and that its support for National Meteorological Services has not been recognized by some partners, and further support in particular from RA V was required.	To be provided under PMC-2 Wprking Paper (WP-12.2)
G	That WMO Secretariat be requested to strengthen resources of the sub-regional office and provide clear communication about roles and responsibilities for the officer and the assistant proposed at the RA V meeting. The respective roles in coordination of the WMO and SPREP Secretariats must be communicated to the RMSD/PMC for their input and guidance. They also called for more information on the coordination efforts between WMO, its sub- regional office and national meteorological services;	<ul> <li>WMO renewed MOU with SPREP in 29 July 2011.</li> <li>Letter of Agreement between WMO and SPREP on the PMDP, in 14 October 2011.</li> </ul>
Η	That the Secretariat in consultation with RMSD and partners develop a Terms of Reference for a consultancy to further refine and develop the draft strategic plan, through consultation with RMSD, partners and regional organizations and other stakeholders as far as possible, and requested the Secretariat to report back to the RMSD in early 2012 with the outcome of that work.	The PIMS was completed and launched in 2012.
1	<ul> <li>That Pacific Island Countries and Territories (PICTs) be encouraged to participate in the work of the IOC Tsunami Early Warning System working groups. PTWC requested inputs and participation from the RMSD:</li> <li>review of new warning products</li> <li>participation in the November 9-10 PACWAVE focused on local events</li> <li>designation and regular updates of tsunami focal points who will receive tsunami early warning messages and the method of delivery and dissemination noting the prohibitive costs of the fax method and the need for costs efficiency</li> </ul>	See Earlier about new PTWC producst and Pacwave 13.
J	To support a continuation of the partnership between the FMI and the Government of Finland, SPREP and PICTs.	<ul> <li>SPREP has worked very closely with the FMI on the FINAPC project from its conception to now its implementation</li> </ul>
К	that national meteorological directors be urged to provide comments on the development of the new FMI project, and requested the Secretariat to ensure that there would be sufficient personnel available for implementing the new project without detriment to other programme areas, and called for active engagement between Directors, partners and SPREP management in this regard.	<ul> <li>The FINPAC project documents were circulated in 2011 for comments from PMC members as requested. SPREP has advertised for a project coordinator and have other members of the PMDP involved in the implementation</li> </ul>
L	that in developing new projects and programmes for the region, that regional met service directors are consulted in relation the national resources and capacity to respond to project needs and request partners to be cognizant of national mandates	PMDP is monitoring this aspect

	that may inhibit their full participation, requiring alignment with national strategic and operational plans.	
М	the role of the Pacific Desk Partnership, should involve coordination with donors to ensure the sustainability of projects and assist in the leverage of additional partnership support.	This is built into the PMDP staff PDP
Ν	that in relation to the DRM/CCA roadmap agreed to provide input to SPREP/SPC(SOPAC Division) by 31/8/2011	PMDP has provided input to the roadmap process

### (iii) Recommendation from the first Pacific Meteorological Council (PMC)

No	RECOMMENDATIONS of the PMC 1	Status/Progress
3	The PMC noted the process for the completion of the PIMS.	The PIMSwas completed and launched in 2012
4	The PMC agreed on the need for active participation in the Pacific Wave 11 exercise and requested National Meteorological Service Directors to follow up with their national tsunami focal points.	Most or all the NMSs participated in the Pacific Wave 11 exercise in November 2011
5	The PMC noted the importance of having in-country capacity building and training for tsunami preparedness and early warning systems and called on partners to give consideration to such requests from National Meteorological Services.	<ul> <li>Several trainings were organised for the NMSs in the region. The first one was organised by PTWC and SOPAC/IOC in Vanuatu</li> </ul>

(iv) Report on the Outcomes of the Pacific Regional Meteorological Services Directors Workshop in Support of Climate Adaptation Planning in the Pacific Islands - Majuro, Marshall Islands - August 8, 2011

14th Meeting of Regional Meteorological Services Directors Meeting - Majuro, Marshall Islands - 9-12 August 2011

Recognizing that the climate is changing and that the Pacific Islands are among the most vulnerable to the impacts of climate change.

Recognizing that the provision of climate services is critical to the sustainable development of Pacific Island countries.

Recalling that the September 2009 World Climate Conference-3 (WCC-3) Declaration decided to establish a framework to strengthen the production, availability, delivery, and application of science-based climate prediction and services.

Recalling that the Global Framework for Climate Services (GFCS) with the following components was endorsed by the 16th WMO Congress held in Geneva from 31 May to 3 June 2011: The User Interface Platform; The Cimate Services Information system; The Observations and Monitoring component; The Research, Modeling, and Prediction component; and The Capacity Building component.

Reflecting on the outcomes of the "Pacific Regional Meteorological Services Directors Workshop in Support of Climate Adaptation Planning in the Pacific Islands" (the Workshop) held in Majuro, Marshall Islands on August 8, 2011.

