

Outcomes of the 14th RMSD and 1st PMC

The RMSD convened for its 14th session at the International Conference Centre in Majuro, Republic of the Marshall Islands from 9-12th August 2011. It was preceded by a Pacific Regional Meteorological Services Directors Workshop in Support of Climate Adaptation Planning in the Pacific Islands on 8th August. The objectives of the meeting were for participants to formulate and establish a clear understanding of the Pacific Meteorology Council (since renamed the Pacific Meteorological Council, PMC), the Pacific Desk Partnership (since renamed the Pacific Meteorological Desk Partnership) concept, and the Strategic Operational Plan for Meteorology in the Pacific (2012-2015). A total of 54 participants attended the meeting. Primarily the participants were Meteorological Service Directors and representatives from American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, New Caledonia, New Zealand, Palau, Papua New Guinea, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, United States of America and Vanuatu. Representatives of NOAA, NIWA, the Finnish Meteorological Institute, SPREP, SPC, WMO, UNESCO-IOC, Institute for Global Environmental Services, University of Oklahoma, Pacific ENSO Applications Climate (PEAC) Centre (collocated at the University of Hawaii and the University of Guam) were also present.

Dr. Netatua Pelesikoti, Pacific Futures Programme Manager, speaking on behalf of the SPREP Director, noted that the RMSD was launching a new era in the field of meteorology in the region. Based on the outcomes of the review of the regional Meteorological strategy (2010) and bearing in mind the decisions of the 21st SPREP Meeting in 2010, she remarked that this 14RMSD meeting would be launching the PMC a way forward on a new strategic plan for developing and supporting meteorology in the region, and the Pacific Meteorological Desk Partnership. She also outlined the approach that SPREP is seeking to take on climate change adaptation and disaster risk reduction and how meteorological services underpin those efforts. The host country aptly demonstrates the sheer vulnerability of atoll and small island countries. She emphasized that there is now a chance of meaningful change to assist Pacific meteorological services to provide much needed assistance for the enhancement of livelihoods of the peoples of the region.

The Honourable Ruben Zackhras, Minister in Assistance to the President of RMI, thanked the RMSD for agreeing to meet in RMI. He welcomed the participants on behalf of the Government, and noted that the Pacific is a major driver of the global climate system, while on the other hand the islands are the smallest and most vulnerable to climate change. He stressed the importance of the role of the Meteorological services in providing advice and assistance to policy and decision makers.

The RMSD elected Reginald White of Marshall Islands as Chair of the 14th RMSD and Salesa Kaniaha of Vanuatu as Vice-Chair by acclamation.

The RMSD:

Organizational matters and national reporting

1. 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 Pacific Climate Change Roundtable and the Pacific Platform for Disaster Risk Management;
2. Noted the progress made at the regional level in relation to the implementation of decisions and recommendations arising from the 13th RMSD and commended the Secretariat and partners for their support to national and regional meteorology support activities in the Pacific Island Countries and Territories;
3. Acknowledged the reports by National Meteorological Service Directors for the richness of their contributions to the regional knowledge base on best practices, challenges and future directions for cooperation in the region;
4. Appreciated the valuable contributions to improve services and observations infrastructure by the many international and regional partners in support of Meteorological Services in the region;
5. Noted that certain issues raised in country presentations required further discussion during the meeting, and these included ICAO requirements 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 opportunities were made in the presentations;
6. Agreed that the key developments presented by the National Meteorological Service Directors are encouraging steps in the right direction, but noted that there are still many challenges. In particular, capacity and funding issues remain key to the further development and enhancement of Meteorological Services in the region. There were valuable lessons learned from the presentations by National Meteorological Service Directors such as the experience of those who have been able to engage with other sectors in order to secure more resources, such as with adaptation projects in the water and climate change sectors, and encouraged others to do the same;
7. 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.
8. Also recognized that a number of countries have been affected by recent tsunami events and as a result numerous Meteorological Services are reconsidering their mandates to tackle this, including capacity needs. In this regard, NMS articulated the need for assistance with these efforts including policy and technical support.

