



EXECUTIVE SUMMARY AND RECOMMENDATIONS OF THE 13RMSD

The 13th Regional Meteorological Services Directors (RMSD) meeting was held 5th to the 8th May at the Novotel Hotel, Nadi, Fiji, and hosted by the Fiji Meteorological Service. Mr. Rajendra Prasad was unanimously elected Chair of the meeting, with a Drafting Committee formed of the Secretariat and volunteers from participants. The Vice Chair was elected towards the end of the meeting and was chosen to be Mr. Reginald White, Director of the Marshall Islands National Weather Service. As such the kind offer of the Republic of Marshall Islands to host the 14RMSD was accepted by the meeting and set for 2011 with final dates to be arranged by the Chair, Vice Chair, and the Secretariat.

The meeting was opened by the Commissioner Western, Mr. Joeli Rokovada, who commented on the need to strengthen the capacity of national meteorological services, and encouraging their continued role in disaster risk reduction and management. The meeting followed largely the course set by the agenda with minor adjustments made to suit the time needed for certain issues of longer discussion requirements during the meeting. The meeting successfully concluded with discussions on the role of the RMSD in the Joint Meeting of the Meteorological Services Directors and National Disaster Managers held on Monday 11th May, the first joint meeting of the two groups since 1998. The recommendations and outcomes of the 13RMSD are presented below and are split into the 5 categories defined by the SDMP¹.

STRATEGIC PLANNING

Update on the Urgent Review of the Meteorological Services

- **Endorsed** provision of support to the SPREP Secretariat to facilitate the work of the Review, including availing Directors of RMSD to interviews and surveys via in-country visits, email, or by teleconferencing.
- **Urged** the Chair of the RMSD to work with the SPREP Secretariat to provide updated reports to the RMSD as developments and milestones of the Review are achieved.

¹ SDMP – the Strategic Action Plan for the Development of Meteorology in the Pacific Region 2000 – 2009. This is a regional action plan developed by SPREP and partners to guide development along key issues and needs facing the Pacific Region National Meteorological Services. The SDMP was launched in 2000. A Review of the SDMP is planned for 2009-2010 by SPREP and partners.

The Review and Renewal of the Strategic Action Plan for the Development of Meteorology in the Pacific region 2000 - 2009

- **noted** those 12RMSD recommendations that have been take up for action by the SPREP Secretariat and others as will be reported during the course of the 13RMSD country reports. The Drafting Committee will be tasked to note completed and outstanding action items and compile these for inclusion and reference in the 13RMSD report (that outstanding action items will be continued for completion between 13 RMSD and 14RMSD).
- **endorsed** the findings of the WMO-led mission to Fiji, in particular the noted concern of the urgent situation recruitment of meteorologists for the upcoming 2008/9 tropical cyclone season, and proposed solutions involving the seconding of SPREP/WMO Member meteorologists from their NMHS to assist the FMS.
- **noted** the decision(s) of the SIS and Forum Leaders on regional Met services, and that SPREP has been asked to continue to take the lead on this issue.
- **endorsed** the proposed review of the Strategic Action Plan for the development of meteorology in the Pacific Region (SDMP) 2000-2009 and the relevant activities as entered into the Secretariat's Work Programme and Budget 2009.

WMO Strategic Plan and Region V Strategic Planning Process

- The meeting **recommended** further development of the plan following amendments as decided at the upcoming WMO RAV meeting.

Review of the Strategic Action Plan for the Development of Meteorology in the Pacific Region 2000-2009

- The meeting **recommended** that steps be taken by SPREP to advance the review and preparation of a draft SDPM 2010-2019 with the view to its consideration and adoption at 14RMSD.

TELECOMMUNICATION SYSTEMS AND SERVICES

MTSAT and Direct Reception

- The meeting **urged** RMSD members to note the changes that are taking place and to install equipment and systems through donor assistance where this is necessary and possible as necessary to ensure continuity of data flow and/or the receipt of improved data.

