### **Background to Paper**

The adverse impacts of tropical cyclones, severe droughts, and flash floods have been counted well into the millions of dollars in the region over the last decade. With socioeconomic and infrastructural losses across health, water, and core primary sectors, national development goals and achievements often face severe setbacks with further impacts reducing, if not negating gains made. In recent years the impacts of extreme weather and climate related events have served to underscore the concern for present and future climate change and variability, as well as the need for improved early warning systems and disaster management.

The role today of a national meteorological service (NMS) is increasingly identified and aligned with key areas contributing to improved planning and policy making in climate change and or disaster risk management contexts. Thus Pacific NMSs are tasked with more responsibility than in the past. The high economic costs of extreme weather and climate events have resulted in demands from public and private sectors for enhanced NMS services and products in order to safeguard against such future impacts.

SPREP has organized and facilitated the meetings of the Regional Meteorological Services Directors (RMSD) since 1994. The meetings of the RMSD have provided an avenue to highlight common issues and needs of national meteorological services, both at the national and regional levels. Together with technical agency partners from around the Pacific region (in Australia, New Zealand, France, Japan, and other international partners), the RMSD forum has been an important and successful medium for initiating important regional meteorological activities centered around training and enhancing technical capability. These in turn have strengthened specialist skills of human resources, as well as technical capability at the national level. A strategic action plan<sup>1</sup> produced by SPREP in collaboration with partner technical agencies identifies important regional issues and strategic priority areas for addressing key needs. In terms of process, the RMSD's agreed set of recommendations are referred for approval to the SPREP Council meeting for endorsement, with any item of particular significance put forward by the SPREP Meeting to Forum Leaders meetings.

The three sets of recommendations above correspond to the following 3 issues that follow in detail below.

# Issue 1 - 13<sup>th</sup> Meeting of the Regional Meteorological Services Directors (13RMSD) 2009

The 13RMSD was hosted by the Fiji Meteorological Service, at the Novotel Hotel, Nadi May 5<sup>th</sup> to 8<sup>th</sup> 2009. Mr. Rajendra Prasad, Fiji representative and Director of the Fiji Meteorological Service, was elected Chair, while Mr. Reggie White of the Republic of Marshall Islands was later elected as Vice Chair to serve with Mr. Prasad between 13RMSD and the future 14RMSD slated for hosting by Marshall Islands in 2011. Initially slated for FSM, the 13RMSD was decided to be held in Nadi in accordance to previous calls and instruction to run back to back with the SOPAC Regional Disaster

<sup>&</sup>lt;sup>1</sup> Strategic Action Plan for the Development of Meteorology in the Pacific Region 2000 – 2009 (SPDM)

Managers (RDM) meeting with the intent to hold a joint meeting of the RMSD and RDM. As such Nadi was selected over FSM's offer of hosting, with the amendment to have the 14RMSD hosted in FSM in 2011.

The Joint SPREP – SOPAC Meeting of the Meteorological Services Directors and the National Disaster Managers took place on the 11<sup>th</sup> June following the 13RMSD. (This was followed by the SOPAC Partnership Platform meeting of which the RMSD membership was invited to attend and observe).

The recommendations of the 13RMSD and the Joint Meeting are provided in the Executive Summary provided in Annex I and Annex II of this paper respectively. A number of recommendations are directed to SPREP and will be actioned where resources are available (additional resources may be sought later). The SM20 is invited to endorse the outcomes and recommendations of the two meetings and note those in particular made to the Secretariat and those for national action. The next meeting of the RMSD will be the 14RMSD slated for Marshall Islands in 2011.

### Issue 2 - The SPREP-Finnish Meteorological Institute (FMI) Project for Increased Capacity of SPREP and PIC NMS Staff to Meet the Growing Demand for Meteorological and Climatological Information in the Society

In late 2008, the Finnish Meteorological Institute (FMI) and SPREP, through previously established contact, agreed to collaborate to produce a regional project proposal targeting identified needs of national meteorological services in the region. The overall objective of the project is to develop the capacity at national and regional level to address and respond to concerns and needs with respect to climate change and climate variability, public weather forecasting and warning services, and other related meteorological and hydrological matters. The project's initial beneficiaries are the Pacific NMS (along with SPREP's capacity to provide support for meteorological services) with final beneficiaries being end users of weather and climate information such as aviation services, farmers, tourism industry, fisheries, governments and decision support mechanisms, and various communities across the PICTs. The scope of the project document on specific funding detail.

There are 3 core project activities as follows:

- (i) Improved PIC NMSs capacity to provide aviation weather services according to international requirements for Quality Management Systems (QMS) and strengthened SPREP capacity to support NMSs to implement QMS.
- Strengthened needs based customer service capacity of PIC NMSs for weather and climate services and enhanced strategic planning abilities of SPREP to support PIC NMSs.
- (iii) Review of the Regional Strategic Action Plan for the Development of Meteorology in the Pacific Region (SDMP) 2000-2009.

The SM20 will note that Activity (iii) above refers to a piece of work slated for reporting in 2009 according to SM19 pending securing of resources. The Finnish Government having now accepted this activity as part of the core project content (the Review of the SDMP), the Secretariat has thus shifted the majority of the activities related to this work to take place over 2009 and early 2010 to deliver upon the SM21 in 2010, specifically with a launch of a new and updated SDMP there. In preparation for this work the Secretariat has begun working with the RMSD to form a Subcommittee composed of several NMS Directors to provide overview and guidance for the implementation of the Review. The SDMP Review process will involve in-country assessments of the status of national meteorological services, appraisal of current and future issues relating to the long term sustainability of the delivery of meteorological services, and the assessment of and incorporation of future areas of collaboration with partners on development issues such as climate change, disaster risk reduction and management, and sector specific services such as food security and renewable energy. The Review will be governed by a subcommittee of the RMSD per the request of Meteorology Directors. The SM20 is invited to note this development and its activities for supporting actions of NMS at the national level.