16th WMO Congress

9. Welcomed the outcomes of the 16th WMO Congress (Cg-XVI), in particular, the new WMO 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).

10. 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;

11. Noted the importance of highlighting the linkages between the global and the regional strategies for enhancing meteorological services;

Pacific Meteorological Strategic plan

12. Agreed that there was general agreement that the strategic plan needed to be simplified to clearly articulate scope, audience, objectives and application;

13. 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;

14. Noted also that there was general agreement that the plan should be country driven and reflect national NMS priorities;

15. Acknowledged the links to other regional strategies and frameworks;

16. Agreed on the need for a strong governance structure;

17. Noted the proposal to task the Secretariat to commission a Technical expert to further consultations and prepare a re-draft of the strategic plan for consideration by early 2012;

18. Noted the need for specific references to national priorities on drought.

Road map towards an integrated regional strategy for DRM and CCA and Mitigation by 2015.

19. Confirmed their support for a joint meeting of the PCCR, DRM communities and the Regional Meteorological Services Directors in 2013;
20. Agreed on the need to ensure input from the meteorological community into the CCA/CCM & DRM Technical Working group;
21. Endorsed in principle the roadmap.

Climate Services Workshop

22. A presentation was made regarding the workshop on Climate Services held on Monday 8th August 2011. A number of recommendations were put forward for consideration by PMC. These have been attached as Attachment 2. 1 and were adopted by the PMC.

RANET and Telecommunications Meeting

23. A presentation was made regarding the meeting on RANET and Telecommunications held on Saturday 6th August 2011. A number of recommendations were put forward for consideration by PMC, and presented by the Chair of this meeting, Mr. Edward Young (NOAA). These have been attached as Attachment 2.2 and were adopted by the PMC.

Pacific-Finland Project

24. Acknowledged the successes to date of the project and commended the FMI and the 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;
25. Noted that, since 2002, the U.S. has funded the PI-GCOS position at SPREP; however, instead of being dedicated to coordinating and moving forward with the PI-GCOS program, the PI-GCOS role has been used primarily to fulfil the duties of the long-dormant, but clearly required, SPREP Meteorology and Climatology Officer (MCO). An example of this is the 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;
26. Emphasized the importance of building in the costs of on-going maintenance to ensure the sustainability of any new equipment purchased by projects;
27. Noted the opportunity for this project to build upon the existing RANET work;
28. Agreed on the need to take a multi donor approach to this project, and invited additional partners to provide support;

29. Emphasized that the project should take into account other projects happening in the region, the smallness of NMHS and their capacity constraints, and take a holistic regional approach;

30. Noted the role of the Pacific Desk Partnership as an important tool for coordinating with donors to assist in the leverage of additional partnership support and ensure the sustainability of projects.

Pacific Tsunami Warning Centre

31. Presentations were made by NOAA and a number of issues raised were noted by the participants as requiring further consideration, such as guidance products, Pacific Wave Exercise 2011, updating of contact points in-country etc.

RANET

32. A presentation was made regarding the workshop on RANET held on Saturday 6th 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.

Severe Weather Forecasting and Disaster Risk Reduction Demonstration Project

33. 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 project it will not be considered at this time. Furthermore, some concern was expressed about the effectiveness of the DRR aspect of the project and that more attention needed to be given to engaging with, and meeting the needs, of the DRR community.

COSPPac

34. 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;

35. 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;

36. Noted the need to include national and regional organisations as 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.

Pacific Australia Climate Change Science and Adaptation Programme (PACCSAP).

37. 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 PACCSAP.