Outcomes of RANET and Telecommunication Committee Meeting

- **Endorsed** the Recommendations of the RANET/Telecommunications Working Group side meeting held on 4 May found at Annex 1.

APPLICATION OF METEOROLOGY AND CLIMATOLOGY

QMS

- The meeting **recommended** that those NMHSs which had done work on the QMS be requested to assist others.
- The meeting **recommended** that training for aviation forecasters to be regionalized and that a common framework be adopted that trainings commence as soon as possible.
- The meeting **recommended** that countries use a gradual approach to QMS by starting with aviation services during the first stage before extending the QMS to other activities.
- The meeting **recommended** that NMHSs, SPREP, WMO, SOPAC, approach potential donors (e.g France and Finland) to fund transport and accommodation of auditors to those PI-NMHSs that wish to be audited or included in a “kick-start” workshop.

ICAO Identified Deficiencies

- The meeting **recommended** that NMHSs to collaborate with each other, ICAO, WMO and national aviation authorities to address deficiencies identified in the recent ICAO project consultancy report (REF. REPORT NUMBER inserted here)

Pacific Islands Climate Prediction Project (PICPP)

- The meeting **recommended** that NMHSs involved in the project actively participate in the joint review of PICPP and SPSLCMP.

Status of Climate Data Archival:

- The meeting **urged** PICs to further pursue securing paper and other records digitization efforts through national or donor funding. In some instances efforts to recover paper records colonial archives have been successful and should be pursued further.

Status of Climate Data Bases:

- The meeting **recommended** that urgent effort be made by the region to replace for CLICOM, if necessary through donor and WMO support.

Climate data access, monitoring and prediction services:

- The meeting **encouraged** that monthly PICPP, ICU, and PEAC monthly teleconferences, bulletins, be continued and all PICs participate in these.
- The meeting **recommended** that annual or biennial workshops be held aimed at assisting PIC Met Staff with ENSO and climate monitoring products.

Climate Change Trends and Projections:

- The meeting **recommended** that data rescue, database development be a strong part of PCCSP, and effort should be made to improve research capabilities or partnerships through PCCSP.

Training for Climate Services

- More training is required e.g. in agro-meteorology, quality control attachments e.g to PEAC, BOM, NCC, NIWA, NCC
- Requested WMO and relevant partners to explore the development of tertiary level course(s) in operational climatology for the NMHSs. Urged WMO to replace CLICOM with a newer and more advanced climate database system.
- Improve Climate Data Base Management systems with the funds being made available for Climate Change.

Island Climate Update (ICU)

- The meeting, noting the crucial contribution by the ICU in developing and building climate forecasting capacity in the region, **requested** NZAid, SOPAC/SPREP and NIWA to continue to work with Pacific Island communities, NMHSs in particular and associated partners to further develop the use, application and effectiveness of the information provided via the ICU by in-country end-users.
- **Urged** Pacific Islands NMHSs to work with SOPAC/SPREP and NIWA to fully identify the demands for, and benefits of, the ICU through in-country end-user consultation workshops, and encourage NMHSs to articulate this demand and need to SOPAC/SPREP through their respective in-country Governing Council Members to enable prioritisation of the ICU within the SPREP or SOPAC programmes and budgets.
- **Urged** SOPAC/SPREP, NIWA and the NMHSs to work together during 2009 to identify and develop a long-term strategic and sustainable direction for the ICU that directly contributes to the building of seasonal and climate prediction capacity for the NMHSs within the context of the aims and objectives of the Strategic Plan for the Development of Meteorology in the Pacific.