Acknowledging and appreciating the assistance of agency, institution and organization-based development partners operating in the region.

Requests the RA V Meteorological Service Directors adopt the findings and recommendations (listed below) of the Report on the outcomes of the Workshop:

No	RECOMMENDATIONS of the PMC 1	Status/Progress
1	NMSs'Directors and development partners recommended that further investigation is required on organizational structures and functions at the regional level to support climate services consistent with the GFCS, to minimize gaps and overlaps, and to align climate service activities that already exist in the region. The investigation should consider geographic, sectoral and functional core capabilities (e.g., observations and data management) as a basis for supporting the effective delivery of climate products and services.	<ul> <li>A US NOAA funded Pacific Climate Services Forum was organised in Fiji in January 2013. As part of this, a Partners Meeting was held, where representatives from almost 30 agencies, institutions, and organizations involved in climate services in the region met to exchange information on and align projects and activities in the context of the GFCS.</li> <li>Aspects of the FINPAC and COSSPac projects include activities that are consistent with the goals of the GFCS.</li> </ul>
2	NMSs' Directors and development partners recommended that further investigation is required to address identified issues related to data sharing.	• Further discussion on the issue of data sharing within the context of Resolution 1 of Extra- ordinaarysession of the World Meteorological Congress (Cg-Ext. (2012)).
3	NMSs Directors and development partners recommended that future RMSD/PMC meetings be linked with those of the PPDRM and the PCCR.	<ul> <li>The PMC-2 held in parallel to the PPDRM and the PCCR.</li> <li>PMC-2 will be held back-to-back with the Road Map Meeting for PCCR and PPDRM.</li> <li>A joint meeting between NMSs/NDMOs during PMC-2.</li> <li>PMC members will participate in the PCCR technical working groups's sessions.</li> <li>.</li> </ul>
4	NMSs' Directors and development partners recommended the coordination of web-based portals, clearing houses etc. aimed at the discovery of and access to regional information on climate data, activities, products and research.	• Several information portals have been developed since PMC-1, including the Pacific Climate Change Portal. Continued discussion on these matters is warranted.

## (v) RANET Workshop recommendations

No	RECOMMENDATIONS of the PMC 1	Status/Progress
11-1	RANET systems needs more formalized and clear guidance with a thrust towards	RANET has focused on 1 way dissemination of multi-hazard early messages from regional Centres to
	recommendations for new technology expanding past RANET into different newer	NMHS to NDMOs, such as EMWIN., and RAPIDCast A secondary focus has been 2 way HF and
	forms of technology.	Chatty Beetle communications to remote islands.
11-2	2 Other avenues should be investigated to improve meteorological communications	<ul> <li>See the outcomes of the WMO RA V WIS Workshop 29-April-May 3, 2013</li> </ul>
	networks for Met Service Offices.	

11-3	A task team is needed to evaluate the capabilities and make recommendations on priorities, that have to be a part of the WMO RA V Working Group on Infrastructure, and be part of the Operating Plan for the WMO RA V Typhoon Committee.	See the outcomes of the WMO RA V Working Group on Infrastructure, 25-28, April, 2013
11-4	RMSD meeting should provide priorities through Strategic Action Plans and how to evolve these backup communications systems. The strategy should address questions about the direction and need for connectivity to regional networks, national, and local networks, and reduce overlapping programs where possible	<ul> <li>Needs and requirements should be addressed in Country Reports for review at the 2<sup>nd</sup> PMC meeting in Nadi, Fiji, July 1-5, 2013</li> </ul>
11-5	Plans for regional systems that support national and local communications needs should be better linked to national development and assistance plans, which is where AID agencies are looking to fund national priorities. Need the expression coming from the Island States.	<ul> <li>Needs and requirements should be addressed in Country Reports and SPREP will consolidate them at the 2<sup>nd</sup> PMC meeting in Nadi, Fiji, July 1-5, 2013.</li> </ul>
11-6	Closer follow-up for ongoing efforts to strengthen tsunamis capacity building efforts between the national tsunami warning entity and the NDMO is needed.	<ul> <li>WMO and the Government of Samoa sponsored IOC/ICG/PTWS SW Pacific Working Group and Regional Tsunami Capacity Building Workshop was held in Apia, Samoa before the WMO RA V Tropical Cyclone Committee Meeting.,</li> <li>IOC-UNESCO Tsunami Information Center (ITIC) and NOAA's funded Training Programme Hawaii (ITP – Hawaii) on Tsunami Early Warning and Mitigation System, Honolulu, Hawaii, USA, 20-30 August 2012.</li> <li>IOC-UNESCO ITIC and NOAA funded Strengthening Tsunami Warning and Emergency Response Workshop on the Development of Standard Operating Procedures Honolulu, Hawaii, USA, 24-28 September 2012</li> <li>IOC-UNESCO and SOPAC Division of the Secretariat of the Pacific Community (SPC) funded National Consultation(s) to Review Samoa Operational Procedures for Tsunami and Tropical cyclones, Apia, Samoa, March 2013.</li> <li>A Regional Tsunami Training Workshop and Regional Consultation on PTWS/PTWC New Tsunami Products will be held August 12-16, 2013, in Wellington, New Zealand.</li> </ul>
11-7	A small team be tasked with working with NMSs' Directors to assess their technical maintenance training needs for the communications systems they utilize, and that the curriculum be identified to match those identified priorities and technical competencies.	Further dicussions on this item, taking into accounts other issues, if required
11-8	Recommended HF communications be included as part of strategic plan for meteorological services.	<ul> <li>Further discussion on this item. HF communications require investment refresh and technical training to maintain, and is a lower priority to other communications systems. Funding to relocate HF regional HUB from Met Service to a Pacific Island country to operate has been identified.</li> </ul>
11-9	Recommend SPREP work with SOPAC to review its capability to provide technical training and instrument calibration support to the m meteorology services community, and report back to the SPREP.	While installing EMWIN systems in Fiji, team provided training to SOPAC/SPC'stechnical maintenance staff with the goal to help maintain EMWIN systems for NDMOs during visits to PICTs
11-10	Ensure coordination of plans to deploy RapidCast receiving systems with NMSs occur, and instruction manuals are received prior to deployment, and on-site training plans are confirmed with receiving NMSs.	<ul> <li>RAPIDCast installation manual developed by University of Hawaii PEACESAT.</li> <li>Installation of RAPIDCastin the northwest Pacific countries to be done in July-September 2013 timeframe.</li> </ul>
11-11	Endorsed a key outcome on Early Warning Systems from the 3rd Session of the Pacific Platform for Disaster Risk Management, held August 1-5, 2011, in Auckland,	Regional earning warning system group has yet to be established.