The RMSD recommended:

- a) That the Secretariat and partners be requested to further enhance their support with more targeted efforts in relation to outcomes and decisions of meetings of the RMSD.
- b) That a regularly updated events calendar be created and disseminated by the Secretariat in cooperation with partner organizations, particularly WMO, and that the announced new applications and technologies by several partners should be made available by email distribution and websites.
- c) That Meteorological Service Directors should become engaged in other national climate change initiatives, in particular for adaptation in the water and food security sectors as well as 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 to staffing support for the Pacific Desk, and to enhance the visibility of its partnerships with SPC (in particular its SOPAC Division).
- e) The Secretariat be requested to synthesize the specific needs identified by National Meteorological Service Directors in their presentations and country papers and to regularly update these for information and dissemination.
- 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.
- 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;
- h) 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.
- i) 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:
 - review of new warning products
 - participation in the November 9-10 PACWAVE focused on local events
 - 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

- j) To support a continuation of the partnership between the FMI and the Government of Finland, SPREP and PICTs.
- k) 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.
- 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 that may inhibit their full participation, requiring alignment with national strategic and operational plans.
- m) That 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.
- n) That in relation to the DRM/CCA roadmap agreed to provide input to SPREP/SPC (SOPAC Division) by 31/8/2011

The Pacific Meteorological Council

1. The Pacific Meteorological Council (PMC) was formally convened on the 12th of August, 2011, and upon nomination by Tonga and USA elected Reginald White (RMI) as Chair, and Salesa Kaniaha (Vanuatu) as Vice-Chair.
2. The PMC endorsed the RMSD meeting outcomes, including the resolution and the terms of reference for the PMC.
3. The PMC noted the process for the completion of the Pacific Meteorological Strategic Plan.
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.
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.
6. All PMC Members and several partner organizations offered their thanks to the Chair and the Vice-Chair for their able handling of the meeting, expressed their gratitude to the Government and People of the Republic of the Marshall Islands for the excellent hosting facilities and hospitality, and thanked the Secretariat for organizing the meeting.
7. The Chair offered his thanks to the participants and to the partners who had funded the RMSD and the PMC, and officially closed the 1st meeting of the PMC.

Attachment 2.1

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

The September 2009 World Climate Conference-3 (WCC-3) Declaration decided to establish a Global Framework for Climate Services (GFCS) to strengthen the production, availability, delivery, and application of science-based climate prediction and services. The 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 Climate Services Information system
- The Observations and Monitoring component
- The Research, Modeling, and Prediction component
- The Capacity Building component

Many in the Pacific Islands region recognize the importance of providing climate services to their communities to achieve sustainable development. Coupled with this understanding, and in response to the outcomes of the WCC-3, this “Pacific Regional Meteorological Services Directors Workshop in Support of Climate Adaptation Planning in the Pacific Islands” was organized with the following theme:

“Global Framework for Climate Services (GFCS): The role of Pacific Islands National Meteorological Services (NMSs) and development partners in implementing the GFCS to support National Programs of Action for climate change adaptation in the Pacific”

This workshop report, for delivery ahead of the 2011 APEC Leaders meeting in November in Hawaii, summarizes the outcomes of the Pacific Regional Meteorological Services Directors Workshop in Support of Climate Adaptation Planning in the Pacific Islands, held in Majuro, Republic of the Marshall Islands, on August 8, 2011.

The objectives of the workshop included assessing the role of Pacific Islands NMSs and development partners in implementing the GFCS; improving technical and substantive engagement in regional efforts related to climate services and promoting expert and practitioner-level relationships at the technical level; and identifying mechanisms to incorporate applied science and research to support climate change adaptation activities.

Outcomes of the workshop discussions fall into six general areas:

- 1) The role of Pacific Islands NMSs in implementing the GFCS;
- 2) Engagement in regional efforts related to climate services;
- 3) Climate data exchange and WMO Resolution 40;
- 4) Linking climate change adaptation with disaster risk reduction and sustainable development activities;
- 5) Building the capacity of institutions, infrastructure and human resources; and
- 6) Integrating regional climate-related web-portals for all users.

1) The role of the Pacific Islands NMSs in implementing the GFCS

NMS directors and development partners identified NMSs as the linkage between users and providers. NMSs provide a vital role in delivery of climate products and services to the people that need it. Examples of effective communication of climate-related data, information, and services were shown from Samoa, Vanuatu and Kiribati, consistent with the GFCS components and structure.

