

“Sustainable Weather, Climate, Oceans and Water Services for a Resilient Pacific”

Fourth Meeting of the Pacific Meteorological Council (PMC-4) Working Papers on Aviation Weather Services

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Honiara
Solomon Islands

Agenda Item No.18.2: Pacific Regional Meteorological Training Centre (RTC)

Purpose:

This discussion paper provides information on the progress made on exploring a possibility to establish a WMO Regional Training Centre (RTC).

Background:

The members of the PMC 3 requested the Education, Training and Research Panel of the PMC to work with PICTs’ NMHSs, USP, SPREP, SPC and other regional organizations, and WMO to address the education and training needs of NMHSs in PICTs with a possibility of establishing a WMO Regional Training Center (RTC) and to support the development of regional research capacity.

Fiji Meteorological Services

Current Capability

Currently Fiji Meteorological Services (FMS) has two staff members devoted to deliver specialised training for FMS and PMC members. Given the training demands over the last two years and enhanced FMS capability, FMS has created a Senior Scientific Officer position to deliver science based training. As a result, FMS is now in a better position to deliver the needs of a RTC. FMS has been delivering the Basic Observer Training certificate IV level since 1960s and Basic Instruction Package for Meteorological Technician (BIP-MT) training from 2013. FMS has also been delivering a variety of regional training programs in collaboration with WMO, JICA, USP, SPREP, SPC, UNDP, NIWA, etc.

FMS personnel have taken the “training of trainers” in Japan, Indonesia and Korea as part of an ongoing capacity development program. The training officer is accredited as trainer’s certification through Fiji National University (FNU) and Australia Pacific Technical College (APTC). FMS has support staff from scientific and technical areas in Meteorology, Climatology and Hydrology, Quality Management System, Maintenance and Calibrations of Meteorological instruments to carry out the training programs at FMS.

Recent Regional Training Delivered by FMS

Date	Training	Participants
4-16.09.2014	Training for Niue Meteorological Service on QMS	QMS Manager
24/04-	Regional BIP-MT Training	27 participants including 9

29.08.2017		locals
02-13.11.2015	Regional Training - Maintenance & Calibration of Instruments (I). Supported training delivery	10 participants from 10 NMHSs
24.02-08.03.2016	In-Country Training - Aviation for Christmas Island/Kiribati	14 participants from KMS and CAA
16-25.07.2016	Regional Training - QMS	11 participants 10 NMHSs
12-16.09.2016	Regional Training - Analysis & Application of Himawari-8 Data	12 participants from 10 NMHSs
21.11-02.12.2016	Regional Maintenance & Calibration of Instruments (II)	13 participants from 11 NMHSs
27.02-10.03.2017	OJT – Climate Service (in Nadi) for Kiribati and Tuvalu	2 participants from TMS and KMS
13-24.02.2017	In-Country Training - Aviation for Cook Islands	12 participants from CIMS and CAA
13-25.03.2017	In-Country Training - Aviation for Tarawa/Kiribati	21 participants from KMS and CAA
15-25.05.2017	In-Country Training - QMS for Kiribati	QMS Manager
24.04 – 29.06 2017	BIP-MT	27 participants from 9 NMHSs

FMS has two training rooms; FMS HQ can accommodate 25 participants and Laucala Bay Met Office in Suva can accommodate 40 participants.

FMS has the capability to deliver the following:

1. Package for Meteorological Technicians including Hydrology (BIP-MT)
2. Refresher short Courses for Meteorologist
3. Competency Assessments for BIP-MT and BIP-M
4. Tropical Meteorology and Climatology (in-General)

University of the South Pacific

The University of the South Pacific is a leading education and research provider in the Pacific Islands supported by 12 Pacific Island countries. The Pacific Center for the Environment and Sustainable Development offers a full post-graduate program in climate change research with research theses for MSc and PhD degrees. Two hundred students have graduated from the program, with 30 MSc degrees and more than 150 PGdip degrees awarded. The program has 300 enrollees in 2017 reflecting the urgent nature of climate change in the region. PaCE-SD Climate Change programme has benefited from EU and DFAT donor support and strong collaboration with international academic community. USP is an international affiliate of the University Corporation for Atmospheric Research, which oversees the National Center for Atmospheric Research in Boulder, Colorado and the COMET Program (Cooperative Meteorological Education and Training), focused on meteorological education.

USP has the capacity to deliver the following:

1. Post-graduate degrees in climate and related science, including PGdip, and research based MSc and PhD degrees.
2. TVET qualifications for resilience professionals including climate adaptation, disaster management, and sustainable energy.
3. Tropical Meteorology, a 14 week on-line post graduate course with a strong emphasis on basic coding in Python, an open source software and an orientation to CLIVAR. The course meets BIP-M standards. The course has been offered annually since 2013.
4. Climate Science a 14 week long on-line post graduate course with a strong emphasis on quantitative skills, and connecting policy and science. The course has been offered annually since 2013.

5. Advanced Physical Oceanography, a 14 week on-line post graduate course with a strong emphasis on basic coding in Python, open source software; exploration and application of remote sensing tools. The course will be offered for the first time in 2018.
6. USP offers a variety of undergraduate courses that support quantitative skill development required from BIP-M including climatology and environmental physics. See attached appendix for a more full description of course offerings mapped to BiP-M standards.
7. Project management and climate finance access training.
8. Relevant coursework requested by FMS and Met services.

Planning for Regional Training Centre

FMS and USP have complementary strengths and capabilities. Combined, they are able to deliver a consolidated regional training center, support WMO global campus activities, and quickly incorporate materials, tools, capabilities and perspectives as required. The Suva FMS office is located next to USP's lower campus making collaborative delivery of training and face to face workshops straightforward.

Requirements for establishing an RTC

The normal procedures for the recognition of RTCs are as follows:

1. A Member wishing to offer its national training facilities as a WMO RTC submits its proposal for consideration and recommendation by the regional association, or by the president of the regional association on behalf of the regional association concerned.
2. A representative of the WMO Secretary-General will survey the training facilities and programmes and assess, using the template in Annex III (a), their compliance with the criteria for the recognition of WMO RTCs. This will usually include a site visit to the RTC.
3. The recommendation of the regional association, or its president, and the report of the Secretariat mission are considered by the EC Panel of Experts on Education and Training or, by its Chairman on behalf of the Panel.
4. The Panel's recommendation is considered by the Executive Council. After endorsement by the Executive Council, the establishment of the centre is subject to an agreement which is drawn up between WMO and the host country and/or organization. Contents of this agreement are specified in Section III of the EC Criteria for the Recognition or Reconfirmation of Regional Training Centres.

Recommendation

The members are invited to:

1. Note the contents of the paper; and
2. Endorse FMS and USP to continue exploring the possibility of establishment of Pacific RTC, pursue with the President and management Group of RAV in coordination with relevant departments of WMO Secretariat, fast track assessment of the requirements and report to PMC-5.

Attachments

- Att 1: Guidelines for recognition or reconfirmation of WMO Regional Training Centres (24 February 2014 – EC Panel of experts on education and training)
- Att 2: Proposed Climate Change curriculum and streams for PaCE-SD
- Att 3: USP curriculum and Tropical Meteorology mapping to BIP-M standards