Pacific GCOS

- The meeting **urged** that PI-GCOS partners **continue** to support the PI-GCOS programme and its activities undertaken and planned
- to **endorse** the plans towards the PI-GCOS Action Plan review and update and planning and organization of a PI-GCOS Steering Committee meeting

University of Oklahoma PACRAIN and other activities in the Pacific

- All NMHS's are **encouraged** to include their rainfall data in the PACRAIN database. Memoranda of understanding can be established with PACRAIN to define the limitations of use, for example whether or not these data are to be made publicly available.
- Pacific NMHS's are **encouraged** to take advantage of the SPaRCE program as a potentially valuable data resource. PACRAIN and the NMHS's should cooperate to expand local participation in the SPaRCE program. NMHS's should assist their local SPaRCE participants wherever practical, for example by facilitating online data transmission to PACRAIN.
- All NMHS's participating in the automated rain gauge initiative are **encouraged** to urgently communicate the status of their tipping buckets gauges to PACRAIN. Data from operational gauges shall be collected and sent to PACRAIN on a regular basis as practical. Gauges which become inoperative shall be restored to service as soon as practical, with assistance from PACRAIN as necessary.
- PACRAIN and the Fiji Meteorological Service **recommended** to cooperate to investigate the implementation of real-time data collection from automatic rain gauges. Real-time data collection could ultimately be useful for other Pacific Island NMHS's as well.

Pacific GCOS Technical Support Centre

- **Requested** US NOAA GCOS, Met Office UK and MetService to ensure RSC/TSP programme continues. It **urged** other development partners to provide additional financial and other support such as spare parts or consumables to the RSC/TSP to ensure its continuity and long term sustainability.

Climate Change Information for Risk and Adaptation Planning Project (ClimRAP)

- In light of the potential benefits associated with ClimRAP, the Meeting **urged** Pacific Islands NMHSs to work closely with NIWA/MetService to implement ClimRAP.

The South Pacific Rainfall Atlas (SPRAT)

- **Urged** Pacific Islands NMHSs to provide permission for the SPRAT project: a) to utilise monthly rainfall total data housed in the Island Climate Update database for the purpose of generating the maps in the SPRAT b) to supply supplementary rainfall data on request where holes exist in the ICU rainfall database, and c) to remain open to receiving directed financial assistance and training for data rescue activities linked to this project.

- **Requested** Pacific Islands NMHSs to:
 - (a) advise NIWA how SPRAT can be developed to better suit their own purposes, with the goal of accommodating special focus chapters in SPRAT on rainfall related issues or case studies for individual Pacific Island Countries (b) advise NIWA of special, high resolution daily mean sea level pressure data measurements contained in their historical archives dating to the 19th or early 20th century that could usefully contribute to ACRE.
- **Requested** NIWA to provide all up-to-date regional map materials emanating from SPRAT to all PI-NMHSs, including updated rainfall data for stations used in the project, updated calculations of climatic normals (1961-1990) and statistics about temporal coverages for individual stations and island groups.
- **Requested** NIWA to forward ICU database monthly rainfall total updates provided to SPRAT by Pacific Islands NMHSs to the PACRAIN database (University of Oklahoma) for purposes of redundant South Pacific rainfall data stewardship.
- **Requested** NIWA to make available all newly developed mapping routines for PI-NMHSs and other emerging opportunities in order to foster collaborative research on rainfall variability in the South Pacific region. It further requested NIWA to raise awareness of how the SPRAT rainfall mapping tools can be used by PI-NMHS.
- **Requested** NIWA to facilitate peer-reviewed research describing recent SPCZ impacts on Vanuatu (early 2008 events) and Fiji (January 2009 event) in collaboration with Vanuatu Meteorological Service and Fiji Meteorological Service, Bureau of Meteorology (PCCSP). This work will also form a distinct chapter or chapters in SPRAT. SPRAT will provide the opportunity for PI-NMHSs to be lead authors on this research, with guidance and support provided by NIWA and BoM climate researchers.

Pacific Islands Data Rescue

- **Urged** NIWA to provide an up-to-date regional status report to all PI-NMHSs about records currently in New Zealand archives that can be rescued, and discuss with PI-NMHSs prioritising data rescue activities
- **Requested** NIWA to examine the potential to rapidly in-fill data poor temporal periods (pre-1960, including WWII, WWI, early 20th century, and beyond) with any available Pacific Island daily meteorological data (pressure, temperature, rainfall), which is crucial for improving re-analysis data sets that are under development
- **Urged** NIWA to provide assistance and training to upskill PI-NMHSs for independently undertaking rescue (cataloguing, digitisation, and entry) for high-risk important data sets currently housed in Pacific Island archives
- **Urged** NIWA to assist PI-NMHSs in developing a grant-in-aid template that can be used by them for requesting external funding from international aid organisations to financially support their data rescue efforts and promote self-sufficiency in this area in the future.