It was recognized that:

- Community consultation is a key element of effective delivery and adoption of climate products and services. An on-going and sustained evaluation process is needed to ensure that climate information is used effectively for decision-making.
- Coordination between NMSs and other sector-based agencies, institutions, national climate change committees, and organizations is vital to ensure data and information is available and is tailored to the users needs in terms of content, format, and timing.
- Sustained observations and monitoring that support weather services are the foundation for the development of data and information of a quality needed to support climate services. Dedicated resources are needed in NMSs to support continued sustainable data monitoring, coordinated data management and stewardship. Adherence to WMO standards for the collection and analysis of information should be encouraged across the region as a means to ensure quality and consistency of data from multiple sources.

It was further recognized that some Pacific Island nations have limited capacity for delivering climate services. There is a need for capacity mapping across the region to identify where additional resources and support are needed to raise all NMSs to a comparable level of effective climate service delivery. Such information could be used to identify potential 2012-2015 fast-track projects under the GFCS.

2) Engagement in regional efforts related to climate services

NMS 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.

This recommendation is consistent with WMO RA V Resolution 2 (XV-RA V) "Establishment of Regional Climate Centres" which calls for an assessment of current RCC functions that occur within the region and a subsequent gap analysis.

Good examples were demonstrated of cross-region collaboration, research and integrated delivery of climate services that already exist within and between agencies, institutions, and organizations (including NMSs) in the region, conducting activities such as: PI-GCOS, PI-GOOS, Pacific HYCOS, PI-CPP, APAN, SPSLCMP, PCCSP, PASAP, CLIMRAP, METPI, CliDEsc, PaCIS, PEAC, PICCC, PRIMO, Pacific RISA, and PCCR, amongst others.

3) Climate data exchange and WMO Resolution 40

NMS directors discussed issues surrounding data sharing across and outside of the region as it relates to the GFCS and relating to the provision of a solid basis for climate products and services in the region. NMS directors identified the following issues:

- Benefits of data sharing need to be returned to the NMSs;
- Ensure high quality data are available for sharing;
- Lack of resources to respond to data requests;
- The Intellectual Property of the data needs to be recognized and preserved;
- Costs of data collection, management and delivery need to be recovered;
- Sovereignty of data needs to be recognized;
- National policies and legislation need to be considered;
- Capacity for data sharing varies across the region;
- Ownership of data needs to be respected;
- Leverage for obtaining funds should be retained; and
- Revenue generation from data provision should not be compromised.

NMS directors particularly noted the need for re-investment locally to support infrastructure and data management systems. They also noted that MOU/MOAs represent a practical mechanism for data exchange, yet these mechanisms are not necessarily the most effective tools.

NMS directors and development partners recommended that further investigation is required to address the above issues related to data sharing.

4) Linking climate change adaptation with disaster risk reduction and sustainable development activities

NMS directors and development partners highlighted the need to link climate change adaptation (CCA) activities with disaster risk reduction (DRR) and sustainable development (SD) initiatives. Such linkages provide opportunities to support continued sustainable data monitoring, coordinated data management and ongoing provision of climate products and services. They also highlighted the need to acknowledge existing and on-going partnerships within and outside of the region between donors, agencies, and communities.

NMS directors and development partners recommended that future RMSD/PMC meetings be linked with those of the Pacific Platform for disaster risk management and the Pacific Climate Change Roundtable.

5) Building the capacity of institutions, infrastructure and human resources

NMS directors and development partners emphasized the need to support systematic development of the necessary institutions, infrastructure and human resources to provide effective climate services. Areas identified where capacity building is needed included:

- Coordinated data rescue, digitization and management;

- Sustainable observations, monitoring and communications equipment meeting WMO standards and related physical infrastructure;
- Additional staff and training to enable the continuing development and delivery of local products and services;
- Effective interaction through dialogue and workshops with sector representatives and other users to inform product and service requirements; and
- Web-based and other IT systems and tools to enhance the access and use of data and products.

6) Integrated regional climate-related web-portals for all users

NMS 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. The aim of this coordination is to minimize overlaps, identify gaps, and align current and future dissemination of information from projects within the region.