11-19	A task team should be appointed to work out protocols and standard operating procedures for use of the RANET Chatty Beetles among participating agencies.	<ul> <li>Protocols have been established for RANET Chatty Beetle users in Marshall Islands and has resulted in 6 hourly SYNOPs being collected. Daily and weekly tests being carried out between NDMO and Weather Office in American Samoa.</li> </ul>
11-18	Recommended that Met Service Directors review the current Tsunami SMS Distribution List and coordinate corrections with the International Tsunami Information Center (ITIC) and UNESCO/IOC Regional Officer in Suva, Fiji.	• Updated after the PMC-1. A request will be sent out prior to the 2 <sup>nd</sup> PMC meeting.
11-17	Recommended a broader approach that requires coordination between SPREP, SOPAC Division, and SPC, utilizing the results of the Pacific Communications Survey and the SOPAC Tsunami Warning and Mitigation Systems.	Yet to be undertaken.
11-16	Agreed to survey by NMSs' Directors on their priorities for 3 new products needed to be uploaded to the new GOES-West broadcast.	A reminder e-mail to be sent out and discussed at the PMC-2.
11-15	Re-circulate the Communications Survey of 2010 to NMSs' Directors, and urge them to complete the survey, so the results can be utilized to identify national and regional priorities for communications requirements.	• The Survey will be sent to those countries that completed and returned the survey for updating, and a 2 <sup>nd</sup> survey will be set out
11-14	Review the need for EMWIN type systems beyond the national Met and Disaster Management Offices, consistent with national action plans.	<ul> <li>RAPIDCast, using a KU-band 1 way broadcast, is designed for use beyond NMHS/NDMOs. Chatty Beetles, 2 way text messaging capability, can provide wake up alerts, and is used in Micronesia for collecting SYNOP reports beyond NMHS/NMDOs.</li> </ul>
11-13	Ensure tsunami regional and national products and warning messages are placed on EMWIN, and insure that resources are identified to sustain the replacement EMWIN system once it has been re-deployed to the NDMOs and refreshed at the Met Service Offices.	<ul> <li>Tsunami regional products from PTWC are being disseminated via EMWIN. As with any donor funded system, maintenance and repair are as resources are made available.</li> </ul>
11-12	procedures for relevant agencies, as well as simplify and standard operating messages and alerts for inclusion in ongoing education and public awareness programmes". A copy of the draft installation schedule for installing EMWIN and RapidCast systems be made available for review and endorsement.	<ul> <li>Schedule was submitted to SOPAC/SPC and SPREP with funding support to replace EMWIN systems at NDMOs and upgrade EMWIN systems at NMHSs.</li> <li>Kiribati Meteorological Service ,Pohnpei/FSM are the last EMWIN systems to be upgraded to GOES-15 in the July-August, 2013 time frame.</li> </ul>
	New Zealand, that recommends the establishment of a "Pacific regional early warning working group to coordinate and complement the efforts of other working groups and Pacific Island Countries and Territories to assist in the development of early warning systems both a regional and national levels and to establish clear standard operating	