The project proponents are SPREP and the FMI who are each responsible for the various involved deliveries of the three activities targeted in this project. The project duration is just under 3 years and runs from 2009 – 2011, with a total budget of approximately €00,000. The resulting project proposal requesting funding from the Finland Government was officially approved in early June, 2009. The relevant project officers from SPREP and FMI have thus commenced to produce a detailed Work Plan for the implementation of the SPREP-FMI project activities.

## Issue 3 – A way forward for the consideration of the Pacific Meteorological Council or the Pacific Meteorological Organization.

12A 1991 report of a feasibility study on climate in the Pacific region titled the "Changing Climate in Paradise (December 1991) initiated discussions on regional cooperation and coordination of meteorology and climatology among National Meteorological Services (NMSs) in the Pacific Sub-region of WMO Regional Association V (South-West Pacific). It identified a number of development projects aimed at improving climate data management, analysis and applications in the region.

One of the projects referred to in the "Changing Climate in Paradise" was the "Regional Meeting of Directors." In October 1993, the Secretariat of the Pacific Regional Environment Programme (SPREP) secured funding and organized the first Regional Meteorological Services Directors (1RMSD) meeting. It marked a new era of opportunity for discussing and exchanging experiences and knowledge among NMSs in the Pacific Subregion of WMO Regional Association V (South-West Pacific). These meetings (now known as the RMSD meetings) are now wider in scope and attract attention of a wider network of related partners in areas such as climate change and disaster management, agriculture and water resource management and others. The meetings have now reached their 13<sup>th</sup> summit and are held biennially.

The 1RMSD meeting included in its agenda a discussion on "Programme Coordination Activities," whereby a representative of the Caribbean Meteorological Organization (CMO) provided information on the establishment, governance and operation of the CMO as an example of regional cooperation among Caribbean NMSs. The recent Joint Meeting of the RMSD and DRM of May 2009 availed an opportunity for a subcommittee of the RMSD formed on this issue to meet informally with a CMO representative that took part in the meetings to gain some insight and advice on the similarities of the needs and situation between the regions. A few interesting points were noted from these discussions:

- (i) The CMO was established in 1973, however cooperation at various levels had existed informally since 1945. CMO arose from by creation of a "champion" of needs of others, and it has since evolved to deal with both meteorological and climatological issues effectively for their region;
- (ii) The Pacific cooperative links in meteorology were in an early stage in the early 90s and it was necessary then to prioritize establishment of NMSs as a first step;
- (iii) The development of the CMO was a 3 pronged approach, generally encompassing the development of capacity of a regional forecasting center, a regional training center for the needs of meteorology, climatology and hydrology, and the development of a Foundation tasked to be responsible for attracting and generating funding for the CMO's operations and work.
- (iv) There are many forms of cooperation, and consideration of the need for better services and reduced costs, and the needs of national versus regional aspiration is fundamental. PICTs are thus to be encouraged to participate in whatever way they can; and
- (v) There could be potential for SPREP Secretariat to have the potential to fulfill the role of a regional cooperation facilitator in the areas of meteorology and climatology.

The background and concept of Pacific Meteorological Organization (PMO) was discussed in various contexts such as resources mobilization via other regional meetings of the WMO where the majority of the feedback was for the RMSD and the WMO and SPREP secretariats undertake further work on preparation of the establishment of a PMO.

In summary, the Secretariat has a reference of good sources of background information and useful contacts but the straightforward development of a PMO is compounded by many concurrent pieces of work that will need to take into consideration the possible role a PMO might play and contribute within the region. As such, the Secretariat has created a subcommittee of the RMSD focused on developing the PMO background and need, and hence proposes a process for the delivery of a proposal for consideration by the SM21 in 2010 below. The subcommittee includes Directors of the NMSs of Samoa, Cook Islands, Marshall Islands, Fiji, Palau, New Caledonia, and representatives of NZ Met Service, Australian Bureau of Meteorology, and the USA NOAA National Weather Service. The Secretariat and subcommittee acknowledge that many related works are currently in place or underway and which the Secretariat and members of its subcommittee are participants to. These works such as the Urgent Review of Regional Meteorological Services, the Review of the SDMP, including also the outcomes of the RIF, contain elements of information and decisions that potentially affect the core issues relating to the establishment of a PMO. The process proposed by the Secretariat thus is for:

- a. SPREP to continue to convene and facilitate the RMSD subcommittee mentioned above
- b. SPREP to find opportunities for the subcommittee to be linked in to the developments of the two Review works (to be headed by the Secretariat) and for outputs of these to consider the PMO case where possible
- c. Where needed and possible, the Secretariat to seek any additional resources to facilitate the work of the subcommittee or a consultancy on its behalf
- d. To find opportunities to link and invite input from the CMO for guidance and advice as the PMO proposal is being developed by the subcommittee
- e. To provide via the current Chair of the RMSD, regular progress and status updates to the RMSD (and via the Secretariat to SPREP Focal Points)
- **f.** Provide a full proposal or recommendations for advice of the SM21 in 2010 on the establishment of a PMO
- **g.** Key support from the Secretariat to the development of this work is the reestablishment of the Meteorology/Climatology Officer (MCO) position currently vacant and unfunded. The Secretariat is to undertake as priority the funding and filling of this position to facilitate this body of work.

#### Discussion

The issues discussed above highlight the importance of this body of work for SPREP, the Secretariat and the Pacific Islands region including the supporting national and regional partners and agencies involved in various aspects. It encompasses a fairly significant amount of work for which the Secretariat has reflected in its proposed Work Plan and Budget 2010.

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