There was also recognition that web-based platforms should not be the sole mechanism for information dissemination due to poor internet access in some countries within the region.

Resolution 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 Climate 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:

Recommendation 1:

NMS 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.

Recommendation 2:

NMS directors and development partners recommended that further investigation is required to address identified issues related to data sharing.

Recommendation 3:

NMS directors and development partners recommended that future RMSD/PMC meetings be linked with those of the Pacific Platform for disaster risk management and the Pacific Climate Change Roundtable.

Recommendation 4:

NMS 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.

Attachment 2.2

Recommendations of the RANET Telecommunications Meeting

14RMSD, Saturday 6 August 2011, Malele Conference Room, Marshall Islands Resort.

The RANET Telecommunications Meeting was held on 6 August, at the Marshall Islands Resort, and drew the participation of Directors of Pacific National Meteorological Services (NMS), representatives of technical agencies from the US, Australia, and New Zealand as well as representatives from CROP and other agencies in the region. The meeting dealt primarily with the telecommunications issues and development work recently undertaken in the past two years since the previous meeting at the 13th Regional Meteorological Services Directors meeting in 2009. It also spent time discussing the planned work on RANET and telecommunications in the next couple of years. Discussion was had on several aspects of the progress of the implementation of several works in the past year including upcoming works. This brief report presents the key recommendations from this meeting for consideration of the Directors at their 14RMSD meeting. Mr. Edward Young, Deputy Director of NOAA Pacific Region Headquarters, chaired and facilitated this meeting.

Recommendation 2011-1 RANET systems needs more formalized and clear guidance with a thrust towards recommendations for new technologies, expanding past current RANET systems into different and newer forms of technology.

Recommendation 2011-2 Other avenues should be investigated to improve meteorological communications networks for Met Service Offices.

Recommendation 2011-3 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.

Recommendation 2011-4 RMSD meeting should its priorities are reflected in the Pacific Islands Meteorological Strategic Plan, 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

Recommendation 2011-5 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. Expressions of needs should come from Pacific Islands Countries and Territories (PICTs).

Recommendation 2011-6 Closer follow-up for ongoing efforts to strengthen tsunamis capacity building efforts between the national tsunami warning entity and the NDMO is needed.

Recommendation 2011-7 A small team be tasked with working with Met Service 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.

Recommendation 2011-8 Recommended HF communications be included as part of the Pacific Islands Meteorological Strategic Plan.

Recommendation 2011-9 Recommend SPREP work with SOPAC to review its capability to provide technical training and instrument calibration support to the Met Service community, and report back its findings.

Recommendation 2011-10 Ensure coordination of plans to deploy RapidCast receiving systems with Met Offices occurs, instruction manuals are received prior to deployment, and on-site training plans are confirmed with receiving Met Service Offices.

Recommendation 2011-11 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, 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 procedures for relevant agencies, as well as simplify and standardize early warning messages and alerts for inclusion in ongoing education and public awareness programmes”.

Recommendation 2011-12 A copy of the draft installation schedule for installing EMWIN and RapidCast systems be made available for review and endorsement.

Recommendation 2011-13 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.

Recommendation 2011-14 Review the need for EMWIN type systems beyond the national Met and Disaster Management Offices, consistent with national action plans.

Recommendation 2011-15 Re-circulate the Communications Survey of 2010 to Met Service Directors, and urge them to complete the survey, so the results can be utilized to identify national and regional priorities for communications requirements.

Recommendation 2011-16 Agreed to survey Met Service Directors on their priorities for 3 new products needed to be uploaded to the new GOES-West broadcast.

Recommendation 2011-17 Recommended a broader approach for coordination between SPREP, SOPAC Division, and SPC, utilizing the results of the Pacific Communications Survey and the SOPAC Tsunami Warning and Mitigation Systems.

Recommendation 2011-18 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.

Recommendation 2011-19 A task team should be appointed to work out protocols and standard operating procedures for use of the RANET Chatty Beetles among participating agencies.