Severe Weather Forecasting and Disaster Risk Reduction Demonstration Project (SWFDDP) for RA V.

- **Urged** Pacific NMHSs, particularly countries involved in the SWFDDP to provide support to the SWFDDP for its success.

Pacific Climate Change Science Programme

- **Recommended** that The PCCSP Annual progress reports be provided by the Program Manager of PCCSP for distribution by PCCSP Project the Chair of RMSD.
- **Recommended** that each Pacific NMHS participating in PCCSP nominate a project contact officer for routine matters related to the project.
- **Recommended** that NMHSs send a participant to the regional PCCSP research and training workshop later this year.
- **Recommended** that NMHSs participate in the development of a data distribution and handling protocol for the PCCSP

Meteorology Development Support from JICA including the JICA/Fiji Funded Meteorology Training Course.

- The meeting **urged** NMHSs to support continued cooperation and development of new partnerships with JICA in the area of meteorology capacity building.

Introduction to the Finnish-Pacific Project for Increased Capacity of SPREP and Pacific Island Countries National Meteorological Services Staff to Meet Growing Demand of Meteorological and Climatological Information in Society

- The meeting **endorsed** the project and for project reports to be presented in future RMSD meetings; and for,
- The meeting **urged** all NMHS make available national socio-economic data to allow SPREP to conduct the socio-economic study with the help of FMI

EDUCATION, TRAINING AND CAPACITY DEVELOPMENT OPPORTUNITIES

- **Urged** that additional technician training opportunities be explored for Pacific NMHSs.
- **Requested** the NZ MetService to explore the possibility of hosting a “dependant forecaster” course exclusively for Pacific Island Countries
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- **Urged** Meteo-France to ensure that the training course on tropical meteorology should occur before start of the 2010-11 cyclone season but not interfere with other meetings expected to be held in October (like the SWFDRDP)

Education and Training within the WMO

- **Recommended** that a SPREP, SOPAC, WMO collaborative approach be developed for a Project Implementation Framework (PIF) which is tailored to the priorities of NMHS under the Pacific Islands Framework on Climate Change as endorsed by the Pacific Forum Leaders as well as the Disaster Risk Management Framework which also has high level commitment;
- **Urged** SPREP, SOPAC, WMO that priority be given to developing a PIF for an upgraded extensive early warning system for the GEF RAF 5
- **Urged** SPREP, SOPAC, WMO to consult previous PMSNAP to assist in the development of the PIF.
- **Urged** SPREP, SOPAC, WMO to assist and equip NMHS with skills to develop proposals, and other necessary relevant NMHS development documents (action plans, etc.)

Pacific Meteorological Organization (PMO)/Pacific Meteorological Committee (PMC). (SPREP/WMO Secretariat)

- The meeting **requested** that the Regional Meteorological Services Review Team to examine in detail the concept of establishing a Pacific Meteorological Organization (PMO). The analysis should clearly identify the strengths and weaknesses of such a body. The analysis should also include a detailed cost-benefit analysis of the PMO option in comparison to other alternative options.

RMSD SUPPORT AND ARRANGEMENTS**14RMSD ARRANGEMENTS**

- The 13RMSD **accepted** the kind offer of Mr. Reginald White of Marshall Islands as host of the 14RMSD in 2011. The meeting also accepted Mr. Salesa Kaniaha's offer of Vanuatu to act as reserve host for Marshall Islands, and Mr. Kaniaha's offer of Vanuatu as host of the 15RMSD, with Mr. Chanel Iroi kindly offering Solomon Islands as reserve for the 15RMSD. Mr. Reginald White unanimously voted to be Vice Chair to assist the Chair, Mr. Rajendra Prasad, in the interim period to the 14RMSD in 2011.